Fingerboards Mineral Sands Project Inquiry and Advisory Committee
Technical note

TN No: TN 002
Date: 8 February 2021
Subject: Response to IAC Request for Information – Part 2.1, questions 1 and 2

The IAC's request for information dated 11 December 2020 (IAC Document 16) provided:

2.1	**Inclusion of expert recommendations – all parts of Project**
(i)	**Reference**
	Technical appendices contain specific expert recommendations. An example is the recommendations contained in Chapter 10 of the noise report (Appendix A010).
(ii)	**Request**
1.	The Proponent should detail the format and wording of specific recommendations of technical experts in specialist areas that are accepted, or not, by the Proponent and how these have informed the Environment Management Framework (EMF) and will be reflected in relevant management plans.
2.	Following the circulation of expert evidence, the same exercise should be undertaken if there are new or additional expert recommendations made.

The Proponent's response to question 1 is provided in the table below.

The Proponent will update this table to include any new or additional expert recommendations as required by question 2, following circulation of its supplementary expert evidence addressing the use of the centrifuges (IAC direction 59).

Table of Contents

Page

Landform, Geology and Soils Investigation (Appendix A001) 1

Geochemistry and Mineralogy Summary Report (Appendix A002) 1

Geotechnical Assessment (Appendix A003) 2

Glenaladale Starter Pit Preliminary Geotechnical Investigation (Appendix A004) 7

Detailed Ecological Investigations (Appendix A005) 9

Groundwater and Surface Water Impact Assessment (Appendix A006) 24

Conceptual Surface Water Management Strategy and Water Balance (Appendix A006 AppA) 40

Groundwater Modelling Report (Appendix A006 AppB) 40

Landscape Stability and Sediment Transport Regime Assessment (Appendix A006 AppC) 42

Geochem Testing of Fingerboard Tailings and Overburden (Appendix A006 AppD) 47

Surface Water Assessment – Site Study (Appendix A006 AppE) 47

Surface Water Assessment – Regional Study (Appendix A006 AppF) 49

Water Supply Options Study: Technical Groundwater Assessment (Appendix A007) 50

Water Supply Options Study: East Gippsland/Mitchell River Concept Design and Investigation (Appendix A008) 51

Stage Two Air Quality and Greenhouse Gas Assessment (Appendix A009) 52

Noise and Vibration Assessment (Appendix A010) 59

Radiation Assessment (Appendix A011) 67

Traffic and Transport Impact Assessment (Appendix A012) 78

Land Use and Planning Impact Assessment (Appendix A013) 86

Landscape and Visual Impact Assessment (Appendix A014) 86

Agriculture Impact Assessment (Appendix A015) 89

Horticulture Impact Assessment (Appendix A016) 91

Cultural Heritage Impact Assessment (Appendix A017) 93

Socioeconomic Impact Assessment (Appendix A018) 97

Human Health Risk Assessment (Appendix A019) 116

Rehabilitation Report (Appendix A020) 118

Soil Profile Reconstruction Study 1 (Appendix A021) 125

Soil Profile Reconstruction Study 2 (Appendix A022) 126

Proposed Tailings Management Strategy Notes on Post Closure Settlement (Appendix A023) 127

TN 002 - Response to IAC Request for Information

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
Landform, Geology and Soils Investigation (Appendix A001)			
Increased plant (pasture) productivity, resulting in higher surface cover, which will reduce runoff and erosion.	Yes	The open voids will be progressively backfilled with sand tailings and fines tailings and covered with overburden, subsoil and, in areas other than Grassy Woodland revegetation, topsoil. Revegetation with crop, pasture or native vegetation will be undertaken where required (GW16).	Rehabilitation plan
Reduced grazing and increased cover in drainage lines to improve their stability.	Yes	Revegetation will be conducted over as large an area as practicable at one time to spread potential impacts of animal grazing over larger areas. (RH30) Ephemeral drainage gullies will be revegetated in areas downstream of future mining activities prior to operations commencing to increase landscape stability and specifically mitigate: • Effects of a moderate increased flow velocity downstream of the mine operations and the final landform. • Potential effects of tunnel erosion downstream of the mine void boundary where soil treatment is not planned. • Effects of sediment starvation by reducing sediment transport and encouraging deposition. (SW34)	Rehabilitation plan Water quality and hydrology risk treatment plan
Strategic increases in deep rooted native vegetation (trees largely, through possibly shrubs in some areas) to reduce drainage to depth and reduce seepage into flow lines.	Yes	Tree densities in areas planned for grazing land use, particularly in swale areas, will be increased to reduce deep drainage and seepage flows, and to maximise erosion stability. (RH27)	Rehabilitation plan Native vegetation management plan Water quality and hydrology risk treatment plan
Geochemistry and Mineralogy Summary Report (Appendix A002)			
None			

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
Geotechnical Assessment (Appendix A003)			
Shear strength testing of the Coongulmerang Formation, the HHF clay and the HHF gravel.	Partially	Work has been conducted and further work is planned during current drill program. (Kalbar pers comm)	Ground control management plan
In situ elastic properties of the sands and overburden materials to improve predictions of deformation of roads. It is recognised that methods such as CPT are unlikely to be successful in the HHF gravel. An alternative is an observational approach, measuring deformation near non-critical slopes early in the mine life.	Yes	Stability and displacement monitoring of mine slopes will be undertaken adjacent to roads using one or a combination of: • Survey targets (prisms) located on mine slopes, read by a robotic total station from various fixed survey pillars. • Radar, for safety-critical situations where a rapid response may be required.(GEO02) Construction and monitoring of all road pillars will be documented, reviewed and quality controlled, including: • Assessing the construction of road pillars against planned construction methods. • Trialling various compaction methods to document and assess performance outcomes. • Formally reviewing road pillar construction methods prior to constructing high road pillar, including specifications of Haunted Hills Formation gravel, coarse sand tailings dewatering and compaction, any additives (e.g., fly ash), achieved strengths, and deformation moduli and settlement times for each stage. (GEO15)	Ground control management plan
Compaction trials and settlement monitoring of road pillar, to be trialled in the early stages of the operation with the lower road pillars in Panels 2 and 3.	Yes	Construction and monitoring of all road pillars will be documented, reviewed and quality controlled, including: • Assessing the construction of road pillars against planned construction methods. • Trialling various compaction methods to document and assess performance outcomes. • Formally reviewing road pillar construction methods prior to constructing high road pillar, including specifications of Haunted Hills Formation gravel, coarse sand tailings	Ground control management plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
		dewatering and compaction, any additives (e.g., fly ash), achieved strengths, and deformation moduli and settlement times for each stage. (GEO15)	
Monitoring of road pillar deformation when filling adjacent to a road pillar, early in the life of the mine in Panels 2 and 3, to assess modelling predictions.	Yes	Deformation and settlement monitoring of road pillars around mining operations will be undertaken, including: • Horizontal strain and tilt on completed road pillars, measured by strain and tilt gauges, initially prior to formation of the roads to confirm that residual deformations are below tolerances, and prior to, during and post filling the voids adjacent to the road pillar. • Settlement of constructed road, either by surveying and/or settlement plates. (GEO12)	Ground control management plan
Displacement monitoring for slope stability should be conducted using survey targets (prisms) or radar. This is for all slopes adjacent to infrastructure and mined deeper than the 5m berm. Survey frequency should be daily, preferably early in the morning to minimise errors from atmospherics.	Yes	Stability and displacement monitoring of mine slopes will be undertaken adjacent to roads using one or a combination of: • Survey targets (prisms) located on mine slopes, read by a robotic total station from various fixed survey pillars. • Radar, for safety-critical situations where a rapid response may be required. (GEO02)	Ground control management plan
Deformation and settlement should be monitored using specialist devices.	Yes	Excavation visual assessments for evidence of slope instability or deformation, and any interactions with slopes will be routinely completed by an experienced geologist or mining engineer with geotechnical understanding. (GEO09)	Ground control management plan
Visual assessments should be conducted daily around mining areas near infrastructure for signs of deformation, that mining is progressing to plan and that water is being appropriately.	Yes	Visual assessments of excavations will be undertaken to check for any variability from expected geological conditions, with particular focus on weaker than expected materials or features. (GEO08)	Ground control management plan
There should be prevention of uncontrolled ponding of surface water from rainfall within the specified stand-off distance from slope crests.	Yes	Surface water run-off controls will be incorporated into mine designs, including the following, where applicable: • Preventing uncontrolled ponding of surface water from rainfall within the specified stand-off distance from slope crests.	Environmental management plan Risk management plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
		• Preventing any surface water run-off over mine slopes with crest windrows, including no ponding behind the windrows. (GEO05) Surface water ponding on post-mining landforms will be avoided, where practicable, through appropriate slope profile design and topsoil treatments. (SW38)	Water quality and hydrology risk treatment plan Ground control management plan Rehabilitation plan
Preventing any surface water run-off over mine slopes and preventing ponding behind crest windrows.	Yes	Surface water run-off controls will be incorporated into mine designs, including the following, where applicable: • Preventing uncontrolled ponding of surface water from rainfall within the specified stand-off distance from slope crests. • Preventing any surface water run-off over mine slopes with crest windrows, including no ponding behind the windrows. (GEO05) Visual assessments of surface water controls will be undertaken on a regular basis, and after rainfall, to check that any ponding, seepage or run-off meets design specifications. (GEO06)	Ground control management plan Water quality and hydrology risk treatment plan
Collecting and redirecting seepage water in drains along the toes to maintain the integrity of the 5m berms.	Yes	For the 5 m berm in mine slopes, if necessary, collecting any rainfall run-off and seepage water in drains along the toes, and re-direct it down the slope via a lined drain to the mine void floor. (GEO05) The downhill side of containment structures, such as surface water drains and road batters, will undergo soil conditioning and be spread with topsoil and revegetated as soon as practicable to minimise erosion and sediment laden runoff. (SW39)	Ground control management plan Water quality and hydrology risk treatment plan
Water storages and ponding areas of the pit floor to be managed well away from slope toes.	Yes	Managing water storage and ponding areas on the mine void floor well away from slope toes, and away from areas that will form foundations for road pillars. (GEO05)	Ground control management plan Water quality and hydrology risk treatment plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
All materials used to backfill the void (sand tailings, overburden, and HHF gravel) should be placed only on a sound, free-draining floor. To ensure this, weak materials such as clay should not be left as a layer on mined floors. Weak materials should either be removed, or the floor should be deep ripped to mix the weaker materials with the sand.	Yes	Overburden and sand tailings will be placed on a stable and well drained floor after removal of weaker materials or deep ripping. (GEO18)	Ground control management plan
If excess materials are to be placed on any natural surfaces, then topsoil, alluvium, dune sands, and other weak materials should be removed prior to dumping. This does not include alluvial sands and gravels in creek beds which are required to assist in floor drainage.	Yes	If excess materials are placed on natural surfaces, weak materials such as topsoil, alluvium, and dune sand will be removed prior to placement. (GEO19)	Risk management plan Ground control management plan
Outward-facing slopes of the final landform (i.e., the northern, north-eastern, eastern facing slopes and gullies) must be constructed as per the recommendation in Figure 7-1.	Yes	All mined slopes adjacent to infrastructure will be surveyed to check they are within acceptable tolerances of specified slope designs. (GEO04) Daily visual assessments around mining areas near infrastructure will be undertaken, including checks for signs of deformation (e.g., cracks, compressional ridges), over steepening of slopes, and poor management of surface water (e.g., pooling). (GEO03)	Ground control management plan Risk management plan
Landform slopes with a gradient greater than 1:4, must be constructed of HHF gravel. The minimum distance from the toe of the constructed landform, to the toe of the nearest sand tailings and/ overburden within the landform, is 125 m, as per Figure 7-6.	Yes	All mined slopes adjacent to infrastructure will be surveyed to check they are within acceptable tolerances of specified slope designs. (GEO04)	Ground control management plan Risk management plan
Slopes with a gradient up to and including 1:4, may be constructed of sand tailings and/or overburden, with a cover of HHF gravel and topsoil.	Yes	Slopes of landforms will be constructed from Haunted Hills Formation gravel, particularly for slopes with a gradient of 1:3 or steeper. For slopes of 1:4 or flatter, dewatered, stacked and compacted coarse sand tailings can be placed within the outer zone of the slope, with Haunted Hills Formation gravel forming an armouring layer. (GEO20)	Ground control management plan Risk management plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
Care needs to be taken when placing materials over dumped clay.	Yes	Overburden and sand tailings will be placed on a stable and well drained floor after removal of weaker materials or deep ripping. (GEO18)	Ground control management plan
Sand tailings must achieve a partially dewatered state (i.e., such that rapid loading will not induce a pore pressure increase), prior to construction of the next lift of material on the tailings. It is expected that floor drainage and toe drains will aid rapid dewatering of sand tailings.	Yes	The next lift of material on top of sand tailings will be constructed only when the deposited sand tailings have achieved a partially-dewatered state (i.e., such that rapid loading will not induce a pore pressure increase). (GEO22)	Ground control management plan
HHF gravels do not need to be compacted to achieve high modulus as for the road pillars. Nominal compaction (e.g., by construction traffic) is required to minimise latent settlement of the landform that may affect the final rehabilitated profile.	Yes	Road pillars will be constructed from Haunted Hills Formation gravel or sand tailings. (GEO13) Trials will be conducted during the early stages of road pillar construction to verify construction methods and achieved densities. (GEO14) Haunted Hills Formation gravel will be nominally compacted, such as under the weight of machinery, to minimise latent settlement of the landform that may affect the final rehabilitated landform profile. (GEO23)	Ground control management plan
Surface water must be managed during construction, and considered as part of the design for long term water control, to ensure that surface water drainage paths are re-routed away from the landform, and rainfall is made to run off or infiltrate the topsoil capping, without ponding and localised infiltration.	Yes	Surface watercourses will be directed away from the landform during construction and operations, so rainfall does not pond or cause localised infiltration. (GEO24) Natural surface water drainage courses will be re-routed to avoid post-mining landforms, where practicable. (SW37)	Ground control management plan Rehabilitation plan
A geotechnical assessment by a tailings dam specialist should be carried out for vertical raise tailings impoundments shown in Figure 7-7. It is expected that this construction will be able to be achieved, but it does need to be assessed and properly designed. This could be done as part of a detailed design and procedure specification during mining, when tailings are being produced and can be observed and tested.	Yes	Geotechnical assessments of the tailings cell structures will be conducted. Assessments may be undertaken during operations to also observe and test the tailings being produced. (GEO25)	Ground control management plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
At the commencement of mining operations, a Ground Control Management Plan should be established.	Yes	Ground control management plan in preparation (Kalbar pers comms)	Ground control management plan
Additional mitigation and commitments by Kalbar.		Following an earthquake event, the following checks will be completed: • Visually assessing mining areas and surrounds for evidence of slope instability or deformation, and any water interactions with slopes including seepage, liquefaction and infiltration into new cracks or depressions. • Visually assessing of roads adjacent to mining areas and roads on road pillars for evidence of cracking and subsidence; could include a drive-along at a safe speed to check surfaces for serviceability. • Checking the functioning of all slope stability and deformation monitoring equipment. (GEO10)	Ground control management plan
		Earthquake motion (acceleration) will be accounted for in mine slope designs.	Ground control management plan
		Where practicable, exclusion zones will be put in place for the geotechnical risk zones around each mining area, and public access will be limited in affected areas. (GEO07)	Ground control management plan
		Haunted Hills Formation clay will be placed well within the landform away from the final landform slope profile to maintain slope stability. (GEO21)	Ground control management plan Rehabilitation plan
Glenaladale Starter Pit Preliminary Geotechnical Investigation (Appendix A004)			
Earthworks be carried out in the dry months.	Yes	Construction activities will be delayed if significant weather events are forecast. (TE55)	Environmental management plan
Exposure of the dispersive site soils should be limited by limiting disturbance of topsoil and grass cover as much as practical.	Yes	High rates of vegetation establishment will be prioritised in rehabilitated flow channels (especially in the first three years of	Rehabilitation plan Environmental management plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
		rehabilitation) to maximise surface cover and minimise erosion. (RH09) Grazing will be excluded in rehabilitated native grass woodland areas (Zone E) channels and riparian areas (Zone D) and on steeper valley slopes (Zone C) to maintain sufficient levels of vegetation cover and prevent disturbance of soils by trampling by livestock, thereby increasing stability and minimising erosion. (RH25)	Water quality and hydrology risk treatment plan Airborne and deposited dust risk treatment plan
The stormwater and sediment control plans take into account the issues associated with dispersive soils.	Yes	A surface water and groundwater sub-plan will be developed and implemented to minimise discharge of stormwater from construction areas. The sub-plan will include measures such as: • Directing surface runoff around or away from areas of land disturbance, stockpiles, embankments or nearby sensitive areas, where practicable. • Capturing runoff (via surface water infrastructure) that comes into contact with construction areas and directing it to sedimentation dams. If required, flocculant treatment (i.e., alum, gypsum or hydrated lime) will be used to reduce suspended sediment levels in the stormwater. • Controlling erosion within gullies using primary and secondary sediment traps constructed at appropriate sites. • Retaining water on site from the contributing catchment to approximately the 10% annual-exceedance-probability. • Designing and profiling all site drains to reduce water flow velocity and erosion (SW04)	Water quality and hydrology risk treatment plan Surface water and groundwater management plan
Water is controlled on site so that it is directed away from areas where dispersive soils are exposed.	Yes	Appropriate outlet scour protection will be placed on all stormwater outlets, chutes, spillways and slope drains to dissipate flow energy and minimise risk of soil erosion. (SW30)	Water quality and hydrology risk treatment plan Surface water and groundwater management plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
Embankments and slopes where dispersive soils are exposed may need to be treated to reduce erosion. Such treatments may include topsoiling and grassing of the slopes or treating surface soils with soil stabilisation additive such hydrated lime.	Yes	Appropriate outlet scour protection will be placed on all stormwater outlets, chutes, spillways and slope drains to dissipate flow energy and minimise risk of soil erosion. (SW30) A surface water and groundwater sub-plan will be developed and implemented to minimise discharge of stormwater from construction areas. The sub-plan will include measures such as: • Directing surface runoff around or away from areas of land disturbance, stockpiles, embankments or nearby sensitive areas, where practicable. • Capturing runoff (via surface water infrastructure) that comes into contact with construction areas and directing it to sedimentation dams. If required, flocculant treatment (i.e., alum, gypsum or hydrated lime) will be used to reduce suspended sediment levels in the stormwater. • Controlling erosion within gullies using primary and secondary sediment traps constructed at appropriate sites. • Retaining water on site from the contributing catchment to approximately the 10% annual-exceedance-probability. • Designing and profiling all site drains to reduce water flow velocity and erosion. (SW04)	Water quality and hydrology risk treatment plan Surface water and groundwater management plan Rehabilitation plan
Detailed Ecological Investigations (Appendix A005)			
The EMP with several sub-plans must outline measures to protect and manage remnant native and fauna habitat retained adjacent to the project footprint.	Yes	The work plan will be adhered to during construction and operation of the project to achieve agreed environmental and social outcomes. (AG04) The biodiversity sub-plan will incorporate fauna salvage and relocation/translocation procedures. (TE28)	Environmental management plan Native vegetation management plan Fire management plan Biodiversity risk treatment plan Water quality and hydrology risk treatment plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
Vegetation removal must not proceed until applicable approvals and permits are obtained.	Yes	Appropriate approvals and permits will be obtained prior to any vegetation removal. (TE01)	Environmental management plan Biodiversity risk treatment plan Native vegetation management plan
In order to compensate for the removal of hollow bearing trees and impacts on hollow dependent fauna known or potentially present (yellow-bellied sheathtail bat, powerful owl, masked owl and eastern pygmy possum) nest boxed could be installed in areas of potential habitat adjacent to the project footprint. However, it should be noted that some species such as powerful owl may only rarely use next boxes for breeding.	Yes	Prior to clearing, nest boxes will be installed in areas of potential habitat adjacent to the project footprint to compensate for the removal of hollow-bearing trees and impacts on hollow-dependant fauna known or potentially present (yellow-bellied sheathtail bat, powerful owl, masked owl and eastern pygmy possum). (TE02)	Environmental management plan Biodiversity risk treatment plan Native vegetation management plan
Appropriate offsets must be secured in accordance with State and Commonwealth legislation/policy.	Yes	Appropriate offsets will be secured in accordance with state and Commonwealth legislation and policy. (TE03)	Environmental management plan Biodiversity risk treatment plan Native vegetation management plan
The extent of vegetation clearance must be clearly defined to ensure disturbance within areas to be retained are avoided. Appropriate buffers must be established around all remnant native vegetation and these must be clearly identified as 'no-go' areas.	Yes	The extent of clearance and buffers around no-go areas will be clearly defined to avoid disturbance within areas to be retained. (TE04) The amount of land clearance will be minimised as far as practicable to reduce greenhouse gas emissions. (GHG07) The amount of land clearance will be minimised wherever possible to minimise loss of agricultural land. (AG14) Riparian vegetation will be retained where possible to maintain aquatic ecosystem habitat and prevent sedimentation of watercourses. (SW41)	Environmental management plan Construction management plan Biodiversity risk treatment plan Native vegetation management plan
Access tracks and roads must be clearly marked to prevent the establishment of secondary tracks and	Yes	Access tracks and roads will be clearly marked to prevent establishment of secondary tracks and disturbance to adjacent	Environmental management plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
disturbance to adjacent vegetation. Where applicable, existing roads must be used as a priority. Access ways that will experience heavy traffic must not be allocated next to areas of high ecological sensitivity.		vegetation; existing roads will be used where practicable. (TE05) Access tracks and roads will be regularly maintained and clearly marked to prevent establishment of secondary tracks and reduce soil erosion; existing roads will be used where practicable. (SW42) Access tracks expected to experience heavy traffic will not be located adjacent to areas of high ecological sensitivity (comprising areas of the Gippsland Red Gum Grassy Woodland and Associated Native Grassland ecological community and 11 EVCs (refer to Table 9.3); hollow-bearing trees; known occurrences and identified potential habitat for swamp everlasting, dwarf kerrawang, gaping leek-orchid, slender wire-lily, blue mat-rush, slender tick-trefoil and sandfly zieria; identified habitat for the giant burrowing frog and Australian grayling; and downstream waterways and wetlands). (TE06) Use of underpasses/culverts and overpasses will be investigated to allow ground dwelling species and arboreal marsupials to move between areas of native vegetation that are bisected or crossed by access roads and linear infrastructure. (TE29)	Construction management plan Biodiversity risk treatment plan Native vegetation management plan
Parking areas, stockpiles, machinery depots and site buildings must be in areas of negligible ecological value.	Yes	Parking areas, stockpiles, machinery depots and site buildings will be located in areas of low ecological value (such as blue gum plantations). (TE07) Project infrastructure and activities will be micro-sited to avoid threatened flora species and native vegetation; including for example, if vegetation of high quality is identified during pre-clearance searches, where practicable, the location will be adjusted to avoid it. (TE37)	Environmental management plan Construction management plan Biodiversity risk treatment plan Native vegetation management plan
All large trees to be retained adjacent to the project footprint must be clearly marked and Tree Retention Zones (i.e., twelve times the tree' diameter at breast height) must be identified.	Yes	Large trees will be retained adjacent to the project footprint and clearly marked; Tree Retention Zones will be identified and marked. (TE08)	Environmental management plan Construction management plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
			Biodiversity risk treatment plan Native vegetation management plan
During the life of the project, areas not required for operation must be revegetated following the mine rehabilitation plan. This plan must include: • Increasing the overall native vegetation cover within the project area • Increasing native vegetation patch size • Increasing habitat connectivity • Excluding stock from areas of native vegetation	Yes	Areas will be revegetated and managed in accordance with the rehabilitation sub-plan to increase overall native vegetation cover in the project area, native vegetation patch size and habitat connectivity, and to exclude stock from such areas. (TE09) Revegetation of mined areas will include: • Planting locally occurring native shrubs, trees and groundcover plants, selected in consultation with DELWP, to recreate the target vegetation community. • Including rocks, logs, dead trees, and stumps in the restoration and rehabilitation works to provide fauna habitat. • Maintaining plantings in accordance with the rehabilitation sub-plan. • Managing weeds and pest animals. (TE11)	Environmental management plan Construction management plan Biodiversity risk treatment plan Native vegetation management plan Rehabilitation plan
Staff/contractor inductions on site must incorporate an environmental component that has been signed off by a suitably qualified site Environmental Advisor/Specialist.	Yes	Staff/contractor inductions will incorporate an environmental component signed off by a suitably qualified representative (e.g., site environmental advisor/specialist). (TE12) Inductions and training will be provided to all relevant project personnel on the safe storage, handling and transport of dangerous goods and in emergency management. (GW08)	Environmental management plan Construction management plan Biodiversity risk treatment plan Native vegetation management plan
The rehabilitation plan must also protect gully systems, including native vegetation from erosion through revegetation. Where possible, revegetation of disturbed areas to recreate pre-existing vegetation communities must be undertaken, thereby increasing the habitat value and visual amenity of affected areas while reducing the likelihood for establishment and	Yes	Disturbed areas will be revegetated to recreate pre-existing vegetation communities, where agreed and practicable, to increase habitat value and visual amenity while reducing the likelihood for weeds to establish and proliferate, and for soil erosion to occur. (TE10)	Rehabilitation plan Environmental management plan Biodiversity risk treatment plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
proliferation of weeds or risks associated with soil erosion.			Native vegetation management plan
The initial focus of rehabilitation must be on soil erosion and sediment control and must involve the implementation of physical controls. Examples of poor erosion management can be found throughout the project area and further gully erosion must be avoided. Following stabilisation and rehabilitation of an area, the area must be returned to its prior condition (i.e., improved pasture, derived native grassland, or native vegetation community). The focus of remaining revegetation in areas owned by Kalbar should be the active management of native vegetation. In many cases this will only involve excluding stock access. Vegetation outside the operational area must also be managed during the life of the project. Revegetation of areas must include: • Planting of a range of locally occurring native shrubs, trees and groundcover plants in consultation with DELWP to recreate the target vegetation community. • Inclusion of rocks, logs, dead trees and stumps in the restoration and rehabilitation works for fauna habitat. • Maintenance of plantings through a rehabilitation and closure plan. • Management of weeds and pest animals. In general, revegetation must aim to enhance the suitability of rehabilitated land within the project footprint and surrounding landscapes for wildlife (within operational safety bounds).	Yes	Disturbed areas will be revegetated to recreate pre-existing vegetation communities, where agreed and practicable, to increase habitat value and visual amenity while reducing the likelihood for weeds to establish and proliferate, and for soil erosion to occur. (TE10) Revegetation of mined areas will include: • Planting locally occurring native shrubs, trees and groundcover plants, selected in consultation with DELWP, to recreate the target vegetation community. • Including rocks, logs, dead trees, and stumps in the restoration and rehabilitation works to provide fauna habitat. • Maintaining plantings in accordance with the rehabilitation sub-plan. • Managing weeds and pest animals. (TE11) Populations of listed or rare native plant species from EVCs within the project area will be increased through targeted recovery programs. (TE52) Planting of tubestock will be scheduled to maximise initial growth, including in spring to take advantage of warmer growing conditions, or in autumn to take advantage of the wet winter. (RH33)	Rehabilitation plan Environmental management plan Biodiversity risk treatment plan Native vegetation management plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
Sensitive areas, such as those containing fauna habitat, must be cleared of fauna prior to constructional and operational activities commencing by a trained ecologist or other qualified environmental specialist. The limits of clearing in sensitive areas (e.g., listed species habitat) must be marked to avoid unnecessary vegetation and habitat removal.	Yes	Pre-clearance searches for fauna will be conducted by a competent environmental professional prior to vegetation removal. (TE54)	Environmental management plan Construction management plan Biodiversity risk treatment plan Native vegetation management plan
Any animals disturbed during clearing works must be relocated. Pre-clearing activities must be undertaken that firstly involve removal of the understorey and smaller non-hollow-bearing trees to disturb fauna and encourage them away from the clearing area. This would require Management Authorisation under the Wildlife Act.	Yes	Animals disturbed during clearing works will be relocated, with appropriate authorisation under the *Wildlife Act 1975.* (TE15) Pre-clearing activities will remove the understorey and smaller non-hollow-bearing trees to disturb fauna and encourage them away from the clearing area. (TE14)	Environmental management plan Construction management plan Biodiversity risk treatment plan Native vegetation management plan
Sides of the trenches must be graded to allow for animal escape. Any trapped animals must be removed before works commence.	Yes	All trenches will have escape ramps to avoid fauna entrapment and allow animals to escape. (TE16) All trenches and other excavations will be checked daily and any trapped animals removed by a competent environmental professional before works commence. (TE39)	Environmental management plan Construction management plan Biodiversity risk treatment plan
Where construction permits, hollow-bearing trees must be retained around project infrastructure.	Yes	Hollow-bearing trees will be retained around project infrastructure, where construction permits. (TE19)	Environmental management plan Construction management plan Biodiversity risk treatment plan
Where large hollow-bearing trees are to be removed a qualified zoologist must be present to conduct pre-clearance searches (primarily for bats, birds and arboreal mammals) and to supervise any tree felling activities in order to salvage fauna.	Yes	Pre-clearance surveys will be carried out by a competent environmental professional in all areas of vegetation to be cleared that have large trees (as defined in the Guidelines for the removal, destruction or lopping of native vegetation, 2017) or that are likely to support flora or fauna species listed under the EPBC Act and/or FFG Act. (TE20)	Environmental management plan Construction management plan Biodiversity risk treatment plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
Where hollow-bearing trees are lost, salvaged or artificial hollows must be installed in retained vegetation adjacent to the project footprint (under the supervision of an ecologist to ensure appropriate site selection and minimise unintended impacts).	Yes	Salvaged or artificial hollows will be installed (under the supervision of an ecologist) in retained vegetation adjacent to the project footprint where hollow-bearing trees are lost. (TE21) Faunal habitat features, such as logs and hollows, will be included as part of habitat restoration works. (TE51)	Rehabilitation plan Environmental management plan Construction management plan Biodiversity risk treatment plan
Regular water quality testing of waterbodies in the local area must be undertaken to ensure there is no significant detrimental impacts as a result of the proposed activity.	Yes	Any water and other suppressants (applied to reduce dust) will not directly enter nearby waterbodies or remnant native vegetation. (TE32) Sediment traps and dams will be cleaned at regular intervals, and following storm events and high rainfall events, to maintain the efficiency of the infrastructure. (SW40)	Environmental management plan Construction management plan Biodiversity risk treatment plan Water quality and hydrology risk treatment plan Surface water and groundwater management plan
Appropriate erosion and settlement control strategies must be implemented to prevent gully erosion in areas adjoining the project footprint.	Yes	Appropriate erosion and sediment control strategies will be implemented to prevent gully erosion in areas adjoining the project footprint. (TE23)	Water quality and hydrology risk treatment plan Environmental management plan Surface water and groundwater management plan
No-go zones must be established around waterbodies adjoining the project footprint to prevent any disturbance (e.g., vehicular traffic, machinery, runoff) to the terrestrial and aquatic values present within these areas.	Yes	No-go zones with buffers will be established around waterbodies adjoining the project footprint to prevent any disturbance to the biodiversity values present within these areas. The width of buffer areas will be determined on a case-by-case basis. (TE24)	Surface water and groundwater management plan Water quality and hydrology risk treatment plan Environmental management plan Biodiversity risk treatment plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
Strategies to manage turbidity/sediment control and spills must be developed for implementation during the construction/operational phases.	Yes	Strategies will be implemented during construction and operations to control sediment runoff (and reduce the potential for increased turbidity in downstream aquatic habitats) and reduce the potential for spills. (TE25) Spills of fuels or chemicals will be managed in accordance with requirements set out in the Spill Response and Clean-up Procedure. (GW11)	Environmental management plan Surface water and groundwater management plan Water quality and hydrology risk treatment plan
Regular maintenance and auditing of plant and equipment must be undertaken to check for leaks or spills.	Yes	If a leak or spill occurs, contaminated soil will be excavated and disposed of by a qualified specialist at a licenced facility. (TE44)	Environmental management plan Surface water and groundwater management plan Water quality and hydrology risk treatment plan
Refuelling and lubrication of vehicles must not be undertaken within 50m of a water course or water body to avoid contamination.	Yes	Areas used for handling and/or storage of concentrated flocculent and hazardous materials will be bunded appropriately to avoid spilled or stored material reaching the surrounding environment and will contain spill response equipment. (TE41)	Environmental management plan Surface water and groundwater management plan Water quality and hydrology risk treatment plan
Bunding around areas of hazardous materials storage will be designed and constructed to ensure hazardous materials are suitably contained in the event of a spill. The capacity (i.e., bund height), storage, stormwater control and maintenance, and operation of bunded areas will comply with EPA bunding guidelines including vehicles operating in bunded areas. Bunding for the fuel storage area (fuel farm) will be accordance with Australian Standard 1940:2004.	Yes	Bunding for the fuel storage area (fuel farm) will be in accordance with Australian Standard 1940:2004 (Standards Australia, 2004). The capacity (i.e., bund height), storage, stormwater control and maintenance, and operation of bunded areas will comply with EPA bunding guidelines (Environment Protection Authority Victoria, 2015). (TE26) Areas used for handling and/or storage of concentrated flocculent and hazardous materials will be bunded appropriately to avoid spilled or stored material reaching the surrounding environment and will contain spill response equipment. (TE41) Limited quantities of chemical will be stored onsite. Any hazardous materials, such as laboratory chemicals, will be	Environmental management plan Construction management plan Surface water and groundwater management plan Water quality and hydrology risk treatment plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
		stored in designated areas in accordance with their safety data sheets. (GW04) Handling of concentrated flocculant and any hazardous materials will be done in accordance with safety data sheet recommendations. (GW05)	
Bunded areas will not be located near a waterway or the freshwater storage dam.	Yes	The capacity (i.e., bund height), storage, stormwater control and maintenance, and operation of bunded areas will comply with EPA bunding guidelines (Environment Protection Authority Victoria, 2015). (TE26) The design, construction and operation of the freshwater storage dam will follow the Australian National Committee on Large Dams (ANCOLD) Guidelines on the Consequence Categories for Dams. (SW12)	Environmental management plan Construction management plan Surface water and groundwater management plan Water quality and hydrology risk treatment plan
The refuelling facility will be bunded and serviced by the stormwater interceptor trap.	Yes	Bunding for the fuel storage area (fuel farm) will be in accordance with Australian Standard 1940:2004 (Standards Australia, 2004). The capacity (i.e., bund height), storage, stormwater control and maintenance, and operation of bunded areas will comply with EPA bunding guidelines (Environment Protection Authority Victoria, 2015). (TE26) Triple interceptor traps will be used to prevent release of hazardous materials from bunded areas into rehabilitated areas. (RH31) Rainfall runoff water from vehicle workshop floors, vehicle service areas and fuelling areas will be captured and directed to an interceptor trap to extract hydrocarbons, prior to treated water being discharged to the drain and sump network. The trap will be emptied of hydrocarbons routinely by a licensed contractor for disposal offsite at a licensed facility. (SW21)	Environmental management plan Construction management plan Surface water and groundwater management plan Water quality and hydrology risk treatment plan
The design, construction, monitoring and rehabilitation of the tailings storage facility will comply with the DEDJTR guidelines.	Yes	The design, construction, monitoring and rehabilitation of the temporary TSF will comply with the Department of Economic Development, Jobs, Transport and Resources: Technical Guideline Design and Management of Tailings Storage	Environmental management plan Construction management plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
		Facilities (Department of Economic Development, Jobs, Transport and Resources, 2017). (TE27)	Surface water and groundwater management plan Water quality and hydrology risk treatment plan
The biodiversity management plan must incorporate fauna salvage and relocation/translocation procedures that address the construction and operational phases of the project.	Yes	The biodiversity sub-plan will incorporate fauna salvage and relocation/translocation procedures. (TE28)	Environmental management plan Construction management plan Biodiversity risk treatment plan Biodiversity management plan
Slow speed limits must be implemented in areas containing remnant native vegetation, within and around the project area. Where possible, traffic must be minimised during the night, dusk and dawn in these areas to prevent fauna mortality.	Yes	Appropriate speed-limits will be applied in areas containing remnant native vegetation to reduce the risk of fauna mortality from vehicle strike. (TE17) Traffic movements will be minimised during the night, dusk and dawn periods in remnant native vegetation areas. (TE18)	Environmental management plan Construction management plan Biodiversity risk treatment plan Traffic management plan Biodiversity management plan
Minimising the isolation and fragmentation of habitat must be taken into consideration when planning any activity that may lead to the removal of vegetation.	Yes	Isolation and fragmentation of habitat will be minimised when planning activities with potential to remove vegetation. (TE22)	Environmental management plan Construction management plan Biodiversity risk treatment plan Biodiversity management plan
Remaining areas of ecological value near the project must be managed with a focus on enhancing habitat features to compensate for those lost. This may include the installation of nesting boxes and logs and other large woody debris relocated from cleared areas.	Yes	All remaining areas of ecological value near the project area and infrastructure options area will be managed under the supervision of a suitably qualified ecologist to enhance habitat features and compensate for those lost; including installing nesting boxes and logs, and other large woody debris relocated from cleared areas. (TE30)	Environmental management plan Construction management plan Biodiversity risk treatment plan Biodiversity management plan Rehabilitation plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
Fauna escape features and refuges must be provided around remnant patches adjacent to the operational area of the project (including ramps and damp sandbags).	Yes	Fauna escape features and refuges (including ramps and damp sandbags) will be provided where remnant patches of vegetation are adjacent to construction and operational areas. (TE31) All trenches and other excavations will be checked daily and any trapped animals removed by a competent environmental professional before works commence. (TE39)	Environmental management plan Construction management plan Biodiversity risk treatment plan Biodiversity management plan
The EMP with several sub-plans must outline measures to controlled weeds and pest animal species across the project area, and manage remnant native vegetation and fauna habitat retained adjacent to the project footprint.	Yes	Biosecurity procedures will be implemented to avoid introducing and spreading weeds, pests and diseases into the project area and surrounds. (TE45) Disturbed areas will be revegetated to increase habitat value and visual amenity while reducing the likelihood of weeds to establish and proliferate. (TE46)	Environmental management plan Construction management plan Biodiversity risk treatment plan Biodiversity management plan
High threat weeds, which include noxious weeds must be mapped prior to construction and removed from the project area.	Yes	Biosecurity procedures will be implemented to avoid introducing and spreading weeds, pests and diseases into the project area and surrounds. (TE45)	Environmental management plan Construction management plan Biodiversity risk treatment plan Biodiversity management plan
Appropriate hygiene controls must be implemented throughout the entire project to prevent the spread of environmental and noxious weeds. Any new infestation must be controlled as soon as they are detected.	Yes	Biosecurity procedures will be implemented to avoid introducing and spreading weeds, pests and diseases into the project area and surrounds. (TE45)	Environmental management plan Construction management plan Biodiversity risk treatment plan Biodiversity management plan
Kalbar must undertake an engagement strategy to collaborate with surrounding landowners in the area of pest plant and animal control.	Yes	Revegetation of mined areas will include management of weeds and pest animals. (TE47) Rehabilitation activities will be timed in consultation with landholders and based on analysis of long-term rainfall patterns to maximise the rate of successful vegetation establishment and rehabilitation performance. (RH10)	Rehabilitation plan Community engagement plan Environmental management plan Construction management plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
		A community engagement plan will be implemented that identifies approaches to actively manage issues with public perception, including providing objective and factual public communications. (AG08) One-on-one meetings will be held with adjacent landholders on a regular basis to provide project updates and discuss any issues of concern. (SE57)	Biodiversity risk treatment plan Biodiversity management plan
All Kalbar staff and contractors need to ensure that they prevent the spread of weeds and infestations need to be reported immediately to the operations manager or equivalent person.	Yes	Biosecurity procedures will be implemented to avoid introducing and spreading weeds, pests and diseases into the project area and surrounds. (TE45)	Environmental management plan Construction management plan Biodiversity risk treatment plan Biodiversity management plan Rehabilitation plan
Parking areas, stockpiles, machinery depots and site buildings must be in areas of negligible ecological value.	Yes	Project infrastructure and activities will be micro-sited to avoid threatened flora species and native vegetation; including for example, if vegetation of high quality is identified during pre-clearance searches, where practicable, the location will be adjusted to avoid it. (TE37) Parking areas, stockpiles, machinery depots and site buildings will be located in areas of low ecological value (such as blue gum plantations). (TE07)	Environmental management plan Construction management plan Native vegetation management plan Biodiversity risk treatment plan Biodiversity management plan
Where possible, construction machinery, vehicles and pedestrians must be confined to formed tracks and designated construction areas.	Yes	Access tracks and roads will be regularly maintained and clearly marked to prevent establishment of secondary tracks and reduce soil erosion; existing roads will be used where practicable. (SW42) No-go zones with buffers will be established around waterbodies adjoining the project footprint to prevent any disturbance to the biodiversity values present within these areas. The width of buffer areas will be determined on a case-by-case basis. (TE24)	Environmental management plan Construction management plan Biodiversity risk treatment plan Biodiversity management plan Traffic management plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
		Construction machinery, vehicles and pedestrians will be confined to formed tracks and designated areas, where practicable. (TE34)	
The movements of heavy vehicles must be controlled, particularly on high wind days, to prevent or limit dust dispersal.	Yes	Certain activities, such as overburden excavation and transport of overburden and product, will be scheduled to avoid excessive dust emissions during forecast adverse weather conditions (principally high winds). (AQ14)	Environmental management plan Construction management plan Traffic management plan Airborne and deposited dust risk treatment plan
Operations, equipment or machinery that emits excessive noise or vibrations (to levels that may disrupt local fauna or impact on nearby vegetation) must be located away from sensitive ecological values. Where relocation is not appropriate, control measures such as mufflers or baffles must be employed.	Yes	Access tracks expected to experience heavy traffic will not be located adjacent to areas of high ecological sensitivity (comprising areas of the Gippsland Red Gum Grassy Woodland and Associated Native Grassland ecological community and 11 EVCs (refer to Table 9.3); hollow-bearing trees; known occurrences and identified potential habitat for swamp everlasting, dwarf kerrawang, gaping leek-orchid, slender wire-lily, blue mat-rush, slender tick-trefoil and sandfly zieria; identified habitat for the giant burrowing frog and Australian grayling; and downstream waterways and wetlands). (TE06) Trucks will be equipped with adequate and functioning mufflers. (NV28)	Environmental management plan Construction management plan Biodiversity risk treatment plan Biodiversity management plan Traffic management plan Environmental noise risk treatment plan
Additional avoidance as part of project micrositing.	Yes	Project infrastructure and activities will be micro-sited to avoid threatened flora species and native vegetation; including for example, if vegetation of high quality is identified during pre-clearance searches, where practicable, the location will be adjusted to avoid it. (TE37) Currently known extant populations of gaping-leek orchid will be avoided, and project activities will be designed to minimise potential for indirect impacts to these populations. (TE48) The amount of land clearance will be minimised wherever possible to minimise loss of agricultural land. (AG14)	Environmental management plan Construction management plan Biodiversity risk treatment plan Biodiversity management plan Native vegetation management plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
			Water quality and hydrology risk treatment plan Fire management plan
Ensure that the area proposed to be disturbed for the rail siding works do not directly or indirectly impact any known populations of the gaping leek orchid.	Yes	Currently known extant populations of gaping-leek orchid will be avoided, and project activities will be designed to minimise potential for indirect impacts to these populations. (TE48)	Environmental management plan Construction management plan Biodiversity risk treatment plan Biodiversity management plan Native vegetation management plan Fire management plan
For swamp everlasting, prevent indirect impacts to native vegetation and low-lying areas, particularly at Saplings Morass Flora and Fauna Reserve adjacent to Cowells Lane. Prevent access along Cowells Lane by construction machinery to ensure no indirect impacts.	Yes	Construction machinery will not be permitted to access Cowells Lane to avoid potential indirect impacts to swamp everlasting, native vegetation and low-lying areas within the infrastructure options area. (TE49)	Environmental management plan Construction management plan Biodiversity risk treatment plan Biodiversity management plan Native vegetation management plan Traffic management plan
Undertake micrositing to prevent direct or indirect impacts to the species and associated habitats along the rail corridor.	Yes	Currently known extant populations of gaping-leek orchid will be avoided, and project activities will be designed to minimise potential for indirect impacts to these populations. (TE48) A detailed flora and fauna survey will be undertaken in accordance with relevant state and Commonwealth legislative requirements in the unsurveyed portion of the project area, located in the northwestern corner, prior to commencement of ground disturbance. (TE53)	Environmental management plan Construction management plan Biodiversity risk treatment plan Biodiversity management plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
			Native vegetation management plan
Avoid and minimise poor water quality entering the Mitchell River. Maintain hydrological regime of Mitchell River.	Yes	A surface water and groundwater sub-plan will be developed and implemented to minimise discharge of stormwater from construction areas. The sub-plan will include measures such as: • Directing surface runoff around or away from areas of land disturbance, stockpiles, embankments or nearby sensitive areas, where practicable. • Capturing runoff (via surface water infrastructure) that comes into contact with construction areas and directing it to sedimentation dams. If required, flocculant treatment (i.e., alum, gypsum or hydrated lime) will be used to reduce suspended sediment levels in the stormwater. • Controlling erosion within gullies using primary and secondary sediment traps constructed at appropriate sites. • Retaining water on site from the contributing catchment to approximately the 10% annual-exceedance-probability. • Designing and profiling all site drains to reduce water flow velocity and erosion. (SW04)	Environmental management plan Construction management plan Biodiversity risk treatment plan Biodiversity management plan Water quality and hydrology risk treatment plan Surface water and groundwater management plan
Avoid the removal of hollow-bearing trees as part of project micrositing.	Yes	Hollow-bearing trees will be retained around project infrastructure, where construction permits. (TE19) Felling of large hollow-bearing trees will be supervised by a competent environmental professional. (TE56)	Environmental management plan Construction management plan Biodiversity risk treatment plan Biodiversity management plan Native vegetation management plan
Prevent sedimentation into Mitchell River. A number of best practice mitigation measures such as sediment wetlands, retardation features and ongoing monitoring and surveillance to ensure that erosion	Yes	A surface water and groundwater sub-plan will be developed and implemented to minimise discharge of stormwater from	Environmental management plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
and sedimentation is avoided and controlled. A detailed Water Management Plan, which includes detailed water quality maintenance and sedimentation prevention measures will be prepared and implemented as part of the project. This will form part of the project EMS.		construction areas. The sub-plan will include measures such as: • Directing surface runoff around or away from areas of land disturbance, stockpiles, embankments or nearby sensitive areas, where practicable. • Capturing runoff (via surface water infrastructure) that comes into contact with construction areas and directing it to sedimentation dams. If required, flocculant treatment (i.e., alum, gypsum or hydrated lime) will be used to reduce suspended sediment levels in the stormwater. • Controlling erosion within gullies using primary and secondary sediment traps constructed at appropriate sites. • Retaining water on site from the contributing catchment to approximately the 10% annual-exceedance-probability. • Designing and profiling all site drains to reduce water flow velocity and erosion. (SW04)	Construction management plan Surface water and groundwater management plan Water quality and hydrology risk treatment plan Rehabilitation plan
Prevent impacts on identified EVCs and wetland/waterways associated with mounding.	Yes	The freshwater and contingency water storage dams will be constructed with an engineered liner to reduce infiltration to groundwater. (GW01) Groundwater will be extracted from the Latrobe Group Aquifer in line with the conditions, timings, and limits detailed in a licence issued by Southern Rural Water. (GW02) Water will be recovered and reused where practicable (such as runoff from ore stockpiles and supernatant water from the temporary TSF and tailings areas within the mine voids). (SW23)	Environmental management plan Water quality and hydrology risk treatment plan Biodiversity risk treatment plan Rehabilitation plan Surface water and groundwater management plan Biodiversity management plan
Groundwater and Surface Water Impact Assessment (Appendix A006)			
Kalbar and contractors will comply with the relevant statutory requirements and relevant Australian standards for hazardous materials transportation, storage, handling and disposal. These measures will	Yes	Areas used for handling and/or storage of concentrated flocculent and hazardous materials will be bunded appropriately	Environmental management plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
be documented within a hazardous material, fuel handling and spill response procedures developed by Kalbar.		to avoid spilled or stored material reaching the surrounding environment and will contain spill response equipment. (TE41) 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). (GW12)	Water quality and hydrology risk treatment plan Biodiversity risk treatment plan Rehabilitation plan Surface water and groundwater management plan Biodiversity management plan
Kalbar will maintain a fuel and oil storage log.	Yes	Spills of fuels or chemicals will be managed in accordance with requirements set out in the Spill Response and Clean-up Procedure. (GW11) Bunding for the fuel storage area (fuel farm) will be in accordance with Australian Standard 1940:2004 (Standards Australia, 2004). The capacity (i.e., bund height), storage, stormwater control and maintenance, and operation of bunded areas will comply with EPA bunding guidelines (Environment Protection Authority Victoria, 2015). (TE26) Materials and equipment will be sourced locally wherever feasible to minimise fuel use for transportation. (GHG10)	Environmental management plan Water quality and hydrology risk treatment plan Biodiversity risk treatment plan Surface water and groundwater management plan
A waste minimisation, handling and disposal strategy will be developed. Standard operating procedures related to the safe handling, transportation, storage and disposal of wastes generated by the project will be developed and implemented by Kalbar as part of the waste management sub plan.	Yes	Hazardous waste will be removed from site by a licensed contractor for treatment or disposal in an approved facility in accordance with licence and regulatory requirements. (GW06) The design of infrastructure for the proposed mine will consider environmentally sustainable approaches to minimising waste generation and waste disposal requirements. (Chapter 3 of Main Report)	Environmental management plan Construction management plan Radioactive waste management plan Risk management plan
Wastewater from ablutions and the office will be treated by in-ground septic systems onsite. The treated effluent will meet EPA requirements and be discharged to land through a subsurface irrigation system.	Yes	Wastewater from ablutions and the administrative offices adjacent to the WCP will be treated with a BioMAX 40EP BioMAX C40 in-ground systems on site. Sewage and wastewater from the contractor yard will be removed periodically by a licenced waste removalist operator. (Chapter 3 of Main Report)	Environmental management plan Construction management plan Water quality and hydrology risk treatment plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
			Surface water and groundwater management plan
All non-toxic waste (including perishable and inert) will be securely stored in appropriate receptacles.	Yes	All non-toxic waste (including perishable and inert waste) will be securely stored in appropriate receptacles. Waste management facilities will allow waste to be segregated into streams that reflect the waste management principles of avoid, reduce, reuse, recycle and proper disposal. (Chapter 3 of Main Report)	Environmental management plan Construction management plan Risk management plan
General waste will be removed from site and disposed of by licensed contractors.	Yes	Waste will be removed from site and disposed of by licensed contractors (except for septic waste). (GW09) Hazardous waste will be removed from site by a licensed contractor for treatment or disposal in an approved facility in accordance with licence and regulatory requirements. (GW06)	Environmental management plan Construction management plan Risk management plan
Waste hydrocarbons will be stored in suitable containers for removal from the mine site for disposal at either an EPA-approved hydrocarbon waste site or a recycling depot.	Yes	Waste hydrocarbons will be stored in suitable containers for removal from the project area for disposal at either an EPA-approved hydrocarbon waste site or a recycling depot. (GW10) Hazardous waste will be removed from site by a licensed contractor for treatment or disposal in an approved facility in accordance with licence and regulatory requirements. (GW06)	Environmental management plan Construction management plan Risk management plan Water quality and hydrology risk treatment plan Surface water and groundwater management plan
Runoff and any groundwater that migrates to the open-mine voids will be collected in sumps, pumped to the process water storage dam and reused in the process plant.	Yes	Diverting runoff from stockpiles to the process water dams for reuse. (RD07) Management techniques, such as underdrains, sumps and water recovery pumps will be used to recover water in the mine void tailings containment cells. (GW15)	Environmental management plan Risk management plan Water quality and hydrology risk treatment plan Surface water and groundwater management plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
Where possible, clean water upstream of the open-mine void will be diverted around the open-void to avoid generating additional mine contact water requiring management.	Yes	Water running off undisturbed ground will be diverted around disturbance areas where practicable. (SW24)	Environmental management plan Construction management plan Risk management plan Water quality and hydrology risk treatment plan Surface water and groundwater management plan
A Water Risk Treatment Plan will be developed and implemented to minimise discharge of stormwater from the operational mine areas. The management plan will include measures such as: • During construction, surface runoff will be directed around or away from areas of land disturbance, stockpiles, embankments or nearby sensitive areas, where practicable. Runoff that comes into contact with construction areas will be captured by surface water management infrastructure and directed to sedimentation dams. • Retention of impacted stormwater in the process water dam onsite. • If required, flocculant treatment (i.e., alum, gypsum or hydrated lime) will be used to drop suspended sediment levels in the stormwater. • Erosion within gullies will be controlled using primary and secondary sediment traps constructed at appropriate sites. Catchment water onsite will be retained to approximately 10% AEP. • All site drains will be designed and profiled to reduce water flow velocity, to reduce erosion.	Yes	Water running off undisturbed ground will be diverted around disturbance areas where practicable. (SW24) Runoff and erosion of soil (which could contain ore) will be minimised through: • Adequate bunding of operations and storage areas to avoid the transport of spilled or stored material into the surrounding terrestrial, freshwater or marine environment. • Constructing stockpile slope angles as low as practicable and mulch materials and contour ripping will be strategically used. • Locating stockpiles to avoid overland flow pathways. • Diverting runoff from stockpiles to the process water dams for reuse. • Vegetating overburden stockpiles where appropriate to minimise erosion. (RD07)	Environmental management plan Risk management plan Water quality and hydrology risk treatment plan Surface water and groundwater management plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
Runoff water from mobile equipment service areas and the mining contractors' workshop will be directed to an interceptor trap to extract hydrocarbons, prior to it being discharged to the drain and sump network. The trap will be emptied of hydrocarbons routinely by a licensed contractor for disposal offsite at a licensed facility.	Yes	Rainfall runoff water from vehicle workshop floors, vehicle service areas and fuelling areas will be captured and directed to an interceptor trap to extract hydrocarbons, prior to treated water being discharged to the drain and sump network. The trap will be emptied of hydrocarbons routinely by a licensed contractor for disposal offsite at a licensed facility. (SW21)	Environmental management plan Risk management plan Water quality and hydrology risk treatment plan Surface water and groundwater management plan
Recovered water will be stored in the process water dam. Only winter-fill from the Mitchell River, or treated mine contact water of similar quality, will be stored in the freshwater storage dam.	Yes	If during successive storm events, water management dams are required to be drawn down at a rate greater than can be achieved by the process water demand, mine contact water will be treated at a rate of 24 ML/day prior to discharge to the freshwater storage dam. Mine contact water will be treated to meet licence requirements prior to discharge offsite. (SW33) The design, construction and operation of the freshwater storage dam will follow the Australian National Committee on Large Dams (ANCOLD) Guidelines on the Consequence Categories for Dams. (SW12)	Environmental management plan Risk management plan Water quality and hydrology risk treatment plan Surface water and groundwater management plan
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.	Yes	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. (SW01)	Environmental management plan Risk management plan Water quality and hydrology risk treatment plan Surface water and groundwater management plan
The open voids will be progressively backfilled with sand tailings and clay/silt tailings which will then be covered with overburden, subsoil and topsoil. Revegetation with crop/pasture or native vegetation will be undertaken where required.	Yes	Progressive rehabilitation will be conducted to ensure that, where feasible, disturbed agricultural land in the project area can be restored to productive use as soon as possible. (AG15) The open voids will be progressively backfilled with sand tailings and fines tailings and covered with overburden, subsoil and, in areas other than Grassy Woodland revegetation,	Environmental management plan Rehabilitation plan Native vegetation management plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
		topsoil. Revegetation with crop, pasture or native vegetation will be undertaken where required. (GW16) The mine void will be progressively backfilled, and rehabilitation will be progressive to re- instate pre-mining landforms and re-establish vegetation. (VL05)	
The mine area will be progressively rehabilitated so that in most cases the post-closure topography and surface drainage gullies will approximate the pre-mining surface topography, to the extent practicable.	Yes	The mine void will be progressively backfilled, and rehabilitation will be progressive to re- instate pre-mining landforms and re-establish vegetation. (VL05)	Environmental management plan Rehabilitation plan Native vegetation management plan
The landform will be particularly susceptible to erosion from rainfall runoff and should be revegetated as soon as practically possible.	Yes	Runoff and erosion of soil (which could contain ore) will be minimised through: • Adequate bunding of operations and storage areas to avoid the transport of spilled or stored material into the surrounding terrestrial, freshwater or marine environment. • Constructing stockpile slope angles as low as practicable and mulch materials and contour ripping will be strategically used. • Locating stockpiles to avoid overland flow pathways. • Diverting runoff from stockpiles to the process water dams for reuse. • Vegetating overburden stockpiles where appropriate to minimise erosion. (RD07) Hydromulches or tackifiers will be used where appropriate to prevent erosion and the more effective use of incident rainfall by germinating seeds. (RH11) Hydroseeding will be used in rehabilitation areas, where appropriate, to stabilise the soil surface and minimise erosion. (RH12)	Environmental management plan Rehabilitation plan Native vegetation management plan Surface water and groundwater management plan Water quality and hydrology risk treatment plan Ground control management plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
Dam infrastructure designed to capture run-off (and eroded sediments) should be maintained until such a time that revegetation of the mine area is fully established and is stabilising the landscape.	Yes	Runoff and erosion of soil (which could contain ore) will be minimised through: • Diverting runoff from stockpiles to the process water dams for reuse. • Capturing runoff (via surface water infrastructure) that comes into contact with construction areas and directing it to sedimentation dams. If required, flocculant treatment (i.e., alum, gypsum or hydrated lime) will be used to reduce suspended sediment levels in the stormwater. (SW04) Surface water management infrastructure designed to capture runoff (and eroded soils) will be maintained until vegetation is fully established and stabilising the landscape. (SW09)	Environmental management plan Rehabilitation plan Native vegetation management plan Surface water and groundwater management plan Water quality and hydrology risk treatment plan Ground control management plan
The mine plan will be implemented to minimise the storage of tailings outside of the mine void footprint, and limit the potential for impacts to surface water and groundwater.	Yes	A temporary tailings storage facility (TSF) will provide tailings storage in the initial stages of mining, before sufficient voids are established. (Chapter 3 of Main Report) The temporary TSF will be decommissioned and the fines tailings from the TSF to be deposited within the mine void. The area under the decommissioned will then be mined. (Chapter 3 of Main Report)	Environmental management plan Rehabilitation plan Native vegetation management plan Surface water and groundwater management plan Water quality and hydrology risk treatment plan Ground control management plan
Prior to construction, a groundwater monitoring program (quality and level) will be developed and implemented to establish further baseline data and provide an ongoing basis for the assessment of impacts during operation of the project.	Yes	The groundwater monitoring program will include: • Monthly recording of groundwater levels prior to construction at designated monitoring bores installed in the Coongulmerang Formation aquifer (seven bores), Balook Formation aquifer (two bores), Seaspray Group aquifer (one bore) and Latrobe Group aquifer (two bores)	Environmental management plan Construction management plan Surface water and groundwater management plan Water quality and hydrology risk treatment plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
		• Record groundwater levels at designated monitoring bores and locations as agreed with regulators. • Analyse groundwater (including for pH, salinity, dissolved metals, radionuclides, major cations and anions, and nutrients) from designated monitoring bores and locations as agreed with regulators. • Analyse process water and effluent (including for biological oxygen demand, suspended solids, E. coli and other parameters) in accordance with the EPA works approvals or licence. • Record quantity of treated sewage effluent discharged in accordance with the EPA works approvals or licence. • Record groundwater extraction volumes and rate. (Chapter 12 of Main Report)	
All dams for fresh water storage will be constructed with engineered liners to reduce infiltration to groundwater.	Yes	The freshwater and contingency water storage dams will be constructed with an engineered liner to reduce infiltration to groundwater. (GW01)	Environmental management plan Construction management plan Surface water and groundwater management plan Water quality and hydrology risk treatment plan
The project will recover and reuse water where practicable (such as run-off from ore stockpiles and supernatant water from the TSF and tailings area within the mine void) and optimise operations to maximise water use efficiency.	Yes	Management techniques, such as underdrains, sumps and water recovery pumps will be used to recover water in the mine void tailings containment cells. (GW15) Water will be recovered and reused where practicable (such as runoff from ore stockpiles and supernatant water from the temporary TSF and tailings areas within the mine voids). (SW23)	Environmental management plan Construction management plan Surface water and groundwater management plan Water quality and hydrology risk treatment plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
Seepage of mine contact water from the TSF, process water storage and mine voids will be monitored via a groundwater monitoring network during operation and closures so that proactive management of groundwater impacts can be implemented.	Yes	Visual assessments of surface water controls will be undertaken on a regular basis, and after rainfall, to check that any ponding, seepage or run-off meets design specifications. (GE06) The density of deep-rooted trees and shrubs will be increased in areas at risk from tunnel erosion by minimising the volume of seepage flows reaching valley slopes and channels. (RH24) Tree densities in areas planned for grazing land use, particularly in swale areas, will be increased to reduce deep drainage and seepage flows, and to maximise erosion stability. (RH27) The temporary TSF will be constructed using engineered cells with lined walls. Water will be managed using a decant system, sumps and drains to capture and reuse seepage. (SW22)	Environmental management plan Surface water and groundwater management plan Water quality and hydrology risk treatment plan
Develop and implement an adaptive management strategy in consultation with affected stakeholders that includes triggers for groundwater and surface water quantity and quality for remedial action.	Yes	Surface water will be managed through an adaptive management strategy that includes trigger levels for surface water quantity and quality that determine when remedial action is required (in consultation with affected stakeholders). (SW28) An adaptive management strategy will be implemented, based on water quality and quantity monitoring results, to determine whether offset water that would typically be returned to the Mitchell River may be directed to ephemeral drainage gullies in a controlled manner. (SW35)	Environmental management plan Construction management plan Surface water and groundwater management plan Water quality and hydrology risk treatment plan
TSF will be constructed using engineered cells. Water will be managed using a decant system, sumps and drains to capture and reuse seepage.	Yes	The temporary TSF will be constructed using engineered cells with lined walls. Water will be managed using a decant system, sumps and drains to capture and reuse seepage. (SW22)	Environmental management plan Construction management plan Surface water and groundwater management plan Water quality and hydrology risk treatment plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
Freeboards on the TSF, freshwater storage dam, process water dam and sedimentation ponds will be maintained to allow for storm events and high rainfall periods, in accordance with Australian and Victorian regulatory requirements.	Yes	Freeboards on the water storage dam, process water dam and sediment ponds will be maintained to allow for storm events and high rainfall periods, in accordance with relevant licence, permit and approval requirements. (SW05)	Environmental management plan Risk management plan Construction management plan Surface water and groundwater management plan Water quality and hydrology risk treatment plan
Stockpile slope angles will be constructed as low as practicable and seeding or mulch materials and contour ripping will be strategically used to stabilise stockpiles, prevent runoff and minimise erosion.	Yes	Stockpiles will be vegetated where appropriate to minimise erosion. (RH22) Constructing stockpile slope angles as low as practicable and mulch materials and contour ripping will be strategically used. (RD07) Stockpile slope angles will be constructed as low as practicable and mulch materials and contour ripping will be used strategically to stabilise stockpiles, prevent runoff and minimise erosion. (RH23) Construction of stockpiles will be designed to avoid flow pathways to minimise erosion. (RH04)	Environmental management plan Risk management plan Construction management plan Ground control management plan
The design and placement of infrastructure in the project area will consider potential for flow accumulation and increased flood risk.	Yes	The design and placement of infrastructure in the project area will consider potential for flow accumulation and increased flood risk, and associated prevention measures. (SW02)	Environmental management plan Risk management plan Construction management plan Water quality and hydrology risk treatment plan Surface water and groundwater management plan
Prior to construction, a surface water monitoring program will be developed and implemented to	Yes	The surface water monitoring program includes the following:	Environmental management plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
provide ongoing assessment of impacts during construction and operation of the project.		• Record flow rates in surface watercourses preconstruction and in all project stages. • Analyse water quality in surface watercourses preconstruction and in all project stages. • Analyse water quality in discharges from water storages, in mine contact water, and sediment detention ponds. • Record water level in mine contact water dams. • Record water extraction (winterfill) rates at the water extraction point during construction, operations and active rehabilitation. • Observe quantity of sediment in sediment detention ponds. • Observe visual evidence of gullying or other instability initially at Honeysuckle Creek eastern tributary, Moilun Creek tributary and Perry Gully, and thereafter at three points in gullies affected by, or to be affected, by mining. • Assess stability of waterways within or immediately adjacent to operational areas. • Audit the structural integrity of the freshwater storage dams, temporary TSF and other water management dams annually. • Observe visual evidence of poor structural integrity in the freshwater storage dams, temporary TSF and other water management dams. (Chapter 12 of Main Report)	Construction management plan Water quality and hydrology risk treatment plan Surface water and groundwater management plan
Groundwater will be extracted from the Latrobe Group aquifer in line with the conditions, timings, and limits detailed in a licence issued by Southern Rural Water. Groundwater extraction will also be contingent on securing a temporary water allocation from existing licenced users.	Yes	Groundwater will be extracted from the Latrobe Group Aquifer in line with the conditions, timings, and limits detailed in a licence issued by Southern Rural Water. (GW02)	Environmental management plan Risk management plan Construction management plan Water quality and hydrology risk treatment plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
			Surface water and groundwater management plan
Install a groundwater monitoring network to assess the effect of extracting groundwater on the Latrobe Group aquifer and overlying aquifers. Review and update the predictive model based on observed drawdown response.	Yes	The groundwater monitoring program includes the following: • Record groundwater levels at designated monitoring bores and locations as agreed with regulators. • Analyse groundwater (including for pH, salinity, dissolved metals, radionuclides, major cations and anions, and nutrients) from designated monitoring bores and locations as agreed with regulators. • Analyse process water and effluent (including for biological oxygen demand, suspended solids, E. coli and other parameters) in accordance with the EPA works approvals or licence. (Chapter 12 of Main Report)	Environmental management plan Risk management plan Construction management plan Water quality and hydrology risk treatment plan Surface water and groundwater management plan
Mine contact water from outside of the mine void or tailings dam that is retained in water management dams will be offset by releasing the same volume of freshwater from the freshwater storage dam. Water will be released downstream of the project area (to the Perry Catchment) or directly to the Mitchell River via the pipeline from the freshwater dam.	Yes	Mine contact water from outside of the mine void, temporary TSF or process water dams that is retained in water management dams will be offset by releasing the same volume of water from the freshwater storage dam. Water will be released downstream of the project area (to the Perry River catchment) or directly to the Mitchell River via the pipeline from the freshwater storage dam. (SW03)	Environmental management plan Risk management plan Construction management plan Water quality and hydrology risk treatment plan Surface water and groundwater management plan
Stream bed instability should be identified within and immediately downstream of the project area, and monitored prior to and during construction, operations, closure and post closure. The following management actions will be taken to minimise stream bed instability: • Where infrastructure, such as dams and haul roads, are to be installed on or in close proximity to a watercourse, these areas should be	Yes	Areas will be inspected for nearby stream bed instability prior to construction where infrastructure such as water storages and haul roads are to be installed on or close to a watercourse. (SW06) If required, bed instability will be addressed through appropriately designed grade controls, such as the use of rock chutes. (SW07) All stream bed instability areas within and immediately downstream of the project area will be inspected prior to, and annually, during construction to determine movement rates of	Environmental management plan Risk management plan Construction management plan Water quality and hydrology risk treatment plan Surface water and groundwater management plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
inspected for nearby stream bed instability prior to construction. • If required, bed instability should be addressed though appropriately designed grade controls, such as the use of rock chutes. • All stream bed instability areas should be inspected prior to, and annually during construction and operation to ascertain a rate of movement and potential risks posed to mine infrastructure.		unstable areas and potential risks posed to mine infrastructure. (SW08)	
The following erosion and sediment controls will be implemented upstream of sedimentation dams to reduce erosion and the mobilisation of sediment: • Where practical, undisturbed water will be diverted around disturbance areas; • Permanent and long-term drains and bund walls are to be topsoiled and vegetated with suitable vegetation as soon as possible; • Appropriate outlet scour protection will be placed on all stormwater outlets, chutes, spillways and slope drains to dissipate flow energy and minimise risk of soil erosion; and • Monitor the site and adjust erosion and sediment control practices to maintain the required performance standard.	Yes	Appropriate outlet scour protection will be placed on all stormwater outlets, chutes, spillways and slope drains to dissipate flow energy and minimise risk of soil erosion. (SW30)	Environmental management plan Risk management plan Construction management plan Water quality and hydrology risk treatment plan Surface water and groundwater management plan Ground control management plan
Mine contact water management dams within the Perry River catchment will be emptied as a priority over those located in the Mitchell River catchment to reduce potential water quality impacts to the Perry catchment.	Yes	Mine contact water management dams within the Perry River catchment will be emptied as a priority over those located in the Mitchell River catchment to reduce potential water quality impacts from a spillway discharge to the Perry River catchment. (SW32)	Environmental management plan Risk management plan Construction management plan Water quality and hydrology risk treatment plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
			Surface water and groundwater management plan
If, during successive storm events, water management dams are required to be drawn down at a rate greater than can be achieved by the process water demand, mine contact water will be treated at a rate of 24ML/day prior to discharge to the fresh water dam. Mine contact water will be treated to a level that is acceptable for discharge to the Mitchell River.	Yes	If during successive storm events, water management dams are required to be drawn down at a rate greater than can be achieved by the process water demand, mine contact water will be treated at a rate of 24 ML/day prior to discharge to the freshwater storage dam. Mine contact water will be treated to meet licence requirements prior to discharge offsite. (SW33)	Environmental management plan Risk management plan Construction management plan Water quality and hydrology risk treatment plan Surface water and groundwater management plan
Revegetation of ephemeral drainage gullies in areas downstream of future mining activities should be commenced during the first autumn or winter after project environmental approvals are received. Revegetation will work towards mitigating: • Moderate increased flow velocity downstream of the mine operations and the final landform; • The effects of tunnel erosion in the area where soil treatment is not planned; and • The effects of sediment starvation by reducing sediment transport and encouraging deposition.	Yes	Ephemeral drainage gullies will be revegetated in areas downstream of future mining activities prior to operations commencing to increase landscape stability and specifically mitigate: • Effects of a moderate increased flow velocity downstream of the mine operations and the final landform. • Potential effects of tunnel erosion downstream of the mine void boundary where soil treatment is not planned. • Effects of sediment starvation by reducing sediment transport and encouraging deposition. (SW34)	Environmental management plan Risk management plan Construction management plan Surface water and groundwater management plan Native vegetation management plan Water quality and hydrology risk treatment plan Biodiversity management plan Biodiversity risk treatment plan
Runoff and groundwater migrating to the open voids will be collected and reused in the process plant.	Yes	Water will be recovered and reused where practicable (such as runoff from ore stockpiles and supernatant water from the temporary TSF and tailings areas within the mine voids). (SW23)	Environmental management plan Risk management plan Construction management plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
			Surface water and groundwater management plan Water quality and hydrology risk treatment plan
A water risk treatment plan will be implemented to minimise discharge from the operational mine areas.	Yes	A water quality and hydrology risk treatment plan has been prepared for the project.	Environmental management plan Risk management plan Water quality and hydrology risk treatment plan Surface water and groundwater management plan
Recovered water will be stored in the process water dam.	Yes	The process water dam will receive water from the freshwater storage dam, excess stormwater from water management dams, runoff from stockpiles and recovered thickener overflow water from the WCP. Compartments within the dam will assist in trapping silt from the reused water. (Chapter 3 of Main Report) Water will be recovered and reused where practicable (such as runoff from ore stockpiles and supernatant water from the temporary TSF and tailings areas within the mine voids). (SW23)	Environmental management plan Risk management plan Water quality and hydrology risk treatment plan Surface water and groundwater management plan
Implementation of a groundwater monitoring program.	Yes	The groundwater monitoring program includes the following: • Record groundwater levels at designated monitoring bores and locations as agreed with regulators. • Analyse groundwater (including for pH, salinity, dissolved metals, radionuclides, major cations and anions, and nutrients) from designated monitoring bores and locations as agreed with regulators. Analyse process water and effluent (including for biological oxygen demand, suspended solids, E. coli and other	Environmental management plan Risk management plan Water quality and hydrology risk treatment plan Surface water and groundwater management plan Biodiversity risk treatment plan Biodiversity management plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
		parameters) in accordance with the EPA works approvals or licence. (Chapter 12 of Main Report)	
Recover and reuse water where practicable (such as run-off from ore stockpiles and supernatant water from the TSF and tailings area within the mine void) and optimise operations to maximise water use efficiency.	Yes	Water will be recovered and reused where practicable (such as runoff from ore stockpiles and supernatant water from the temporary TSF and tailings areas within the mine voids). (SW23)	Environmental management plan Risk management plan Water quality and hydrology risk treatment plan Surface water and groundwater management plan
Seepage water will be monitored so that proactive management of impacts can be implemented.	Yes	Inspection of water controls on a regular basis and after rainfall, to check that ponding, seepage or runoff meets design specifications. (Chapter 12 of Main Report) Groundwater monitoring include the following activities: • Record groundwater levels at designated monitoring bores and locations as agreed with regulators. • Analyse groundwater (including for pH, salinity, dissolved metals, radionuclides, major cations and anions, and nutrients) from designated monitoring bores and locations as agreed with regulators. (Chapter 12 of Main Report)	Environmental management plan Risk management plan Water quality and hydrology risk treatment plan Surface water and groundwater management plan
Implement an adaptive management strategy that includes triggers for groundwater quantity and quality for remedial action.	Yes	The regular internal review of monitoring results informs an adaptive management approach to be implemented effectively and will also help identify whether additional or modified monitoring activities are required to address project risks. (Chapter 12 of Main Report)	Environmental management plan Risk management plan Water quality and hydrology risk treatment plan Surface water and groundwater management plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
Conceptual Surface Water Management Strategy and Water Balance (Appendix A006 AppA)			
The ability of groundwater extraction from the Latrobe group aquifer to meet a supply shortfall from the Mitchell River may be constrained by licensing and bore yields. This is not assessed in the report. Once groundwater production rates from sources are known, the design capacity and operation of water supply to the dam should be reviewed.	Yes	Further groundwater drilling is currently underway to determine the suitability of the Latrobe Group Aquifer. Further consultation with licence holders is also occurring.	Environmental management plan Risk management plan Water quality and hydrology risk treatment plan Surface water and groundwater management plan
Once the project commences, it is recommended that intensive monitoring and survey collection at the commencement of mining in each catchment. The purpose of the monitoring is to provide accurate estimates of runoff, evaporation and seepage so that dams volumes and volumetric estimates of surface water licence offsets are accurate.	Yes	A daily water balance approach will be applied to dam design to achieve a probability of spillway activation of once per 100 years on average (1% average-exceedance probability) for Perry River catchments, and three times per 100 years on average (3.3% average- exceedance probability) for Mitchell River catchments. (SW11)	Environmental management plan Risk management plan Water quality and hydrology risk treatment plan Surface water and groundwater management plan
Groundwater Modelling Report (Appendix A006 AppB)			
Ongoing monitoring programs and studies will be designed to provide further groundwater data that will, in due course, enable model predictions to be further constrained.	Yes	Groundwater monitoring will inform model predictions. These include: • Monthly recording of groundwater levels prior to construction at designated monitoring bores installed in the Coongulmerang Formation aquifer (seven bores), Balook Formation aquifer (two bores), Seaspray Group aquifer (one bore) and Latrobe Group aquifer (two bores). • Monthly recording of groundwater levels in the Coongulmerang Formation aquifer and Balook Formation aquifer at 12 locations to be agreed with regulators. • Continuous (via data loggers) recording of groundwater levels in water supply bores drawing on the Latrobe Group aquifer in a minimum of five monitoring bores; and in three	Environmental management plan Risk management plan Water quality and hydrology risk treatment plan Surface water and groundwater management plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
		shallow groundwater monitoring bores surrounding the temporary tailing storage facility. • Quarterly sampling (for water quality) prior to construction at designated monitoring bores installed in the Coongulmerang Formation aquifer (seven bores), Balook Formation aquifer (two bores), Seaspray Group aquifer (one bore) and Latrobe Group aquifer (two bores). • Quarterly sampling (for water quality) in the Coongulmerang Formation aquifer and Balook Formation aquifer at designated monitoring bores installed in the Coongulmerang Formation aquifer (seven bores) and the Balook Formation aquifer (five bores). • Quarterly sampling (for water quality) in six designated shallow groundwater monitoring bores, including bores at the contractor's work area and processing plant and three bores at the temporary tailings storage facility; and analysis for pH, salinity, dissolved metals, radionuclides, major cations and anions, nutrients, and hydrocarbons. • Monthly monitoring of water discharge from the borefield (bores drawing on the Latrobe Group aquifer) into the contingency water dam. Monitoring to include pH, salinity, dissolved metals, radionuclides, and major cations and anions. • Analysis of water quality in the process water dam monthly in first year of the project; quarterly thereafter if consistency in water quality is demonstrated. • Daily records of water extraction from production bores accessing water from the Latrobe Group aquifer. • Ongoing recording of results from DELWP's State Observation Bore Network for three bores in the Latrobe Valley Group to the north and east of the project. (Chapter 12 of Main Report)	

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
Landscape Stability and Sediment Transport Regime Assessment (Appendix A006 AppC)			
A revegetation programme for revegetation of all gullies downstream of mining activities should be commenced at the first Autumn or Winter after environmental approval.	Yes	Ephemeral drainage gullies will be revegetated in areas downstream of future mining activities prior to operations commencing to increase landscape stability and specifically mitigate: • Effects of a moderate increased flow velocity downstream of the mine operations and the final landform. • Potential effects of tunnel erosion downstream of the mine void boundary where soil treatment is not planned. • Effects of sediment starvation by reducing sediment transport and encouraging deposition. (SW34)	Environmental management plan Risk management plan Water quality and hydrology risk treatment plan Surface water and groundwater management plan
Mitigate the effects of moderate increases in flow velocity resulting from mine operations and the final landform.	Yes	Riparian vegetation will be established in rehabilitated flow channels to increase effective hydraulic roughness of the channels, reduce flow velocities, increase channel stability to storm flows and minimise erosion. (RH08) Ephemeral drainage gullies will be revegetated in areas downstream of future mining activities prior to operations commencing to increase landscape stability and specifically mitigate: • Effects of a moderate increased flow velocity downstream of the mine operations and the final landform. (SW34)	Environmental management plan Risk management plan Water quality and hydrology risk treatment plan Surface water and groundwater management plan Rehabilitation plan
Control and mitigate the effects of tunnel erosion downstream of the pit boundary where soil treatment is not planned, through increased landscape stability.	Yes	Ephemeral drainage gullies will be revegetated in areas downstream of future mining activities prior to operations commencing to increase landscape stability and specifically mitigate: • Effects of a moderate increased flow velocity downstream of the mine operations and the final landform. • Potential effects of tunnel erosion downstream of the mine void boundary where soil treatment is not planned.	Environmental management plan Risk management plan Water quality and hydrology risk treatment plan Surface water and groundwater management plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
		• Effects of sediment starvation by reducing sediment transport and encouraging deposition. (SW34)	
Mitigate the effects of uncontrolled flow releases from the dams by reducing sediment transport and encouraging deposition.	Yes	Aquatic and riparian vegetation will be established in minor waterways between the water management dams and major receiving waterways to reduce potential water quality impacts from release of mine contact water. (SW36)	Environmental management plan Risk management plan Water quality and hydrology risk treatment plan Surface water and groundwater management plan
Mitigate the effects of sediment starvation by reducing sediment transport and encouraging deposition.	Yes	Ephemeral drainage gullies will be revegetated in areas downstream of future mining activities prior to operations commencing to increase landscape stability and specifically mitigate the effects of sediment starvation by reducing sediment transport and encouraging deposition. (SW34)	Environmental management plan Risk management plan Water quality and hydrology risk treatment plan Surface water and groundwater management plan
Providing an established vegetated buffer at the site prior to mine closure (in some cases 20 years old).	Yes	Additional vegetation screening will be planned to minimise future visual impacts. (VL06)	Environmental management plan Risk management plan Water quality and hydrology risk treatment plan Surface water and groundwater management plan Biodiversity risk treatment plan Biodiversity management plan Rehabilitation plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
Sediment and water retention on all drainage paths leaving the site will be required to ensure no excess sediment is contributed to the receiving waters.	Yes	Capturing runoff (via surface water infrastructure) that comes into contact with construction areas and directing it to sedimentation dams. If required, flocculant treatment (i.e., alum, gypsum or hydrated lime) will be used to reduce suspended sediment levels in the stormwater. (SW04)	Environmental management plan Risk management plan Water quality and hydrology risk treatment plan Surface water and groundwater management plan
Physical dam capacity should be monitored, and dredging should be undertaken if a significant drop in capacity is observed.	Yes	Freeboards on the water storage dam, process water dam and sediment ponds will be maintained to allow for storm events and high rainfall periods, in accordance with relevant licence, permit and approval requirements. (SW05)	Environmental management plan Risk management plan Water quality and hydrology risk treatment plan Surface water and groundwater management plan
Dams must not be decommissioned until rehabilitation efforts have reach a stage where a self-sustaining system (vegetation) is stabilising the landform. This should be assessed by a suitably qualified geomorphologist.	Yes	The sediment ponds and water management dams will be decommissioned in an area once monitoring demonstrates that water quality controls are no longer required, anticipated to be approximately two years following final shaping, seeding and mulching. (Chapter 12 of Main Report)	Environmental management plan Risk management plan Water quality and hydrology risk treatment plan Surface water and groundwater management plan Rehabilitation plan Ground control management plan
Dam decommissioning should be undertaken with extreme care so as not to initiate upstream moving bed instabilities. This should be undertaken with the advice of a suitably qualified geomorphologist and a suitably qualified environmental engineer.	Yes	Decommissioning of dams will not occur until water quality monitoring demonstrates that runoff from the catchment no longer requires active management. (Chapter 12 of Main Report)	Environmental management plan Risk management plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
			Water quality and hydrology risk treatment plan Surface water and groundwater management plan Rehabilitation plan Ground control management plan
All waterways should be inspected annually for bed instabilities. It is recommended that the inspections take note of known instabilities though the establishment of photo points, to monitor change (if any).	Yes	Observe visual evidence of gullying or other instability initially at Honeysuckle Creek eastern tributary, Moilun Creek tributary and Perry Gully, and thereafter at three points in gullies affected by, or to be affected, by mining. (Chapter 12 of Main Report)	Environmental management plan Risk management plan Water quality and hydrology risk treatment plan Surface water and groundwater management plan
Prior to the construction of on-stream or stream-adjacent infrastructure, known bed instabilities should be assessed by a suitably qualified geomorphologist to determine whether grade control is required to protect infrastructure.	Yes	Areas will be inspected for nearby stream bed instability prior to construction where infrastructure such as water storages and haul roads are to be installed on or close to a watercourse. (SW06) If required, bed instability will be addressed through appropriately designed grade controls, such as the use of rock chutes. (SW07)	Environmental management plan Risk management plan Water quality and hydrology risk treatment plan Surface water and groundwater management plan
If grade control is required, design should be undertaken by a suitably qualified environmental engineer with experience in grade control design.	Yes	Areas will be inspected for nearby stream bed instability prior to construction where infrastructure such as water storages and haul roads are to be installed on or close to a watercourse. (SW06) If required, bed instability will be addressed through appropriately designed grade controls, such as the use of rock chutes. (SW07)	Environmental management plan Risk management plan Water quality and hydrology risk treatment plan Surface water and groundwater management plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
Grade control structures must be monitored as part of the annual inspections and immediately following high rainfall events.	Yes	All stream bed instability areas within and immediately downstream of the project area will be inspected prior to, and annually, during construction to determine movement rates of unstable areas and potential risks posed to mine infrastructure. (SW08)	Environmental management plan Risk management plan Water quality and hydrology risk treatment plan Surface water and groundwater management plan
Grade control structures must be maintained as required.	Yes	If required, bed instability will be addressed through appropriately designed grade controls, such as the use of rock chutes. (SW07)	Environmental management plan Risk management plan Water quality and hydrology risk treatment plan Surface water and groundwater management plan Ground control management plan
Rehabilitation efforts should be designed and assessed by a suitably qualified geomorphologist and an environmental engineer. Rehabilitation plans should: • Be designed well in advance of mine closure and reviewed as needed • Include details on the finished landform topography and channel design (including modelling), • Include information on topsoil placement, sources and required volumes (including information on geofabric requirements), • Include detailed information on vegetation types, placement and planting densities,	Yes	Kalbar has prepared a draft mine rehabilitation plan which sets out the issues relating to rehabilitation and actions required to be addressed during and following mining operations. The draft mine rehabilitation plan will need to be approved by the Minister prior to construction commencing. (Chapter 11 of Main Report) The closure and rehabilitation plans will include measures to manage flood risk including the need for vegetation buffers to manage the velocity of water flowing through the gullies and to control potential erosion. Flood risk mapping of the final landform will also help inform post-closure land use and the placement of infrastructure. (Chapter 11 of Main Report)	Environmental management plan Rehabilitation plan Risk management plan Water quality and hydrology risk treatment plan Biodiversity management plan Biodiversity risk treatment plan Native vegetation management plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
• Include details on realistic establishment phases and contingency planning to account for the effects of droughts and floods, • Include a detailed and realistic monitoring and maintenance planning component, that spans post closure. It is recommended that an established monitoring method is used such as the Index of Stream Condition (2004). This method has been applied at several work sites for Melbourne Water for programs lasting over 10 years.			
Geochem Testing of Fingerboard Tailings and Overburden (Appendix A006 AppD)			
No recommendations			
Surface Water Assessment – Site Study (Appendix A006 AppE)			
Landowners potentially impacted by changes in flooding should be engaged through the broader EES process. Outputs from this study can be used to help them understand the potential magnitude of the changes and the effectiveness of the proposed surface water management system in reducing impacts.	Yes	The design and placement of infrastructure in the project area will consider potential for flow accumulation and increased flood risk, and associated prevention measures. (SW02) No impacts are expected to surface water availability and flows from flooding during the construction phase of the project. (Chapter 9 of Main Report)	Community engagement plan Water quality and hydrology risk treatment plan
The ongoing design of the rehabilitated landform should respond to the findings of this study. Adjustment to catchment boundaries and valley morphology is recommended during future design updates as well as careful management of valley arrangements including fill types and vegetation type and density. Future rehabilitation designs should include the input of a qualified geomorphologist. The hydraulic model developed in this study (or similar) should be used as an evaluation tool for future designs.	Yes	Riparian vegetation will be established in rehabilitated flow channels to increase effective hydraulic roughness of the channels, reduce flow velocities, increase channel stability to storm flows and minimise erosion. (RH08)	Rehabilitation plan Risk management plan Water quality and hydrology risk treatment plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
Increases in flows and flooding in drainage lines either side of the filled Perry Gully (e.g., the Simpson Gully) should be further investigated to ensure flood flows do not cause adverse impacts (erosion), this is particularly important for the rehabilitated scenario.	Yes	The design and placement of infrastructure in the project area will consider potential for flow accumulation and increased flood risk, and associated prevention measures. (SW02)	Rehabilitation plan Risk management plan Water quality and hydrology risk treatment plan
Event monitoring should be undertaken prior to any mining activity as frequently as possible to characterise the existing water quality of the gullies to create a robust reference dataset that can be used to assess potential impacts to aquatic gully ecosystems, as opposed to comparison with the ANZECC aquatic ecosystem trigger values which are not appropriate for ephemeral streams.	Yes	Continuous monitoring (via data loggers) of preconstruction flow rates at DELWP gauging stations on Mitchell River and initially at Honeysuckle Creek eastern tributary, Moilun Creek tributary and Perry Gully; and daily monitoring at DELWP gauging station on Mitchell River during construction, operations and active rehabilitation. (Chapter 12 of Main Report) Analysis of water quality during construction, operations and active rehabilitation: • Every two months initially, then quarterly thereafter with agreement from the regulator at five established monitoring sites on Mitchell River. • Every two months initially, then quarterly thereafter with agreement from the regulator at two locations on Perry River to be agreed with regulators (one location upstream and one downstream of the confluence of Honeysuckle Creek and Perry River). • Every two months (if water is present) at two locations within each impacted drainage line inside the project area (locations to be agreed with regulators). • Following significant rainfall events (when rainfall received at the mine site exceeds 60 mm within a 24 hour period, which corresponds approximately to a 100% AEP) and when water is available to sample at six established monitoring locations within the project area in undisturbed catchments (Chapter 12 of Main Report)	Environmental management plan Risk management plan Water quality and hydrology risk treatment plan Surface water and groundwater management plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
Event monitoring should continue in gullies during mine operation in order to quantify potential changes in water quality.	Yes	Continuous monitoring (via data loggers) of preconstruction flow rates at DELWP gauging stations on Mitchell River and initially at Honeysuckle Creek eastern tributary, Moilun Creek tributary and Perry Gully; and daily monitoring at DELWP gauging station on Mitchell River during construction, operations and active rehabilitation. (Chapter 12 of Main Report)	Environmental management plan Risk management plan Water quality and hydrology risk treatment plan Rehabilitation plan Surface water and groundwater management plan
Inform downstream users during a spillway flow event of the potential change in water quality during an event.	Yes	Dust, noise and water monitoring results will be made available at regular intervals on the project website along with information on how any peaks or exceedances have been responded to. (SE02) A community engagement plan will be implemented that identifies approaches to actively manage issues with public perception, including providing objective and factual public communications. (AG08)	Community engagement plan Surface water and groundwater management plan Environmental management plan Risk management plan Water quality and hydrology risk treatment plan
Surface Water Assessment – Regional Study (Appendix A006 AppF)			
There are several steps that the Fingerboards Mine can take to further minimise or offset the potential impacts, such as the installation of progressively more efficient clean water bypass infrastructure and water treatment infrastructure (sedimentation ponds, swale drains etc.) with learnings from site operations as the mine proceeds.	Yes	Capturing runoff (via surface water infrastructure) that comes into contact with construction areas and directing it to sedimentation dams. If required, flocculant treatment (i.e., alum, gypsum or hydrated lime) will be used to reduce suspended sediment levels in the stormwater. (SW04) Riparian vegetation will be retained where possible to maintain aquatic ecosystem habitat and prevent sedimentation of watercourses. (SW41)	Environmental management plan Risk management plan Water quality and hydrology risk treatment plan Rehabilitation plan Surface water and groundwater management plan
It is recommended that the Conceptual Surface Water Management Strategy by EMM be reviewed in light of these study findings.	Partially	The water management strategy is under review, including the use of centrifuges to recover water from tailings as per documentation provided to IAC.	Environmental management plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
			Risk management plan Water quality and hydrology risk treatment plan Rehabilitation plan Surface water and groundwater management plan
Water Supply Options Study: Technical Groundwater Assessment (Appendix A007)			
Further testing is required to quantify the sustainability of the resource over the proposed 20-year mine life.	Partially	A drilling program for the Latrobe Group aquifer is currently underway.	Environmental management plan Risk management plan Water quality and hydrology risk treatment plan Surface water and groundwater management plan
Although the Seaspray Group aquitard is thought to provide an adequate barrier for flow and the transmission of drawdown, active monitoring of both aquifers at depth and along transects would be recommended to facilitate an active management and mitigation plan.	Yes	Groundwater monitoring program includes: • Monthly recording of groundwater levels prior to construction at designated monitoring bores installed in the Coongulmerang Formation aquifer (seven bores), Balook Formation aquifer (two bores), Seaspray Group aquifer (one bore) and Latrobe Group aquifer (two bores). • Monthly recording of groundwater levels in the Coongulmerang Formation aquifer and Balook Formation aquifer at 12 locations to be agreed with regulators. • Continuous (via data loggers) recording of groundwater levels in water supply bores drawing on the Latrobe Group aquifer in a minimum of five monitoring bores; and in three shallow groundwater monitoring bores surrounding the temporary tailing storage facility. • Quarterly sampling (for water quality) prior to construction at designated monitoring bores installed in the	Environmental management plan Risk management plan Water quality and hydrology risk treatment plan Surface water and groundwater management plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
		Coongulmerang Formation aquifer (seven bores), Balook Formation aquifer (two bores), Seaspray Group aquifer (one bore) and Latrobe Group aquifer (two bores). • Quarterly sampling (for water quality) in the Coongulmerang Formation aquifer and Balook Formation aquifer at designated monitoring bores installed in the Coongulmerang Formation aquifer (seven bores) and the Balook Formation aquifer (five bores). • Quarterly sampling (for water quality) in six designated shallow groundwater monitoring bores, including bores at the contractor's work area and processing plant and three bores at the temporary tailings storage facility; and analysis for pH, salinity, dissolved metals, radionuclides, major cations and anions, nutrients, and hydrocarbons. • Monthly monitoring of water discharge from the borefield (bores drawing on the Latrobe Group aquifer) into the contingency water dam. Monitoring to include pH, salinity, dissolved metals, radionuclides, and major cations and anions. • Analysis of water quality in the process water dam monthly in first year of the project; quarterly thereafter if consistency in water quality is demonstrated. • Daily records of water extraction from production bores accessing water from the Latrobe Group aquifer. • Ongoing recording of results from DELWP's State Observation Bore Network for three bores in the Latrobe Valley Group to the north and east of the project. (Chapter 12 of Main Report)	
Water Supply Options Study: East Gippsland/Mitchell River Concept Design and Investigation (Appendix A008)			
Analysing the results in relation to the performance indicators it is recommended that the following pipe sizes be adopted for each of the various alignment options:	Yes	These recommendations have been adopted for the engineering design.	Not relevant to EMF

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
• Option 1a: 3.2GL/a – 139L/s – DN375 PN12 PVC or 500OD PN12.5 HDPE; • Option 1b: 3.2GL/a – 350L/s – 630OD PN12.5 HDPE or 710OD PN12.5 HDPE;			
Engage with East Gippsland Water and Southern Rural Water to determine if EGW's existing bore fields south of Woodglen could be used as a potential water source;	Yes	Ongoing engagement with the water authorities is an essential element of Kalbar's engagement strategy. (Kalbar pers comm)	Community engagement plan Surface water and groundwater management plan
Engage with Bonnacord Ingram to determine what if any possibility there is to share resources and infrastructure;	Yes	Ongoing engagement with neighbouring landholders is an essential element of Kalbar's water infrastructure strategy. (Kalbar pers comm)	Community engagement plan Surface water and groundwater management plan
Engage with owner of large storage adjacent to Rathjens Road to determine any interest in purchasing water from the pipeline should this alignment option be pursued;	Yes	Ongoing engagement with neighbouring landholders is an essential element of Kalbar's water infrastructure strategy. (Kalbar pers comm)	Community engagement plan Surface water and groundwater management plan
Stage Two Air Quality and Greenhouse Gas Assessment (Appendix A009)			
As per the PEM for Mining, the following monitoring is recommended to be conducted for 12 months (or as agreed with EPA Victoria): • Twenty-four-hour average concentrations of PM^{10} and $PM^{2.5}$ • Monthly average dust deposition rates • Weekly analysis of $PM^{10}$and $PM^{2.5}$ filters for respirable crystalline silica and heavy metals.	Yes	Air quality monitoring will include the following: • One-hour average concentration of PM_{10}: Real-time monitoring (1-hour average) of PM_{10} concentrations at key sensitive receptor locations (positions will vary throughout the project) to allow for changes in operational activities and locations that may impact the achievability of the 24-hour average health-based criteria. A minimum of three real-time PM_{10} monitors is likely to be required. The management action trigger level for hourly PM_{10} readings will be set at 150 $\mu g/m^3$ (1-hour average reading). • Twenty-four-hour average concentrations of PM_{10} and $PM_{2.5}$, and weekly analysis of PM_{10} and $PM_{2.5}$ filters for respirable crystalline silica, gross alpha and beta radiation and heavy metals: Continuous monitoring will be conducted during construction and operations at locations representative of sensitive receptors likely to experience	Environmental management plan Risk management plan Airborne and deposited dust risk treatment plan Construction management plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
		the highest particulate concentrations (monitoring locations will change, depending upon the locations of mining activities). A network of no fewer than five particulate monitoring stations is likely to be required. • At least hourly monitoring and recording of temperature, humidity, wind speed and direction. • Continuous dust deposition monitoring upwind and downwind of active mining areas to determine monthly average dust deposition rates. • Quarterly sampling of water in rainwater tanks at a minimum of 13 locations (assuming landholders grant access) prior to construction and during operations. • Prior to construction, ongoing monitoring of respirable crystalline silica to fill in data gaps in the 12-month ambient monitoring program conducted to date. (Chapter 12 of Main Report)	
Ongoing monitoring for respirable crystalline silica should also be conducted to fill in data gaps in the 12-month ambient monitoring program conducted to date, prior to construction of the project, if possible.	Yes	Prior to construction, ongoing monitoring of respirable crystalline silica to fill in data gaps in the 12-month ambient monitoring program conducted to date. (Chapter 12 of Main Report)	Environmental management plan Risk management plan Airborne and deposited dust risk treatment plan Construction management plan
The initial 12 months of monitoring will be conducted at locations that are representative of sensitive receptors likely to experience the highest particulate concentrations during the operational stage of the project. Monitors will be used that are compliant with the relevant Australian Standards. This compliance monitoring will allow validation of the dispersion modelling results presented in the air quality assessment.	Yes	Twenty-four-hour average concentrations of PM_{10} and $PM_{2.5}$, and weekly analysis of PM_{10} and $PM_{2.5}$ filters for respirable crystalline silica, gross alpha and beta radiation and heavy metals: Continuous monitoring will be conducted during construction and operations at locations representative of sensitive receptors likely to experience the highest particulate concentrations (monitoring locations will change, depending upon the locations of mining activities). A network of no fewer than five particulate monitoring stations is likely to be required. (Chapter 12 of Main Report)	Environmental management plan Risk management plan Airborne and deposited dust risk treatment plan Construction management plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
Monitoring should also be conducted, as per the PEM, as part of the risk management strategy for Level 1 operations that includes real-time (1-hour average) monitoring of PM^{10} to allow for changes in operations on site when particles levels are measured that may impact the achievability of the 24-hour average health-based criteria.	Yes	Air quality monitoring will include the following: • One-hour average concentration of PM_{10}: Real-time monitoring (1-hour average) of PM_{10} concentrations at key sensitive receptor locations (positions will vary throughout the project) to allow for changes in operational activities and locations that may impact the achievability of the 24-hour average health-based criteria. A minimum of three real-time PM_{10} monitors is likely to be required. The management action trigger level for hourly PM_{10} readings will be set at 150 µg/m^3 (1-hour average reading). (Chapter 12 of Main Report)	Environmental management plan Risk management plan Airborne and deposited dust risk treatment plan Construction management plan
Meteorological monitoring should also be ongoing during construction and operation of the mine.	Yes	Record meteorological conditions in project area (with alarms sent automatically to the shift supervisor if average wind speeds exceed 40 km/hour, to trigger management responses, including restricting operations where necessary) with at least hourly monitoring and recording of temperature, humidity, wind speed and direction. 9Chapter 12 of Main Report)	Environmental management plan Risk management plan Airborne and deposited dust risk treatment plan Construction management plan
Dust deposition monitoring is recommended by the PEM as an ongoing indicator of the effectiveness of site management practices and the potential for off-site nuisance. Locations should be considered that are both upwind and downwind of activities, to reflect the impact of the Project during predominant wind conditions.	Yes	Continuous dust deposition monitoring upwind and downwind of active mining areas to determine monthly average dust deposition rates. (Chapter 12 of Main Report)	Environmental management plan Risk management plan Airborne and deposited dust risk treatment plan Construction management plan
As per Section 4 of the PEM, dust deposition monitoring results should not exceed 4g/m^2/month (no more than 2g/m^2/month above background) as a month average. Dust deposition levels above these values should be used as a trigger to review dust management practices to ensure nuisance dust impacts can be addressed in a timely manner.	Yes	Dust deposition modelling found that the annual average deposition rates (together with ambient background conditions) at sensitive receptors within 1 km of operations activities are predicted to range from 0.9 to 1.4 g/m^2/month (of which the project contributes between 0.02 to 0.47 g/m^2/month, depending on the distance between activities and the sensitive receptor). Dust deposition rates during construction were	Environmental management plan Risk management plan Airborne and deposited dust risk treatment plan Construction management plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
		predicted to be approximately 31% of those in operations. (Chapter 9 of Main Report) Dust generation will be appropriately managed through implementing relevant mitigation measures such as applying water or appropriate suppressants to working surfaces, stockpiles, haul roads and other areas where rehabilitation is not yet practicable. (AQ15)	
It is noted that the PEM requires emissions to heavy metals to be managed such that any impact on tank water in nearby residences does not lead to exceedances of the NHMRC drinking water guidelines for these substances.	Yes	Using dust deposition rates, the predicted concentrations of deposited dissolved metals in rainwater tanks as a result of the project was estimated. The maximum predicted concentration in an offsite rainwater tank is expected to be $<1 \times 10^{-10}$ mg/L per year, which is negligible. (Chapter 9 of Main Report) Prior to construction and during operations, quarterly sampling and analysis of rainwater tanks for total and dissolved metals and suspended solids conducted at a minimum of 13 locations (assuming landholders grant access) and compared against pre-mining contaminations. (Chapter 12 of Main Report)	Environmental management plan Risk management plan Airborne and deposited dust risk treatment plan Construction management plan
Management procedures should be developed to detail options for both proactive and reactive management measures to prevent exceedances of the 24-hour average standards for particulates. This should use the real-time particulate monitoring, on-site meteorological data, and forecast weather conditions for the site. This may include measures such as ceasing certain activities when real-time monitoring indicates that trigger levels near key sensitive receptors have been reached, or scheduling activities to avoid excessive dust emissions during forecast adverse weather conditions. Trigger levels or conditions should be defined to identify when additional mitigation should be applied.	Yes	Activities will be restricted, as required, on days when modelling predicts exceedances of air quality criteria at one or more sensitive receptors. Activities to be restricted will include overburden extraction and haulage, ore extraction and grading of roads. Restrictions will be applied to these activities conducted across the whole or part of the project area where required to achieve compliance with air quality criteria. (AQ20) Certain activities, such as overburden excavation and transport of overburden and product, will be scheduled to avoid excessive dust emissions during forecast adverse weather conditions (principally high winds). (AQ14) Construction activities will be delayed if significant weather events are forecast. (TE55)	Environmental management plan Risk management plan Airborne and deposited dust risk treatment plan Construction management plan Biodiversity management plan
It is recommended that this provide an opportunity for community members to log complaints and engage with Kalbar, and to gather sufficient data to understand the nature of the complaint to allow	Yes	A principal contact person to whom community queries and complaints will be directed will be identified for the project. The complaints response procedure will be implemented to address any complaints received. Twenty-four-hour contact details for	Environmental management plan Risk management plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
complaints to be evaluated and addressed adequately. Complaints data may also be a trigger for the implementation of additional mitigation measures.		the principal contact person will be provided through letters and signage onsite. (AQ19) Timely responses will be provided to any community complaints raised. (SE22)	Airborne and deposited dust risk treatment plan Construction management plan
Additional mitigation and commitments by Kalbar.		Public roads and new intersections will be constructed to standards used by the East Gippsland Shire Council to reduce generation of excess dust (Infrastructure Design Association, 2015)[1]. (AQ06)	Environmental management plan Risk management plan Airborne and deposited dust risk treatment plan Construction management plan Traffic management plan
Additional mitigation and commitments by Kalbar.		Haul vehicles will travel on designated haul roads only and haul route lengths will be minimised where practicable. (AQ08)	Environmental management plan Risk management plan Airborne and deposited dust risk treatment plan
Additional mitigation and commitments by Kalbar.		Ore will be transferred through a pipeline across the project area as a slurry to reduce potential for dust emissions. (AQ10)	Environmental management plan Risk management plan Airborne and deposited dust risk treatment plan
Additional mitigation and commitments by Kalbar.		Water or appropriate suppressants will be applied to working surfaces, stockpiles, haul roads and other areas where rehabilitation is not yet practical, to minimise dust generation, and in particular, during drier months. (AQ02)	Environmental management plan Risk management plan Airborne and deposited dust risk treatment plan Construction management plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
Additional mitigation and commitments by Kalbar.		Speed limits will be implemented and enforced on unsealed project roads to minimise dust generation. (AQ04)	Environmental management plan Risk management plan Airborne and deposited dust risk treatment plan Construction management plan
Additional mitigation and commitments by Kalbar.		Topsoil stripping will be planned and conducted taking into account forecast and actual weather conditions to minimise dust generation. (AQ05)	Environmental management plan Risk management plan Airborne and deposited dust risk treatment plan Construction management plan
Additional mitigation and commitments by Kalbar.		Dust generation from haul roads will be controlled by applying water or chemical suppressants, cessation of haulage during adverse weather conditions, and as required in response to real-time air quality monitoring. (AQ16)	Environmental management plan Risk management plan Airborne and deposited dust risk treatment plan Construction management plan Traffic management plan
Additional mitigation and commitments by Kalbar.		Construction of internal haul roads will use an optimal size grading of aggregate with road stabilisation and compaction agents. (AQ17)	Environmental management plan Risk management plan Airborne and deposited dust risk treatment plan Construction management plan Traffic management plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
Additional mitigation and commitments by Kalbar.		Plant, machinery and vehicles will be maintained regularly in accordance with manufacturers' specifications to minimise emission of particulates. (AQ18)	Environmental management plan Risk management plan Airborne and deposited dust risk treatment plan Construction management plan
Additional mitigation and commitments by Kalbar.		Dust generation will be managed in accordance with the air quality sub-plan. (AQ15)	Environmental management plan Risk management plan Airborne and deposited dust risk treatment plan Construction management plan
Additional mitigation and commitments by Kalbar.		Where practical, solar photovoltaic technology will be used to supplement electricity requirements for applications such as lighting. (GHG01)	Environmental management plan Risk management plan
Additional mitigation and commitments by Kalbar.		Energy efficient technology will be used where practicable, including low energy lighting (e.g., LEDs). (GHG02)	Environmental management plan Risk management plan
Additional mitigation and commitments by Kalbar.		Generator diesel consumption will be reduced by selecting a flexible configuration that allows for electricity output to be adjusted in line with demand. (GHG06)	Environmental management plan Risk management plan
Additional mitigation and commitments by Kalbar.		Electricity usage will be conducted in accordance with the power factor limits specified in Table 2 of the Victorian Electricity Distribution Code. (GHG03)	Environmental management plan Risk management plan
Additional mitigation and commitments by Kalbar.		Vehicle diesel consumption will be reduced where practicable through equipment selection, load and route optimisation and production scheduling, and minimising idle time. (GHG04)	Environmental management plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
			Risk management plan Airborne and deposited dust risk treatment plan Construction management plan
Noise and Vibration Assessment (Appendix A010)			
All mobile plant items must be fitted with broadband reversing signals to avoid generating tonal characteristics associated with traditional reversing beepers at nearby receivers. Third-party trucks should be provided with routes that do not involve reversing, if control over their reversing alarms is limited.	Yes	Mobile plant items will be fitted with broadband reversing signals to avoid tonal characteristics associated with traditional reversing beepers at nearby sensitive receptors. (NV10)	Environmental management plan Construction management plan Risk treatment plan Environmental noise risk treatment plan Construction noise management plan Traffic management plan
Specific items of plant must be fitted with noise-reduction kits where local screening is not feasible to provide noise mitigation.	Yes	Suitable noise-reduction kits have been identified for specific items of plant in consultation with industry specialists (Hushpak and Minetek) including replacement muffler systems, cooling fans, air intake and exhaust silencers. (NV13)	Environmental management plan Construction management plan Risk treatment plan Environmental noise risk treatment plan Construction noise management plan Traffic management plan
Suitable noise-reduction kits have been identified for specific items of plant in consultation with industry specialists (Hushpak and Minetek) and Kalbar. These include scrapers, dozers, haul trucks and excavators.	Yes	Suitable noise-reduction kits have been identified for specific items of plant in consultation with industry specialists (Hushpak and Minetek) including replacement muffler systems, cooling fans, air intake and exhaust silencers. (NV13)	Environmental management plan Construction management plan Risk treatment plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
Plant noise-reduction kits would be required for both construction and operational activities.			Environmental noise risk treatment plan Construction noise management plan Traffic management plan
Some degree of noise control is likely to be required of the WCP to allow compliance with the NIRV recommended levels. Cladding will be focussed to the sides of the WCP closest to noise-sensitive areas. The WCP cladding would comprise 0.6 mm thick sheet steel (e.g., Colorbond) with a lining of 75 mm thick, 32 kg/m^2 glasswool insulation (e.g., Bradford Supertel). The cladding is expected to provide a sound insulation rating of Rw 21 (or Rw + Ctr 19).	Yes	Noise mitigation measures such as bunding, walls or cladding will be installed at the wet concentrator plant to control noise emissions from the plant to achieve compliance. At a distance of 20 m east and south of the plant, these levels are 50, 54 and 65 LAeq dB at heights of 1.5, 10 and 20 m above ground respectively. (NV14)	Environmental management plan Construction management plan Risk treatment plan Environmental noise risk treatment plan Construction noise management plan Traffic management plan
The noise model indicates that in Year 1, for the plant locations and topography considered in the model scenario, noisier activities such as overburden haulage will need to be restricted to the day and evening periods to achieve quieter noise levels during the night.	Yes	As the year 1 mining progresses, or moves into a new situation with respect to natural or reconstructed topography, noise modelling will be used to predict compliance at nearby sensitive receptors. Where modelling indicates potential non-compliance, additional mitigation will be implemented, or night shift overburden operations will cease to achieve compliance. (NV11)	Environmental management plan Construction management plan Risk treatment plan Environmental noise risk treatment plan Construction noise management plan
Where noise modelling indicates noncompliance, additional mitigation or restriction of overburden operations will be employed to achieve compliance with NIRV.	Yes	Adaptive management of noise levels for the project, where identified exceedances will inform the required control strategy. (NV09)	Environmental management plan Construction management plan Risk treatment plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
			Environmental noise risk treatment plan Construction noise management plan
Earth bunds have been designed to screen noise from specific activities or operations. As mining activities move around the site, screening by way of earth bunds will need to be reviewed to determine the requirement for screening, and the location and height of suitable bunds or screens.	Yes	Earth bunds will be constructed to control noise such that noise levels from the target sources are controlled to achieve site compliance with EPA guidelines. The location and height of earth bunds will be adaptive and as mining activities move around the project area, screening requirements will be reviewed. (NV12)	Environmental management plan Construction management plan Risk treatment plan Environmental noise risk treatment plan Construction noise management plan
There are a number of options available for use as noise barriers. Any solid material with a surface density of at least 12 kg/m^2 will provide sufficient noise reduction to perform adequately as a noise barrier. Above this surface density threshold, the barrier performance is limited by sound flanking over and around the barrier, rather than sound passing through it. It is critical that the barrier is well sealed and free from any holes or gaps. In particular, there must be no gap at the base of the barrier. It is recommended that the base of the barrier is buried to a depth of 10-20 cm.	Yes	Earth bunds will be constructed to control noise such that noise levels from the target sources are controlled to achieve site compliance with EPA guidelines. (NV12)	Environmental management plan Construction management plan Risk treatment plan Environmental noise risk treatment plan Construction noise management plan
Where any of the 28 0.5-1 MVA type transformers with booster pumps are located within 800 m of any dwelling, it is recommended that temporary deployable acoustic barriers are used to surround the plant. Proprietary products such as Echobarrier or FlexSheild barriers would be appropriate for this application as long as the height of the deployable acoustic barriers exceeds the height of the pump by at least 0.5 m. The barrier system should incorporate	Yes	When pumping units over 500 kVA are located within 800 m of any dwelling, temporary acoustic barriers will be used, such as earth bunds, Echobarrier or FlexShield barriers (when the barrier height exceeds the pump height by at least 0.5 m). The barrier system will incorporate an acoustically absorptive finish to minimise reflected noise. (NV03)	Environmental management plan Construction management plan Risk treatment plan Environmental noise risk treatment plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
an acoustically-absorptive finish to minimise reflected noise paths that could undermine the performance of the screening. Any gaps at the base of temporary screening structures must be minimised as far as practical.			Construction noise management plan
Consultation with affected residents located in the vicinity of the site should be undertaken during the course of the Project to discuss alternative noise control measures depending on each individual situation (e.g., acoustic treatment for dwellings, temporary relocation).	Yes	Consultation with affected residents located in the vicinity of the site will be conducted during the course of the project to investigate the need for alternative or additional noise control measures depending on each individual situation (e.g., acoustic treatment for dwellings). (NV15)	Environmental management plan Construction management plan Risk treatment plan Environmental noise risk treatment plan Construction noise management plan Community engagement plan
Application of EPA Publication 1254 for noise control works during construction.	Yes	Contingency procedures will be developed and implemented if noise emissions during construction exceed relevant guideline values, including additional mitigation measures to be considered during less favourable meteorological conditions that may enhance noise emissions from the project area. (NV06) Commissioning noise tests will be undertaken at regular intervals and prior to work starting, including checking that bunds have been constructed to specifications required for site compliance with EPA guidelines. (NV16) Construction of the proposed Fernbank East rail siding will be restricted to daytime hours (Monday to Friday (7:00 a.m. to 6:00 p.m.) and Saturday (7:00 a.m. to 1:00 p.m.)). (NV34) A permanent power supply will be secured as early as possible to minimise the time diesel generators are used. (NV31)	Environmental management plan Construction management plan Risk treatment plan Environmental noise risk treatment plan Construction noise management plan Community engagement plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document

It is recommended the following measures are included in the Noise Management Plan for the project:
 	
Community Consultation and Work Scheduling
 	
• Inform potentially noise-affected neighbours about the nature of construction stages and noise reduction measures
 	
• Give notice as early as possible for periods of noisier works such as excavation (specific timeframes would be developed as part of the EMP). Describe the activities and how long they are expected to take. Keep affected neighbours informed of progress.
 	
• Appoint a principal contact person for community queries
 	
• Provide 24-hour contact details through letters and site signage. Record complaints and follow a complaint response procedure suitable to the scale of the works.
 	
• Within normal working hours, where it is reasonable to do so;
 	
  • Schedule noisy activities for less sensitive times
 	
  • Provide periods of respite from noisier works.
 	
• The weekend/evening work hours are important for community rest and recreation and provide respite when noisy work has been conducted throughout the week. Accordingly, work should not usually be scheduled during these times.
	Yes	A noise and vibration sub-plan will be prepared and implemented. The sub-plan will be informed by best practice guidelines. At a minimum, the sub-plan will include:
		
		• Location of nearby residences and other sensitive land uses, including the sensitive receptors identified in this EES.
		
		• Approved construction working hours and/or shift rotations, and inclusion of construction activities, work areas and mobile plant and equipment locations during each working shift.
		
		• Best practice work practices to minimise noise emissions.
		
		• Best practice vibration mitigation strategies to minimise vibration.
		
		• Community consultation strategy required for the construction phase and associated high noise and vibration generating works.
		
		• Complaints handling process, including contact details, follow-up inspection, monitoring and corrective action processes once a complaint is made.
		
		• Noise monitoring procedures focused on the noise-sensitive receptors, including noise monitoring from the project area and along the HMC transportation route.
		
		• Contingency procedures if noise emissions during operations are determined to exceed those modelled as part of the approval process, including alternatives to be considered during less favourable meteorological conditions that may enhance noise emissions from the project area.
		
		• Requirements for recording actions taken in response to exceedances, and evaluation of their effectiveness.
			Environmental management plan
			
			Construction management plan
			
			Risk treatment plan
			
			Environmental noise risk treatment plan
			
			Construction noise management plan
			
			Community engagement plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
		• Adaptive management of noise levels for the project, where identified exceedances will inform the required control strategy. (NV09) Residents at noise-sensitive receptors will be informed of the timing and location of each construction stage and associated noise reduction measures and given advance notice and details of periods of noisy activities (such as excavation). (NV18) Consultation with affected residents located in the vicinity of the site will be conducted during the course of the project to investigate the need for alternative or additional noise control measures depending on each individual situation (e.g., acoustic treatment for dwellings). (NV15)	
It is recommended the following measures are included in the Noise Management Plan for the project: Work Requirements • Fit noise-reduction kits on all equipment as per the designations in Section 10.1.2 • Fit all pneumatic tools operated near a residential area with an effective silencer on the air exhaust port • Install less noisy movement/reversing warning systems for equipment and vehicles that will operate for extended periods, during sensitive times or in close proximity to sensitive sites. Occupational Health and Safety requirements for use of warning systems must be followed. • Turn off plant when not being used • All vehicular movements to and from the site to only occur during the scheduled normal working hours, unless approval has been granted by the relevant authority	Yes	Direct treatment through plant noise-reduction kits and cladding or screening of the MUP will be undertaken. Suitable noise-reduction kits have been identified for specific items of plant in consultation with industry specialists (Hushpak and Minetek). (NV13) Managerial processes will be implemented (such as 'push-back' mining operations) to optimise the direction of mine void excavation so the terrain provides maximum natural attenuation noise from plant and equipment. (NV19) All personnel will be informed about the measures required to minimise noise including through regular toolbox talks. (NV20) All pneumatic tools used near residential areas will be fitted with an effective silencer on the air exhaust port. (NV22) Plant will be turned off when not in use. (NV23) Plant, machinery and vehicles will be maintained in accordance with manufacturers' specifications to minimise emission of noise. (NV24) All project vehicles will be maintained in accordance with manufacturers' specifications. (NV27)	Environmental management plan Construction management plan Risk treatment plan Environmental noise risk treatment plan Construction noise management plan Traffic management plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document

• Where possible, no truck associated with the work should be left standing with its engine operating when close to residential areas
• Special assessment of vibration risks may be needed, such as for pile-driving
• Noise from the site needs to comply with the requirements of the schedule, except for:
  • Unavoidable works
  • Night period low-noise or managed-impact works approved by the local authority.			

Introduction to best practice including application of all practical noise management measures, including time restrictions, management of activities and using lower-noise movement alarm systems (for example, broadband reversing alarms).	Yes	Mobile plant items will be fitted with broadband reversing signals to avoid tonal characteristics associated with traditional reversing beepers at nearby sensitive receptors. (NV10) Equipment and processes that do not exhibit characteristics of intermittency or impulsiveness will be selected, where feasible. (NV32) Equipment will be selected with noise emissions that do not exceed the sound values used in the project noise modelling. (NV33) Project inductions will include briefings for all employees and contractors on the key principles and requirements of the noise and vibration sub-plan as relevant to their work. (NV35)	Environmental management plan Construction management plan Risk treatment plan Environmental noise risk treatment plan Construction noise management plan Traffic management plan
A work plan and/or specific noise management plan would be developed at the detailed design stage of the project, prior to operations commencing.	Yes	Draft prepared for exhibition of the EES	Environmental management plan Construction management plan Risk treatment plan Environmental noise risk treatment plan Construction noise management plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
Best practice noise mitigation strategies for the Project including managerial processes, regular reinforcement, regular maintenance of equipment, investigation of available mitigation packages, selection of quietest available plant and management of noise levels within the community.	Yes	Noisier activities will be scheduled for less sensitive times of day where practicable and works will be limited as much as practicable during the night and at weekends. (NV17)	Environmental management plan Construction management plan Risk treatment plan Environmental noise risk treatment plan Construction noise management plan
Best practice vibration mitigation strategies for the Project including regular reinforcement of the need to minimise vibration, minimising the movement of materials and plant and minimising large mobile plant movements.	Yes	A noise and vibration sub-plan will be prepared and implemented. The sub-plan will be informed by best practice guidelines. At a minimum, the sub-plan will include: • Best practice vibration mitigation strategies to minimise vibration. • Community consultation strategy required for the construction phase and associated high noise and vibration generating works. • Complaints handling process, including contact details, follow-up inspection, monitoring and corrective action processes once a complaint is made. • Requirements for recording actions taken in response to exceedances, and evaluation of their effectiveness. (NV09) Mobile plant and vehicles will be maintained regularly and in accordance with manufacturers' specifications; including inspections for leaks and spills. (TE42)	Environmental management plan Construction management plan Risk treatment plan Environmental noise risk treatment plan Construction noise management plan Traffic management plan
Should the transportation option to the Fennings Yard (Bairnsdale) rail siding be elevated as the preferred transportation option, consideration of the number of dwellings along that route, and consideration of noise from the rail siding would also be provided.	No	Not part of preferred option for project	Environmental management plan Construction management plan Risk treatment plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
			Environmental noise risk treatment plan Construction noise management plan Traffic management plan
As part of the noise management plan for the project, truck drivers will be instructed to perform driving practices that minimise noise impacts such as avoiding abrupt acceleration/deceleration, maintenance to avoid rattling and banging of loose parts, driving to the speed limit in a careful manner and limiting the use of compression brakes to situations where it is justified for safety reasons, such as along a long downhill slope. In addition, trucks will be maintained regularly to reduce the likelihood of vehicles developing tonal or noisy components.	Yes	Project vehicles will be driven to the speed limit and in a careful manner, avoiding strong acceleration/deceleration, and restricting the use of compression brakes to situations where justified on safety grounds, such as along long downhill slopes. (NV29) All trucks left standing on site will, as far as practicable, have their engines switched off after no more than five minutes. (NV25) Trucks will be equipped with adequate and functioning mufflers. (NV28) B-double movements on the private haulage road and rail loading activities at the Fernbank East rail siding will be restricted to the day and evening periods. (NV36)	Environmental management plan Construction management plan Risk treatment plan Environmental noise risk treatment plan Construction noise management plan Traffic management plan
Radiation Assessment (Appendix A011)			
Provision of engineering controls, such as ventilation, dust control, and appropriate machinery shielding where applicable.	Yes	Radiation exposure to personnel will be minimised through: • Engineering controls, such as ventilation, dust control, and appropriate machinery shielding. (RD09)	
The application of standard operating procedures for handling and transport of radioactive materials, use of radiation sources/apparatus and industrial gauges;	Yes	Radiation exposure to workers will be minimised by implementing standard operating procedures for handling and transport of radioactive materials, use of safety apparatus and industrial gauges. (RD01) Generation of dust and inhalation of dust by project personnel and members of the public will be minimised through: • Limiting vehicle speed on unsealed roads.	Risk management plan Environmental management plan Traffic management plan Radiation management plan Radioactive waste management plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
		• Suppressing dust by applying water to unsealed roads in the project area as required. • Passing trucks through a wheel wash prior to leaving the site. • Minimising the drop height of truck dumping as far as practicable. (RD10)	
Limitation of occupancy within certain areas, or restriction of time for certain activities, to minimise exposure times for workers.	Yes	Radiation exposure to personnel will be minimised through: • Limiting occupancy in identified higher risk areas and/or restricting time spent on identified higher risk activities. (RD09)	Radiation management plan Radioactive waste management plan Risk management plan Environmental management plan
The use of warning signs and labels within certain areas.	Yes	Exposure to gamma radiation will be minimised through: • Providing site security and signage to restrict unauthorised access. • Locating product stockpiles at sufficient distances from other operations. • Only loading trucks immediately prior to departure from the site. • Transporting HMC in accordance with the Code of Practice for Safe Transport of Radioactive Material. (RD03)	Radiation management plan Radioactive waste management plan Risk management plan Environmental management plan
The availability of adequate facilities for personal hygiene.	Yes	Ingestion of radioactive material will be minimised through: • Providing hand washing facilities and encouraging good hygiene practices. • Restricting smoking and eating onsite to designated areas only.	Radiation management plan Radioactive waste management plan Risk management plan Environmental management plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
		• Providing sufficient hose-down points and sumps to allow clean-up of product. (RD06)	Construction management plan
The provision and use of personal protection equipment for certain operational procedures where potential radiation doses might necessitate its use.	Yes	Radiation exposure to personnel will be minimised through: • Engineering controls, such as ventilation, dust control, and appropriate machinery shielding. • Limiting occupancy in identified higher risk areas and/or restricting time spent on identified higher risk activities. • Providing warning signs and labels in higher risk areas. • Providing adequate facilities for personal hygiene. • Providing personal protective equipment for certain procedures where higher potential radiation doses might necessitate its use. (RD09) Generation and inhalation of radioactive dust will be minimised through: • Ensuring HMC stockpile material is damp. • Progressively backfilling and revegetating the worked-out mine void to minimise the area of mine materials exposed to the environment. • Pumping ore as a slurry to the WCP and returning tailings as a slurry. • Retaining sufficient moisture content in concentrates during processing. • Transporting concentrate in fully sealed containers or covered for bulk shipments. (RD04)	Radiation management plan Radioactive waste management plan Risk management plan Environmental management plan
A radiation monitoring programme to demonstrate compliance with regulatory standards, dose estimation, and effectiveness of engineering controls. The program will depend on the potential exposure situation, but will include monitoring techniques such as personal dose monitoring and area monitoring,	Ye	The project will be operated in accordance with a management licence addressing radiation safety in accordance with the provisions of the Radiation Regulations, including likely conditions such as compliance with the Radiation Protection Series No. 9 and preparation of a radiation sub-plan for all operations. The plan would account for any special conditions	Radiation management plan Radioactive waste management plan Risk management plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
dust sampling, surface contamination monitoring, etc. The scale of the monitoring programme will depend on the level of potential exposure. Employees likely to receive significant doses (e.g., > 5 mSv per year) are commonly classified as "designated employees" and subject to more comprehensive monitoring.		or exemptions from specific provisions of the Radiation Regulations that might apply to the project. (RD05) Radiation monitoring program to include: • Prior to construction, undertake a finer grid external gamma dose rate survey in the project area to verify the baseline characterisation, in accordance with regulatory requirements. • Measure radiation levels onsite and in storage and handling areas of the port facilities to demonstrate compliance with regulatory standards, dose estimation and effectiveness of engineering controls. • Investigate the variability of radionuclides present in soils in an area of high-value irrigated vegetables in the Lindenow Valley for baseline purposes. Consider locations in relation to the project area, crop type, cultivation methods, fertiliser use and gamma survey field measurements. • Analyse gamma radiation levels and conduct radionuclide analysis within vegetables from the Lindenow area as part of baseline surveys. • Prior to construction, undertake additional dust analysis of baseline high-volume filter samples to quantify the existing alpha and beta activity concentrations in air. • Undertaking AMAD airborne particle sizing in the early stages of operations to determine if default conversion coefficients (ARPANSA Radiation Protection Series No. 9.1, 2011) are appropriate for radiation dose assessment purposes, or alternative coefficients need to be applied. (Chapter 12 of the Main Report)	Environmental management plan
Details of worker dose assessment methodologies incorporating internal and external exposure pathways in accordance with appropriate guidance documents (RPS 9.1, 2011).	Yes	The project will be operated in accordance with a management licence addressing radiation safety in accordance with the provisions of the Radiation Regulations, including likely conditions such as compliance with the Radiation Protection Series No. 9 and preparation of a radiation sub-plan for all	Radiation management plan Radioactive waste management plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
		operations. The plan would account for any special conditions or exemptions from specific provisions of the Radiation Regulations that might apply to the project. (RD05) Radiation exposure at the port through handling of HMC will be minimised through: • Adequately segregating stored concentrate from other cargo, including providing adequate signposting. • Adopting remote handling of concentrate and minimising exposure times wherever possible. • Using rotator boxes to load bulk shipments of concentrate into vessels. (RD08)	Risk management plan Environmental management plan
Training requirements for workers in the radiological aspects of operations, which will include: • Training in measures adopted to reduce or minimise radiation exposures; • Job specific training and additional training for supervisors; • Induction programs; • Documentation of training programs and records of employee participation; and • Specific on-going training and professional development of radiation safety personnel.	Yes	Workers will be provided with training specific to their role on potential radiation risks and measures to be implemented to reduce or minimise radiation exposures. All training will be documented and will include: • Job-specific training and additional training for supervisors. • Induction programs relating to the dangers of working near radioactive material and procedures to prevent radiation exposure. • Specific ongoing training and professional development of radiation safety personnel. (RD02)	Radiation management plan Radioactive waste management plan Risk management plan Environmental management plan
Provision for reporting to the Victorian Department of Health and Human Services, and company management, detailing results of personal dosimetry, and area and dust monitoring, incident reports and other operational issues, and worker dose records.	Yes	The project will be operated in accordance with a management licence addressing radiation safety in accordance with the provisions of the Radiation Regulations, including likely conditions such as compliance with the Radiation Protection Series No. 9 and preparation of a radiation sub-plan for all operations. The plan would account for any special conditions or exemptions from specific provisions of the Radiation Regulations that might apply to the project. (RD05)	Radiation management plan Radioactive waste management plan Risk management plan Environmental management plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
Conduct a risk assessment to estimate potential doses to wharf employees once proposed handling techniques and the ports for export have been finalised.	Partially	The project will be operated in accordance with a management licence addressing radiation safety in accordance with the provisions of the Radiation Regulations, including likely conditions such as compliance with the Radiation Protection Series No. 9 and preparation of a radiation sub-plan for all operations. The plan would account for any special conditions or exemptions from specific provisions of the Radiation Regulations that might apply to the project. (RD05) Radiation exposure at the port through handling of HMC will be minimised through: • Adequately segregating stored concentrate from other cargo, including providing adequate signposting. • Adopting remote handling of concentrate and minimising exposure times wherever possible. • Using rotator boxes to load bulk shipments of concentrate into vessels. (RD08)	Radiation management plan Radioactive waste management plan Risk management plan Environmental management plan
Ensure controlled areas are in place at the ports to ensure that any temporary storage of materials at the dock are adequately segregated from other cargo, and signposted accordingly. This will be the responsibility of the port operators.	Yes	The project will be operated in accordance with a management licence addressing radiation safety in accordance with the provisions of the Radiation Regulations, including likely conditions such as compliance with the Radiation Protection Series No. 9 and preparation of a radiation sub-plan for all operations. The plan would account for any special conditions or exemptions from specific provisions of the Radiation Regulations that might apply to the project. (RD05) Radiation exposure at the port through handling of HMC will be minimised through: • Adequately segregating stored concentrate from other cargo, including providing adequate signposting. • Adopting remote handling of concentrate and minimising exposure times wherever possible. • Using rotator boxes to load bulk shipments of concentrate into vessels. (RD08)	Radiation management plan Radioactive waste management plan Risk management plan Environmental management plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
Review of standard procedures for the storage, handling and loading of concentrate to ensure remote handling is adopted, and exposure times are minimised wherever possible.	Yes	Radiation exposure at the port through handling of HMC will be minimised through: • Adopting remote handling of concentrate and minimising exposure times wherever possible. (RD08)	Radiation management plan Radioactive waste management plan Risk management plan Environmental management plan
Use rotator boxes to load bulk shipments of concentrate into vessels to prevent spillage of concentrate on the wharf and prevent dust generation during loading.	Yes	Radiation exposure at the port through handling of HMC will be minimised through using rotator boxes to load bulk shipments of concentrate into vessels. (RD08)	Radiation management plan Radioactive waste management plan Risk management plan Environmental management plan
Ensure appropriate area radiation monitoring is conducted on a regular basis.	Yes	The project will be operated in accordance with a management licence addressing radiation safety in accordance with the provisions of the Radiation Regulations, including likely conditions such as compliance with the Radiation Protection Series No. 9 and preparation of a radiation sub-plan for all operations. The plan would account for any special conditions or exemptions from specific provisions of the Radiation Regulations that might apply to the project. (RD05)	Radiation management plan Radioactive waste management plan Risk management plan Environmental management plan
A Radioactive Waste Management Plan will be developed for the site and will include: • Descriptions of the waste generated, the processes generating the waste and the environment into which the waste will be discharged or disposed of. The facilities and procedures involved in the handling, treatment, storage and disposal of radioactive waste. • Prediction of environmental concentrations of radionuclides and radiation doses to people from the proposed waste management practices,	Yes	The project will be operated in accordance with a management licence addressing radiation safety in accordance with the provisions of the Radiation Regulations, including likely conditions such as compliance with the Radiation Protection Series No. 9 and preparation of a radiation sub-plan for all operations. The plan would account for any special conditions or exemptions from specific provisions of the Radiation Regulations that might apply to the project. (RD05) The monitoring program for radiation will include investigating the variability of radionuclides present in soils in an area of high-value irrigated vegetables in the Lindenow Valley (regularly referred to as the 'food bowl') for baseline purposes.	Radiation management plan Radioactive waste management plan Risk management plan Environmental management plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
including demonstration that the radiation protection requirements of this Code will be met both now and, in the future, as determined by the relevant regulatory authority. • Contingency measures in the case of failures in operational processes or equipment. • A program for monitoring the concentration of radionuclides in the environment and assessment of radiation doses to members of the public arising from the waste management practices (i.e., groundwater monitoring, airborne dust levels or radon in air; • A system of periodic assessment and review of the adequacy and effectiveness of procedures instituted under the approved RWMP to ensure currency and to take account of potential improvements consistent with currently available technology.		Consideration will be given to those locations relative to the project area, crop type, cultivation methods, fertiliser use and gamma survey field measurements. (Chapter 12 of the Main Report)	
In addition, the RWMP will include a plan for decommissioning the operation and the associated waste management facilities and rehabilitating the site. This Plan will be developed in consultation with the Victorian Department of Health and Human Services as part of the initial approval process and be subject to on-going review. These plans will encompass the closure of the mine site, rehabilitation of the area, any long-term controls over future land use, maintenance of records pertaining to past operations at the site, an appropriate programme for long-term radiation monitoring and surveillance, which might include ground and/or surface water monitoring, site inspection to assess the post-closure integrity of the rehabilitated areas and contingency plans for remediation of any defects that might become apparent in the rehabilitated site.	Yes	The project will be operated in accordance with a management licence addressing radiation safety in accordance with the provisions of the Radiation Regulations, including likely conditions such as compliance with the Radiation Protection Series No. 9 and preparation of a radiation sub-plan for all operations. The plan would account for any special conditions or exemptions from specific provisions of the Radiation Regulations that might apply to the project. (RD05) Runoff and erosion of soil (which could contain ore) will be minimised through: • Adequate bunding of operations and storage areas to avoid the transport of spilled or stored material into the surrounding terrestrial, freshwater or marine environment. • Constructing stockpile slope angles as low as practicable and mulch materials and contour ripping will be strategically used.	Radiation management plan Radioactive waste management plan Risk management plan Environmental management plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
		• Locating stockpiles to avoid overland flow pathways. • Diverting runoff from stockpiles to the process water dams for reuse. • Vegetating overburden stockpiles where appropriate to minimise erosion. (RD07)	
Integral to the approvals process, a Radiation Environmental Plan outlining the potential impacts of the project on non-human biota will be drafted. In accordance with recognised guidelines a 'Tier 1' assessment will be documented, to identify if stipulated screening values as stipulated in RPS G-1 have been exceed. Any further assessment that may be required depending on the results of this assessment will be documented.	Yes	The project will be operated in accordance with a management licence addressing radiation safety in accordance with the provisions of the Radiation Regulations, including likely conditions such as compliance with the Radiation Protection Series No. 9 and preparation of a radiation sub-plan for all operations. The plan would account for any special conditions or exemptions from specific provisions of the Radiation Regulations that might apply to the project. (RD05)	Radiation management plan Radioactive waste management plan Radiation environment plan Risk management plan Environmental management plan
A finer grid external gamma dose rate survey will be conducted of the project area locations prior to start-up, as advised by the Victorian Department of Health and Human Services. The grid size will be in accordance with guidelines published by the Western Australian Chamber of Mines and Energy (WACME 2008).	Yes	Prior to construction, Kalbar will undertake a finer grid external gamma dose rate survey in the project area to verify the baseline characterisation, in accordance with regulatory requirements. (Chapter 12 of Main Report)	Radiation management plan Radioactive waste management plan Radiation environment plan Risk management plan Environmental management plan
Investigation of the variability of radionuclides present in soils in the food bowl area for baseline purposes. Consideration will be given to those locations relative to the Project area, crop type, cultivation methods, fertilizer use, and gamma survey field measurements.	Yes	Investigate the variability of radionuclides present in soils in an area of high-value irrigated vegetables in the Lindenow Valley for baseline purposes. Consider locations in relation to the project area, crop type, cultivation methods, fertiliser use and gamma survey field measurements. (Chapter 12 of the Main Report)	Radiation management plan Radioactive waste management plan Radiation environment plan Risk management plan Environmental management plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
Analysis of gamma radiation levels within vegetables from the Lindenow area as part of baseline surveys.	Yes	Prior to construction, undertake a finer grid external gamma dose rate survey in the project area to verify the baseline characterisation, in accordance with regulatory requirements. (Chapter 12 of the Main Report) Analyse gamma radiation levels and conduct radionuclide analysis within vegetables from the Lindenow area as part of baseline surveys. (Chapter 12 of the Main Report)	Radiation management plan Radioactive waste management plan Radiation environment plan Risk management plan Environmental management plan
Additional dust analysis will be required on future baseline high-volume filter samples to quantify the alpha and beta activity concentrations in air. This should be conducted prior to construction.	Yes	Prior to construction, undertake additional dust analysis of baseline high-volume filter samples to quantify the existing alpha and beta activity concentrations in air. (Chapter 12 of Main Report) Record particulate matter (PM_{10} and $PM_{2.5}$ and respirable crystalline silica, gross alpha and beta radiation and heavy metals). (Chapter 12 of Main Report)	Radiation management plan Radioactive waste management plan Radiation environment plan Risk management plan Environmental management plan
Area monitoring using passive radon (radon-222) and thoron (radon-220) detectors will be conducted on site during the initial stages of operation to confirm ambient airborne radioactive gas concentrations. These passive track-etch detectors will be deployed on a quarterly basis at defined locations. The monitoring will continue for a 12-month period to compensate for diurnal and temporal variations over the assessment period. Representative monitoring will be conducted at both outdoor and indoor locations within the process plant.	Yes	Quarterly monitoring of passive radon and thoron gas onsite during the initial stages of operations to confirm the ambient airborne radioactive gas concentrations used as part of the EES assessment. Continue for 12-months at both outdoor and indoor locations within the project area. (Chapter 12 of Main Report)	Radiation management plan Radioactive waste management plan Radiation environment plan Risk management plan Environmental management plan
The RMP will include the requirements for AMAD airborne particle sizing to be undertaken in the early stages of operations to determine if default conversion coefficients (RPS 9.1, 2011) are appropriate for radiation dose assessment purposes, or alternative coefficients need to be applied.	Yes	The project will be operated in accordance with a management licence addressing radiation safety in accordance with the provisions of the Radiation Regulations, including likely conditions such as compliance with the Radiation Protection Series No. 9 and preparation of a radiation sub-plan for all operations. The plan would account for any special conditions	Radiation management plan Radioactive waste management plan Radiation environment plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
		or exemptions from specific provisions of the Radiation Regulations that might apply to the project. (RD05)	Risk management plan Environmental management plan
Extensive groundwater bore and surface water monitoring and radionuclide analysis will be conducted for a 12-month period prior to start-up.	Yes	Quarterly radionuclide analysis of groundwater bores and surface water monitoring for 12-months prior to operations. (Chapter 12 of Main Report)	Radiation management plan Radioactive waste management plan Radiation environment plan Risk management plan Environmental management plan
The Transport Management Plan developed for the Project will address the radiological hazards associated with heavy mineral sands as outlined in this assessment, and incorporate mitigations to minimise the impact on freight contractor employees and members of the public.	Yes	Workers will be provided with training specific to their role on potential radiation risks and measures to be implemented to reduce or minimise radiation exposures. All training will be documented and will include: • Job-specific training and additional training for supervisors. • Induction programs relating to the dangers of working near radioactive material and procedures to prevent radiation exposure. • Specific ongoing training and professional development of radiation safety personnel. (RD02)	Radiation management plan Radioactive waste management plan Radiation environment plan Risk management plan Environmental management plan Traffic management plan Emergency preparedness and response plan
In conjunction with the relevant stakeholders, a radiation monitoring programme will be established for the relevant export loading facilities including the Port at Corner Inlet, Port of Melbourne, and the intermodal container facility, whether that be at Maryvale, or another rail siding. This will include a baseline radiological survey prior to transport commencing, and assistance with establishing an ongoing radiation monitoring during operations.	Yes	Measure radiation levels onsite and in storage and handling areas of the port facilities to demonstrate compliance with regulatory standards, dose estimation and effectiveness of engineering controls. (Chapter 12 of the Main Report)	Radiation management plan Radioactive waste management plan Risk management plan Environmental management plan Traffic management plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
Traffic and Transport Impact Assessment (Appendix A012)			
Produce a travel plan encourages the workforce to travel by bus or car pool.	Yes	The construction environmental management plan and environmental management plan will include measures to encourage personnel to travel to and from the mine site by bus, or to carpool. (TT22)	Environment management plan Traffic management plan Construction management plan
Stakeholder consultation and advanced notice to the community of proposed changes.	Yes	Where roadworks require closure of roads, alternative routes will be identified in consultation with East Gippsland Shire Council and Department of Transport to provide the public with adequate access at all times. (TT17)	Environment management plan Community engagement plan Traffic management plan Construction management plan
The design to aim for angles between each leg of the Fingerboards roundabout to be evenly distributed (approximately 90 degrees between legs).	Yes	The proposed new Fingerboards roundabout will be designed so that the angle between each leg is approximately equal, such that the legs are distributed generally evenly around the roundabout. (TT15)	Environment management plan Construction management plan Traffic management plan
Produce a transport operational management plan (TOMP) in accordance with industry standards.	Yes	In preparation as part of the traffic management plan. A traffic management plan will be prepared in accordance with industry standards to address general driver awareness and safety for the project workforce and the inherent risks associated with driving; the plan will be updated as required based on annual driver surveys of the project workforce and in response to recommendations from relevant incident investigations. (TT02) Roadworks and temporary traffic management on the public road network will be implemented in accordance with a traffic management plan submitted to and approved by the responsible road authority prior to commencement of works. (TT19)	Environmental management plan Risk treatment plan Transport operational management plan Traffic management plan
Comply with OSOM permit requirements including pilot vehicles, escorts and restricting movement times.	Yes	Prior to the movement of oversize and overmass vehicles: • A permit will be obtained from the relevant road authority to gain access to any roads not approved for oversize and overmass vehicles. (TT05)	Environmental management plan Construction management plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
			Community engagement plan Traffic management plan
Undertake a route audit to identify risks associated with the road (e.g., alignment, cross section, pavement, bridge loads) and clearances (e.g., wires, structures, trees and rail crossing infrastructure).	Yes	Prior to the movement of oversize and overmass vehicles: • An audit will be completed to assess route options, safety, and clearance between the vehicle and potential obstructions such as wires, trees, structures and rail crossing infrastructure, and then plan the route accordingly. (TT05)	Environmental management plan Construction management plan Community engagement plan Traffic management plan
Diverted roads should be constructed to the dame or better standard than the original. In cases where Responsible Authority for the roads changes, the standard of upgrade should be agreed between the existing and proposed Responsible Authority. Any new intersections are to be built to Austroads standards including new intersections that have been created by diverted roads.	Yes	New intersections, including new intersections that have been created by diverted roads, will be constructed to Austroads standards. (TT11) Diverted and realigned roads will be constructed to the same or better standard as existing roads. (TT10)	Environmental management plan Construction management plan Community engagement plan Traffic management plan
Produce traffic and emergency management plans.	Yes	A traffic management plan will be prepared in accordance with industry standards to address general driver awareness and safety for the project workforce and the inherent risks associated with driving; the plan will be updated as required based on annual driver surveys of the project workforce and in response to recommendations from relevant incident investigations. (TT02) Emergency services will be advised where significant delays are expected and contact details for the operations manager will be provided to allow emergency services to arrange access across an area of delay. (TT20) A review of the existing capability of emergency services and potential future requirements for these services will be completed in consultation with East Gippsland and Wellington shires and emergency service providers. (SE62)	Environmental management plan Construction management plan Community engagement plan Traffic management plan Emergency preparedness and response plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
Provide channelised right turn (CHR) treatment to allow for safe right turning traffic movements.	Yes	A channelised right-turn treatment will be provided at the new intersection of Bairnsdale- Dargo Road and the diverted section of Fernbank-Glenaladale Road north of Bairnsdale- Dargo Road. (TT07)	Environmental management plan Construction management plan Community engagement plan Traffic management plan
Upgrade to roundabout control reducing the speed of approaching traffic and mitigating cross-traffic controls.	Yes	The intersection of Princes Highway and Lindenow-Glenaladale Road will be upgraded to roundabout control to increase road safety and avoid excessive slowing of traffic due to B- doubles turning right from Lindenow-Glenaladale Road onto Princes Highway (if required under the Bairnsdale rail and road and rail scenarios). (TT31)	Environmental management plan Construction management plan Community engagement plan Traffic management plan
Provide rumble or shaker strips on the approach to Bairnsdale-Dargo Road / Fernbank-Glenaladale Road roundabout and chemical or physical (water) dust suppressants to control dust on access roads.	Yes	Rumble or shaker strips will be provided on approach to the new Fingerboards roundabout and on the Fernbank East rail siding access road to prevent mud tracking onto the public road network. (TT14)	Environmental management plan Construction management plan Community engagement plan Traffic management plan Airborne and deposited dust risk treatment plan
Extend no overtaking line marking (west leg of the intersection) by approximately 300m, to just west of Lindenow-Glenaladale Road.	Yes	The no overtaking line marking west of the intersection of Lindenow-Glenaladale Road and Bairnsdale-Dargo Road will be extended to just west of Lindenow-Glenaladale Road to reduce the risk of vehicles trying to overtake B-doubles on the approach to the crest of the hill near the intersection. (TT12)	Environmental management plan Construction management plan Community engagement plan Traffic management plan
Upgrade to roundabout control, reducing the speed of approaching traffic and mitigating cross-traffic conflicts.	Yes	The intersection of Princes Highway and Lindenow-Glenaladale Road will be upgraded to roundabout control to increase road safety and avoid excessive slowing of traffic due to B- doubles turning right from Lindenow-Glenaladale Road	Environmental management plan Construction management plan Community engagement plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
		onto Princes Highway (if required under the Bairnsdale rail and road and rail scenarios). (TT31)	Traffic management plan
Provide lighting at the following locations of Fernbank-Glenaladale Road / Bairnsdale-Dargo Road and Princes Highway / Lindenow-Glenaladale Road.	Yes	Standard road lighting will be provided at the following intersections to increase the visibility on approach to the intersection and improve safety: • Fernbank-Glenaladale Road and Bairnsdale-Dargo Road (if required under the road and rail scenario). • Lindenow-Glenaladale Road and Princes Highway. • Fernbank-Glenaladale Road and the private haulage road. • Racecourse Road and Princes Highway (if required under the Bairnsdale rail scenario). (TT03)	Environmental management plan Construction management plan Community engagement plan Traffic management plan
Provide flag lighting at the intersections of Princes Highway / Fernbank-Glenaladale Road.	Yes	Flag lighting (a small number of lights to indicate the presence and location of an intersection without providing lighting to any particular level) will be provided at the following intersections to increase visibility on approach and improve safety: • Fernbank-Glenaladale Road and Princes Highway. • Fernbank-Glenaladale Road and private haulage road. (TT04)	Environmental management plan Construction management plan Community engagement plan Traffic management plan
Undertake annual driver surveys and update the TOMP if required (depending on survey findings); and Regularly monitor and review the TOMP over the 20-year project.	Yes, TOMP as part of the traffic management plan	A traffic management plan will be prepared in accordance with industry standards to address general driver awareness and safety for the project workforce and the inherent risks associated with driving; the plan will be updated as required based on annual driver surveys of the project workforce and in response to recommendations from relevant incident investigations. (TT02)	Environmental management plan Community engagement plan Traffic management plan
Avoid movement of OSOM loads during peak hours and school bus operation hours.	Yes	Oversize and overmass vehicle movements will avoid peak hours and school bus operation hours. (TT06)	Environmental management plan Construction management plan Community engagement plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
			Traffic management plan
B-Double transport movements to avoid travelling during school pick up and drop of times i.e., 8:00 a.m. to 9:30 a.m. and 2:30p.m. to 4:00 p.m. on school days.	Yes	Heavy mineral concentrate haulage via Lindenow South will be scheduled to avoid school bus routes during times of school bus movements (i.e., 7:30 a.m. to 9:00 a.m. and 3:20 p.m. to 5:00 p.m. on school days). (TT25)	Environmental management plan Community engagement plan Traffic management plan
Upgrade the active control level crossing to incorporate boom gates as per AS1742.7 '*Manual of uniform traffic control devices - Railway crossings*'	Yes	Boom gates will be installed at the level crossing on Lindenow-Glenaladale Road in accordance with AS 1742.7 Manual of uniform traffic control standards, Part 7 Railway crossings. (TT13)	Environmental management plan Community engagement plan Traffic management plan
Reinstate existing linemarking or consider linking rail signals with traffic signals to avoid vehicles queuing onto the crossing.	Yes	Measures developed in consultation with the Department of Transport will be implemented to minimise the risk of B-doubles queuing onto the level crossing at Maryvale rail siding, such as shorter cycle times, leading and lagging right turn phasing and coordinating signals with a detector on the rail line upstream of the crossing (if required under the road and rail scenario). (TT24)	Environmental management plan Community engagement plan Traffic management plan
B-Double transport movements to avoid travelling during school pick up and drop of times i.e., 8:00 a.m. to 9:30 a.m. and 2:30p.m. to 4:00 p.m. on school days.	Partially	Heavy mineral concentrate haulage via Lindenow South will be scheduled to avoid school bus routes during times of school bus movements (i.e., 7:30 a.m. to 9:00 a.m. and 3:20 p.m. to 5:00 p.m. on school days). (TT25)	Environmental management plan Community engagement plan Traffic management plan
A monitoring and asset protection plan to be developed and agreed between the project and relevant road authorities, to including maintenance of shoulders (clearing of overgrowth) to improve drainage in addition to the pavement treatments.	Yes	Where any pavement damage occurs and requires immediate treatment, remedial pavement works will be undertaken as agreed with the responsible road authority. (TT26) To be prepared part of the traffic management plan. A traffic management plan will be prepared in accordance with industry standards to address general driver awareness and safety for the project workforce and the inherent risks associated with driving; the plan will be updated as required based on annual driver surveys of the project workforce and in response to recommendations from relevant incident investigations. (TT02)	Environmental management plan Community engagement plan Traffic management plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
		Regular (e.g., annual, subject to existing pavement condition and agreement with the responsible authority) monitoring of pavement condition along Lindenow-Glenaladale Road, Bairnsdale-Dargo Road west of Lindenow-Glenaladale Road and other roads as required and agreed in accordance with the relevant authority. (Chapter 12 of Main Report)	
Survey of the existing conditions for the final product transport route be undertaken prior to construction commencing so that deterioration resulting from the project can be monitored. This includes a structural integrity assessment to understand the pavement composition.	Yes	Prior to construction, survey of pavement condition along Lindenow-Glenaladale Road and Bairnsdale-Dargo Road west of Lindenow-Glenaladale Road to provide a baseline to assess any deterioration resulting from the project. (Chapter 12 of Main Report)	Environmental management plan Community engagement plan Traffic management plan
Avoid construction road upgrades in peak periods.	Yes	Roadworks affecting the Princes Highway, if required under the Bairnsdale rail scenario or road and rail scenario, will be avoided during peak periods, including peak hours and peak times such as school and public holidays, wherever practicable. (TT21)	Environmental management plan Community engagement plan Traffic management plan
Upgrade to signalised control with advanced warning signs upstream of intersection location and consideration of appropriate spacing between intersections to reduce the risk of high-speed vehicle collisions and providing awareness of the hazard.	Yes	New intersections will be constructed such that through-traffic movements are maintained to the satisfaction of the responsible road authority. Temporary traffic signals will be used as required to safely control traffic flow through the work site. (TT18)	Environmental management plan Community engagement plan Traffic management plan
As part of the TOMP, introduce an operational overlay that requires B-Doubles to come to a stop before crossing Chettles Road and Cowells Lane.	Yes	For B-double movements to Fernbank East rail siding, an operational overlay to the traffic management plan will be introduced that requires B-doubles to stop before crossing Chettles Road and Cowells Lane. (TT28)	Environmental management plan Community engagement plan Traffic management plan
Provide rumble or shaker strips on the approach to Fernbank-Glenaladale Road / Private Haul Road and chemical or physical (water) dust suppressants to control dust on access roads.	Yes	Rumble or shaker strips will be provided on approach to the new Fingerboards roundabout and on the Fernbank East rail siding access road to prevent mud tracking onto the public road network. (TT14)	Environmental management plan Community engagement plan Traffic management plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
Public road sealing of a small section (~20-30m) either side of the Private Haulage Road crossing of Chettles Road and Cowells Lane.	Yes	The main access road is likely to be sealed from the Fernbank-Glenaladale Road intersection to the WCP and administration area. Rumble or shaker strips are likely to be installed to prevent mud tracking onto the local road network. (Chapter 3 of Main Report) Concentrate transport trucks will access the site via an automatically gated entrance off Fernbank-Glenaladale Road. The trucks will leave the mine site via a sealed, private road running parallel to Chettles Road within the infrastructure corridor from the mine site to the Fernbank East rail siding. (Chapter 3 of Main Report)	Environmental management plan Community engagement plan Traffic management plan
Provide flag lighting at the intersection of the Fernbank-Glenaladale Road / Private Haul Road.	Yes	Flag lighting (a small number of lights to indicate the presence and location of an intersection without providing lighting to any particular level) will be provided at the following intersections to increase visibility on approach and improve safety: • Fernbank-Glenaladale Road and Princes Highway. • Fernbank-Glenaladale Road and private haulage road. (TT04)	Environmental management plan Community engagement plan Traffic management plan
Mitigation measures in response to safety issues outlined in section 9.3.1 will dually mitigate this potential impact. Details of specific intersection upgrades outlined in section 9.3.1. Likewise, product transport during these busy periods should be avoided.	Yes	The intersection of Princes Highway and Lindenow-Glenaladale Road will be upgraded to roundabout control to increase road safety and avoid excessive slowing of traffic due to B- doubles turning right from Lindenow-Glenaladale Road onto Princes Highway (if required under the Bairnsdale rail and road and rail scenarios). (TT31) Standard road lighting will be provided at the following intersections to increase the visibility on approach to the intersection and improve safety: • Fernbank-Glenaladale Road and Bairnsdale-Dargo Road (if required under the road and rail scenario). • Lindenow-Glenaladale Road and Princes Highway. • Fernbank-Glenaladale Road and the private haulage road.	Environmental management plan Community engagement plan Traffic management plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
		• Racecourse Road and Princes Highway (if required under the Bairnsdale rail scenario). (TT03) For B-double movements to Bairnsdale rail siding, the intersection of Princes Highway and Racecourse Road will be upgraded to roundabout control to increase road safety and avoid excessive slowing of traffic due to B-doubles turning right from Princes Highway onto Racecourse Road (if required under the Bairnsdale rail scenario). (TT31)	
Seal Fennings Yard access road.	No	Not part of preferred project scenario	
Widen shoulders and reinstate linemarking on the Racecourse Road bend. May be an opportunity to address this as part of the upgrade of the intersection to roundabout control.	Yes, if required	For B-double movements to Bairnsdale rail siding, shoulders will be widened, and line marking will be reinstated on the Racecourse Road bend to reduce the potential for rear end collisions (if required under the Bairnsdale rail scenario). (TT29)	Environmental management plan Community engagement plan Traffic management plan
Widen shoulders and reinstate linemarking on the Forge Creek Road bend	Yes, if required	For B-double movements to Bairnsdale rail siding, shoulders will be widened, and line marking will be reinstated on the Forge Creek Road bend to reduce the potential for crashes (if required under the Bairnsdale rail scenario). (TT30)	Environmental management plan Community engagement plan Traffic management plan
Provide lighting at the intersections Racecourse Road / Princes Highway.	Yes, if required	For B-double movements to Bairnsdale rail siding, the intersection of Princes Highway and Racecourse Road will be upgraded to roundabout control to increase road safety and avoid excessive slowing of traffic due to B-doubles turning right from Princes Highway onto Racecourse Road (if required under the Bairnsdale rail scenario). (TT31)	Environmental management plan Community engagement plan Traffic management plan
It is recommended that pedestrian surveys be undertaken to understand the patterns of demand for Lindenow South. Mitigation measures that may be appropriate to consider include the limitations to the time of operation of B-Double movements, revision to the speed limits, driver training and familiarisation as part of the TOMP.	Yes	The need for a cycleway/foot path on Lindenow-Glenaladale Road to provide greater protection for cyclists and pedestrians on this road within the township will be investigated as a part of the traffic management plan. (SE13)	Environmental management plan Community engagement plan Traffic management plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
A monitoring and asset protection plan to be developed and agreed between the project and relevant road authorities. Minor works to rectify poor drainage performance and/or sections requiring localised shoulder widening.	Yes	Where any pavement damage occurs and requires immediate treatment, remedial pavement works will be undertaken as agreed with the responsible road authority. (TT26)	Monitoring and asset protection plan Environmental management plan Community engagement plan Traffic management plan
Resealing and strengthening of pavement for B-double use to be developed and agreed between the project and relevant road authorities. Particularly around Bosworth Road / Forge Creek Road roundabout and Bosworth Road / Fennings Yard access.	Yes	For B-double movements to Bairnsdale rail siding, shoulders will be widened, and line marking will be reinstated on the Racecourse Road bend to reduce the potential for rear end collisions (if required under the Bairnsdale rail scenario). (TT29)	Environmental management plan Community engagement plan Traffic management plan
Survey of the existing conditions for the final product transport route (post Avon River Bridge) be undertaken so that deterioration resulting from the project can be monitored. This includes a structural integrity assessment to understand the pavement composition.	Yes	Where any pavement damage occurs and requires immediate treatment, remedial pavement works will be undertaken as agreed with the responsible road authority. (TT26)	Environmental management plan Community engagement plan Traffic management plan
Land Use and Planning Impact Assessment (Appendix A013)			
Planning approvals will include a Specific Controls Overlay for activities associated with the project outside the mining licence area.	Yes	Planning Scheme Amendment has been exhibited with the EES	Environmental management plan Community engagement plan
Additional mitigation and commitment adopted by Kalbar.		Landholder compensation will be in accordance with the *Mineral Resources (Sustainable Development) Act 1990* and based on a full inventory of on-farm assets. (LUP08)	Community engagement plan
Landscape and Visual Impact Assessment (Appendix A014)			
Progressive reinstatement / rehabilitation will ensure that soil profiles are maintained to ensure the success of grass cover and tree plantings.	Yes	The mine void will be progressively backfilled, and rehabilitation will be progressive to re- instate pre-mining landforms and re-establish vegetation. (VL05)	Environmental management plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
		The landscape will be restored to reduce visual impacts from elevated view points. (VL07) Regular slopes and/or sharp transition angles will be rounded to provide a natural appearance to the final landform. (VL08) Topsoil will be managed and maintained throughout rehabilitation activities to promote successful re-grassing and tree planting. (VL11) Seeds will be spread to achieve a stem density significantly higher than the target to allow for losses due to animal damage and other causes; thinning will occur at a later date to achieve the target number of stems per hectare, particularly in areas where a higher (moderate) density of trees is proposed and where there is inclusion of understorey species. (RH34)	Visual amenity management plan Rehabilitation plan
Overburden mining to prominent locations will be avoided wherever practically possible at night, to reduce prominent mobile lighting.	Yes	Works will be scheduled wherever practicable during daylight hours to avoid night-time activities in areas directly visible from nearby residences. (VL04)	Environmental management plan Visual amenity management plan Rehabilitation plan
Place temporary visual bunds so that they provide screening to internal mine void operations.	Yes	Temporary visual bunds will be placed to screen operations within the mine void. (VL13)	Environmental management plan Visual amenity management plan
Landscape Plans and a Landscape Management and Maintenance Plan will need to be prepared prior to the commencement of works to detail the location of amelioration works as well as their staging and ongoing maintenance requirements.	No	A visual amenity management plan will be prepared and implemented based on the rehabilitation plan. (Chapter 12 of Main Report)	Environmental management plan Visual amenity management plan Rehabilitation plan
Indigenous plants are to be utilised given their suitability for local conditions and subsequently	Yes	Disturbed areas (e.g., road reserves) will be revegetated with local indigenous vegetation. (VL09)	Environmental management plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
greater potential to achieve the required amelioration outcomes			Visual amenity management plan Rehabilitation plan Native vegetation management plan Biodiversity management plan
In areas at ground level, lighting can be targeted and appropriately baffled or shielded to minimise fugitive light emissions.	Yes	Fixed lighting on plant and buildings will be designed to reduce the potential for light spill through measures such as focussed/targeted lighting and installation of shields or baffles. (VL02)	Environmental management plan Visual amenity management plan
Fixed lighting on permanent plant and buildings will be subject to specific lighting design and will wherever possible be focussed, shielded or have baffles installed in order to reduce the potential for light spill.	Yes	Fixed lighting on plant and buildings will be designed to reduce the potential for light spill through measures such as focussed/targeted lighting and installation of shields or baffles. (VL02)	Environmental management plan Visual amenity management plan
Other ameliorative treatments such as the restriction of vehicles operating at night on outer stockpile faces should be considered.	Yes	Works will be scheduled wherever practicable during daylight hours to avoid night-time activities in areas directly visible from nearby residences. (VL04)	Environmental management plan Visual amenity management plan
Affected landholders adjacent to the project area will be consulted on a case-by-case basis regarding the appropriate mitigation and avoidance measures which may be available.	Yes	Displaced plantation timber and vegetation will be replaced around properties in consultation with relevant landholders. (VL10) Local landholders will be engaged on how land is rehabilitated to ensure compatibility with future stocking requirements. (SE32)	Environmental management plan Visual amenity management plan Rehabilitation plan Native vegetation management plan Biodiversity management plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
Fixed plant, such as the WCP and administration and works compound, will be located to take advantage of existing screening vegetation provided by forestry plantations.	Yes	Fixed buildings will be located to take advantage of existing vegetation screening. Additional vegetation screening will be planned to minimise future visual impacts. (VL06)	Environmental management plan Visual amenity management plan Rehabilitation plan Native vegetation management plan Biodiversity management plan
Additionally, visual bunding and perimeter screen planting will be established to provide long term visual mitigation.	Yes	Visual bunds and screen plantings will be established at locations around the perimeter of the project area to visually screen project activities from sensitive view points. (VL01) Buildings and roofs will be clad with non-reflective materials of a colour that mimics those found in the landscape to reduce visual contrast with the landscape setting. (VL03) Containers will be stacked at the rail siding to the maximum height of adjacent screening vegetation and/or topography. (VL12)	Environmental management plan Visual amenity management plan Rehabilitation plan Native vegetation management plan Biodiversity management plan
Agriculture Impact Assessment (Appendix A015)			
The Project's overall Environmental Monitoring Systems, as part of its Environmental Management Plan, will be relevant to monitoring performance regarding agricultural impacts. This will include monitoring of parameters such as biodiversity offset, surface water, groundwater, air quality, noise, traffic and waste.	Yes	As part of the EMF, a series of procedures would be in place to continually monitor and evaluate project compliance and manage records. (Chapter 12 of Main Report)	Environmental management plan Native vegetation management plan Risk management plan
Monitoring of Land Rehabilitation will also occur under the Project's Environmental Management Plan. The parameters to be monitored for land rehabilitation could include pasture ground cover (%), plant species composition (%), presence of weeds, pasture production (tonnes dry matter per ha), visual assessment of general health, soil monitoring, photo	Yes	Land rehabilitation monitoring will consist of a monitoring program to demonstrate compliance with rehabilitation commitments and provide information for future planning and to establish reference sites prior to commencing rehabilitation works to form a baseline, used to assess the success of rehabilitation works. (Chapter 12 of Main Report)	Environmental management plan Risk management plan Ground control management plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
monitoring, surface and groundwater monitoring and geotechnical stability.			Rehabilitation plan Community engagement plan Surface water and groundwater management plan Biodiversity management plan
Regarding agriculture impacts, there will be a strong requirement for engagement with directly affected and neighbouring landholders. Regular communication with landholders about project operations will be important. Communication should be tailored to each landholder and there should be a general objective of providing landholders with as much information as possible.	Yes	Local agriculture and horticulture industry bodies, such as Food and Fibre Gippsland, will be consulted and engaged with to identify any potential issues at an early stage and enable effective solutions to be implemented. (AG02) Representation from local horticultural and agricultural producers will be sought for the environment review committee to provide input on concerns during project construction and operations. (AG03) A working group with growers will be established, as agreed with growers, and will meet on a periodic basis to discuss specific issues of concern and potential responses. (AG11) Local landholders will be engaged on how land is rehabilitated to ensure compatibility with future stocking requirements. (SE32)	Environmental management plan Risk management plan Rehabilitation plan Community engagement plan
Engagement should include: • Providing each directly affected and neighbouring landholder with a direct and continuous Kalbar point of contact • The point of contact should have strong skills in stakeholder engagement and use a stakeholder engagement management system to keep a good record of these activities • Providing directly affected landholders with adequate notice and regular updates of the timing of land access and changes in the land rehabilitation program	Yes	Local landholders will be engaged on how land is rehabilitated to ensure compatibility with future stocking requirements. (SE32) A community engagement plan will be implemented that identifies approaches to actively manage issues with public perception, including providing objective and factual public communications. (AG08) A principal contact person to whom community queries and complaints will be directed will be identified for the project. The complaints response procedure will be implemented to address any complaints received. Twenty-four-hour contact details for the principal contact person will be provided through letters and signage onsite. (AQ19)	Environmental management plan Risk management plan Rehabilitation plan Community engagement plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
• Undertaking regular communication with directly affected and neighbouring landholders to receive feedback about any Project-related concerns • Having a grievance management procedure to provide a framework through which Project grievances will be recorded, processed, resolved (linked to the stakeholder engagement management system). This includes a process for dispute resolution • Involvement of directly affected landholders in the rehabilitation program, including pasture species selection, pasture management and other issues in the lead up to handover • Given the importance of the local vegetable industry it may be appropriate to form a specific Vegetable Industry Reference Group. Alternatively, the vegetable industry could be included in a Project Community Reference Group.		Timely responses will be provided to any community complaints raised. (SE22) Local landholders will be engaged on how land is rehabilitated to ensure compatibility with future stocking requirements. (SE32)	
Horticulture Impact Assessment (Appendix A016)			
Encourage and support local vegetable producers to achieve EnviroVeg, Freshcare Environmental or Global G.A.P. certification so they have evidence of their environmentally responsible, 'clean green' production.	Yes	Local growers will be encouraged to obtain EnviroVeg or Freshcare environmental certification as evidence of 'clean green' production under an environmental management system. (AG12)	Environmental management plan Risk management plan Community engagement plan
Implementation of a stakeholder engagement plan to manage issues of perception concerning markets and employment.	Yes	A community engagement plan will be implemented that identifies approaches to actively manage issues with public perception, including providing objective and factual public communications. (AG08)	Environmental management plan Risk management plan Community engagement plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
Provide monitoring data and forecasts e.g., weather conditions and planned management actions to mitigate impacts to landholders and the community.	Yes	Construction activities will be delayed if significant weather events are forecast. (TE55) Dust, noise and water monitoring results will be made available at regular intervals on the project website along with information on how any peaks or exceedances have been responded to. (SE02)	Environmental management plan Risk management plan Community engagement plan
Engage with growers and seek their interest in Kalbar establishing a working group with them, as part of or in addition to the CRG. The group would meet on an agreed periodic basis to discuss any issues of concern to producers and how they will be dealt with. This landholder engagement will allow an adaptive approach to risk identification, monitoring and management, e.g., via an annual review of relevant data, risk and mitigation measures, ensuring that residual risks remain low.	Yes	A working group with growers will be established, as agreed with growers, and will meet on a periodic basis to discuss specific issues of concern and potential responses. (AG11)	Environmental management plan Risk management plan Community engagement plan
Establish an environmental review committee (ERC, as part of stakeholder engagement) assessing the environmental performance of the project throughout its life.	Yes	An environmental review committee will be established to involve the community in reviewing the environmental performance of the project throughout its life. (SE19) Representation from local horticultural and agricultural producers will be sought for the environment review committee to provide input on concerns during project construction and operations. (AG03)	Environmental management plan Risk management plan Community engagement plan
Include community engagement in the buffer zone design to ensure it creates good landscape amenity and supports local biodiversity.	Yes	The community engagement plan and associated activities will be regularly reviewed and adapted based on community feedback so that the community has different ways to receive information on the performance of the project. (SE05) A community engagement plan will be implemented that identifies approaches to actively manage issues with public perception, including providing objective and factual public communications. (AG08)	Environmental management plan Risk management plan Community engagement plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
Cultural Heritage Impact Assessment (Appendix A017)			
The principal Aboriginal cultural heritage risk reduction measure to be implemented by the proponent will be the preparation of an Aboriginal CHMP, which will be undertaken in accordance with the requirements of the AH Act 2006 (Vic) and the Aboriginal Heritage Regulations 2018 (Vic).	Yes, in preparation	A cultural heritage management plan will be prepared and implemented in accordance with the *Aboriginal Heritage Act 2006* (Vic) and the Aboriginal Heritage Regulations 2018 (Vic). The plan will include site-specific management and salvage procedures (e.g., collection of surface artefacts and excavation of archaeological sites of significance). (CH01)	Environmental management plan Construction management plan Cultural heritage management plan (in preparation) Community engagement plan

The CHMP will include
• Site-specific management conditions that must be implemented before the project commences, during the project and after the project has ended (as appropriate). These management conditions will be designed to either avoid impacts to Aboriginal cultural heritage places (if appropriate), or mitigate impacts to them by implementing a range of salvage procedures that may include the collection of surface artefacts, or the excavation of all or a portion of certain archaeological sites identified as having the potential to contribute to a range of research-focused questions, or questions of interest to Aboriginal Traditional Owners.
• General management conditions that may include:
  • the requirement for all personnel involved in ground disturbing activities to participate in a cultural heritage induction.
  • the need for the proponent to regularly review their compliance with the management conditions contained in the CHMP.
	Yes, in preparation	If cultural heritage sites are discovered, the following steps will be taken:
		• The person who found the cultural heritage site will immediately notify the operations manager.
		• The operations manager will suspend relevant works to a distance of 50 m from the site and isolate the find via the installation of safety webbing, or other suitable barrier; the discovery is to remain in situ.
		• If historical archaeological deposits, artefacts or features are discovered, all works that may cause harm will cease and Heritage Victoria will be contacted.
		• The operations manager will notify a suitably qualified archaeologist of the find within 24 hours of the discovery. (CH06)
		Collected cultural heritage materials will be stored by a qualified heritage advisor. (CH03)
		Recovered Aboriginal cultural heritage materials will be repatriated to a Registered Aboriginal Party, e.g., the GLaWAC. (CH04)
			Environmental management plan
			Construction management plan
			Cultural heritage management plan (in preparation)
			Community engagement plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
• retention and storage of all recovered cultural heritage materials by a qualified Heritage Advisor • the future repatriation of all recovered cultural heritage materials to a Registered Aboriginal Party such as GLaWAC.			
Contingency measures (chance finds protocol) that provide clear instructions that must be followed in the event that Aboriginal cultural heritage places or materials are discovered during the construction, operation or decommissioning of the project. The following matters will need to be considered in relation to these measures for the project: • strategy to be implemented if any suspected human remains are found in the activity area • process to follow if unexpected Aboriginal places or objects other than human remains are found during the activity • custody and management of Aboriginal cultural heritage recovered • reviewing compliance with the management plan • dispute resolution • delays and other obstacles • authorised Project Delegates and the handling of sensitive information	Yes	A cultural heritage chance finds protocol will be developed and implemented which addresses: • Actions to be taken in the event of unexpected discovery of human remains, Aboriginal places or objects, low-density and non-low-density artefact distribution. • Actions to be taken in the event of unexpected discovery of non-Indigenous cultural heritage. • Custody management of Aboriginal cultural heritage recovered. • Compliance review with the protocol. • Dispute resolution. • Authority of personnel and handling sensitive information. • Site specific management. (CH05)	Environmental management plan Construction management plan Cultural heritage management plan (in preparation) Community engagement plan
VAHR 8322 0090 W H Dumeresq - No measures required due to the almost total destruction of this Aboriginal cultural heritage place.	Yes	No need for further study.	Environmental management plan Construction management plan Cultural heritage management plan (in preparation)

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
			Community engagement plan
VAHR 8422 0369 West Bairnsdale IA 1 - Surface salvage collection of the single stone artefact by a qualified archaeologist and at least one representative from a relevant Registered Aboriginal Party (if one exists) prior to the commencement of the project.	Yes	For registered Aboriginal cultural heritage places VAHR 8422-0369 and VAHR 8322-0226, salvage procedures, such as surface salvage collection and controlled manual or mechanical salvage excavation, of flaked stone artefacts will be undertaken by a qualified archaeologist prior to commencing construction. (CH07)	Environmental management plan Construction management plan Cultural heritage management plan (in preparation) Community engagement plan
VAHR 8322 0226 Fingerboards LDAD 1 - Salvage collection of all flaked stone artefacts comprising the site by a qualified archaeologist and at least one representative from a relevant Registered Aboriginal Party (if one exists) prior to the commencement of the project.	Yes	For registered Aboriginal cultural heritage places VAHR 8422-0369 and VAHR 8322-0226, salvage procedures, such as surface salvage collection and controlled manual or mechanical salvage excavation, of flaked stone artefacts will be undertaken by a qualified archaeologist prior to commencing construction. (CH07)	Environmental management plan Construction management plan Cultural heritage management plan (in preparation) Community engagement plan
VAHR 8322 **** Fingerboards LDAD 2 - Salvage collection of all flaked stone artefacts comprising the site by a qualified archaeologist and at least one representative from a relevant Registered Aboriginal Party (if one exists) prior to the commencement of the project.	Yes	This work has been completed as part of the preparation of the CHMP.	Environmental management plan Construction management plan Cultural heritage management plan (in preparation) Community engagement plan
VAHR 8322 **** Fingerboards Artefact Scatter Components – To be determined through further investigation as part of a CHMP and implemented prior to the commencement of the project.	Yes	This work has been completed as part of the preparation of the CHMP.	Cultural heritage Environmental management plan Construction management plan Cultural heritage management plan (in preparation) Community engagement plan
A partially ruined built structure located on the property immediately southeast of the Fernbank-	Yes	This work has been completed as part of the preparation of the CHMP.	Environmental management plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
Glenaladale Road/Bairnsdale-Dargo Road should be further investigated to determine if it does indeed comprise a cultural heritage value requiring impact management or mitigation.			Construction management plan Cultural heritage management plan (in preparation) Community engagement plan
If historical heritage sites are discovered during the construction, operation or decommissioning of the project, the following steps should be applied: • The person who identified the find will immediately notify the person in charge. • The person in charge must then suspend any relevant works at the location of the discovery and to a distance within 50m of the relevant site extent and isolate the find via the installation of safety webbing, or other suitable barrier and the material to remain in situ. • The person in charge of works should notify a suitably qualified archaeologist of the find within 24 hours of the discovery.	Yes	Properties within the project area or infrastructure options area that could not be accessed during the cultural heritage study will be investigated prior to ground disturbance activities to identify non-Indigenous cultural heritage values that may be present. (CH08) If cultural heritage sites are discovered, the following steps will be taken: • The person who found the cultural heritage site will immediately notify the operations manager. • The operations manager will suspend relevant works to a distance of 50 m from the site and isolate the find via the installation of safety webbing, or other suitable barrier; the discovery is to remain in situ. • If historical archaeological deposits, artefacts or features are discovered, all works that may cause harm will cease and Heritage Victoria will be contacted. • The operations manager will notify a suitably qualified archaeologist of the find within 24 hours of the discovery. (CH06)	Environmental management plan Construction management plan Cultural heritage management plan (in preparation) Community engagement plan
Additional mitigation and commitments by Kalbar.		Cultural heritage training will be provided for all personnel involved in vegetation clearance and ground disturbance works prior to commencement of these activities. (CH02)	Environmental management plan Construction management plan Cultural heritage management plan (in preparation) Community engagement plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
Socioeconomic Impact Assessment (Appendix A018)			
Close dialogue with East Gippsland and Wellington Shire councils will be maintained for opportunities to encourage social interaction.	Yes	Close dialogue with East Gippsland and Wellington Shire councils will be maintained to identify opportunities to encourage social interaction. (SE21)	Environmental management plan Construction management plan Community engagement plan
A community fund will be established to support community events and initiatives that encourage social interaction.	Yes	A community fund will be established to support community events and initiatives that encourage social interaction such as sporting teams and community festivals. (SE04)	Environmental management plan Construction management plan Community engagement plan
Dust, noise and water monitoring results will be made available at regular intervals on the project website along with information on how any peaks or exceedances have been responded to.	Yes	Dust, noise and water monitoring results will be made available at regular intervals on the project website along with information on how any peaks or exceedances have been responded to. (SE02)	Environmental management plan Construction management plan Community engagement plan Airborne and deposited dust risk treatment plan Water quality and hydrology risk treatment plan Environmental noise risk treatment plan Construction noise management plan Operational noise management plan Surface water and groundwater management plan
Community access will be provided to information on potential project impacts, and the process for the EES, land access and acquisition in a range of ways,	Yes	Community access will be provided to information on potential project impacts, and the process for the EES, land access and acquisition in a range of ways, such as through community	Environmental management plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
such as through community meetings, personal meetings, newspaper advertisements and website information.		meetings, personal meetings, newspaper advertisements and website information. (SE01) Regular updates will be provided to local communities on the progress of the EES. (SE08)	Construction management plan Community engagement plan
An environmental review committee will be established to involve the community in reviewing the environmental performance of the project throughout its life.	Yes	An environmental review committee will be established to involve the community in reviewing the environmental performance of the project throughout its life. (SE19)	Environmental management plan Construction management plan Community engagement plan
A community reference group will be established to provide a point of liaison and communication with the local community during project construction and operations.	Yes	A community reference group will be established to provide a point of liaison and communication with the local community during project construction and operations. (SE20)	Environmental management plan Construction management plan Community engagement plan
Regular meetings will be held with adjacent residents to discuss any issues or concerns	Yes	Regular meetings will be held with adjacent residents to discuss any issues or concerns. (SE03)	Environmental management plan Construction management plan Community engagement plan
The community engagement plan and associated activities will be regularly reviewed and adapted based on community feedback so that the community has different ways to receive information on the performance of the project	Yes	The community engagement plan and associated activities will be regularly reviewed and adapted based on community feedback so that the community has different ways to receive information on the performance of the project. (SE05) A community engagement plan will be implemented that identifies approaches to actively manage issues with public perception, including providing objective and factual public communications. (AG08)	Community engagement plan
A range of avenues will be provided for those with concerns to contact Kalbar to express their concerns or ask questions	Yes	A range of avenues will be provided for those with concerns to contact Kalbar to express their concerns or ask questions. (SE06)	Community engagement plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
One-on-one meetings will be held with adjacent landholders on a regular basis to provide project updates and discuss any issues of concern.	Yes	One-on-one meetings will be held with adjacent landholders on a regular basis to provide project updates and discuss any issues of concern. (SE57)	Community engagement plan
Bushfire protection objectives must be achieved in the completed development in relation to: • Landscape, siting and design. • Defendable space (including firebreaks) and design/construction standards. • Water supply. • Emergency access and egress. • Emergency communications and collaborative planning with external private and public stakeholders.	Yes	Regular community updates will be provided on how bushfire mitigation measures are being adopted on site. (SE09) A review of the existing capability of emergency services and potential future requirements for these services will be completed in consultation with East Gippsland and Wellington shires and emergency service providers. (SE62)	Environmental management plan Construction management plan Community engagement plan Fire management plan Emergency preparedness and response plan
Providing the community with regular updates on how bushfire mitigation measures are being adopted on site will be important in improving community confidence that bushfire risks are being effectively managed.	Yes	Regular community updates will be provided on how bushfire mitigation measures are being adopted on site. (SE09)	Environmental management plan Construction management plan Community engagement plan Fire management plan Emergency preparedness and response plan
A fire and emergency management sub-plan will be prepared and implemented that includes site-specific bushfire mitigation measures, awareness actions, preparedness levels and fire response procedures for the site. The plan will be prepared in consultation with East Gippsland and Wellington shire councils and emergency service providers.	Yes	A fire and emergency management sub-plan will be prepared and implemented that includes site-specific bushfire mitigation measures, awareness actions, preparedness levels and fire response procedures for the site. The plan will be prepared in consultation with East Gippsland and Wellington shire councils and emergency service providers. (BF01) A review of the existing capability of emergency services and potential future requirements for these services will be	Environmental management plan Construction management plan Community engagement plan Fire management plan Emergency preparedness and response plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
		completed in consultation with East Gippsland and Wellington shires and emergency service providers. (SE62)	
Incentives will be provided to encourage employees to become emergency services volunteers. For example, Kalbar will pay its employees for their time to attend training and respond to incidents on behalf of these organisations.	Yes	Incentives will be provided to encourage employees to become emergency services volunteers. For example, Kalbar will pay its employees for their time to attend training and respond to incidents on behalf of these organisations. (SE11) Incentives will be provided for personnel to participate in local community activities and organisations. (SE24)	Community engagement plan Fire management plan Emergency preparedness and response plan
Key traffic and transport mitigation measures include: • Oversize and overmass vehicle movements will avoid peak hours and school bus operation hours. • Speed limits will be revised and driver training will be undertaken to minimise risks to pedestrian safety. • A traffic management plan will be prepared and implemented. • Alternative routes will be identified in consultation with council and regulators to provide the public adequate access at all times	Yes	Prior to the movement of oversize and overmass vehicles: • An audit will be completed to assess route options, safety, and clearance between the vehicle and potential obstructions such as wires, trees, structures and rail crossing infrastructure, and then plan the route accordingly. • A permit will be obtained from the relevant road authority to gain access to any roads not approved for oversize and overmass vehicles. (TT05) Oversize and overmass vehicle movements will avoid peak hours and school bus operation hours. (TT06) Where roadworks require closure of roads, alternative routes will be identified in consultation with East Gippsland Shire Council and Department of Transport to provide the public with adequate access at all times. (TT17)	Environmental management plan Construction management plan Community engagement plan Traffic management plan
The need for a cycleway/foot path on Lindenow-Glenaladale Road to provide greater protection for cyclists and pedestrians on this road within the township will be investigated as a part of the traffic management plan	Yes	The need for a cycleway/foot path on Lindenow-Glenaladale Road to provide greater protection for cyclists and pedestrians on this road within the township will be investigated as a part of the traffic management plan. (SE13)	Environmental management plan Construction management plan Community engagement plan Traffic management plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
Prior to construction and operation, all residents adjacent to affected roads will be engaged with to discuss any concerns they have and how road safety can be maintained	Yes	Prior to construction and operations, all residents adjacent to affected roads will be engaged with to discuss any concerns they have and how road safety can be maintained. (SE12)	Environmental management plan Construction management plan Community engagement plan Emergency preparedness and response plan
Transport contractors will be engaged on opportunities to adopt vehicle management systems which enable drivers to detect school buses.	Yes	Transport contractors will be engaged about opportunities to adopt vehicle management systems which enable drivers to detect school buses. (SE56)	Environmental management plan Construction management plan Community engagement plan Emergency preparedness and response plan
If Bairnsdale Siding is utilised, Bairnsdale Racing Club and East Gippsland Shire will be engaged regarding when public events are held at Bairnsdale Racecourse and the measures that can be adopted to improve pedestrian safety	Yes	If Bairnsdale Siding is utilised, Bairnsdale Racing Club and East Gippsland Shire will be engaged regarding when public events are held at Bairnsdale Racecourse and the measures that can be adopted to improve pedestrian safety. (SE14)	Environmental management plan Construction management plan Community engagement plan Emergency preparedness and response plan
Noisier activities will be scheduled for less sensitive times of day where practicable and works will be limited as much as practicable during the night and at weekends.	Yes	Noisier activities will be scheduled for less sensitive times of day where practicable and works will be limited as much as practicable during the night and at weekends. (NV17)	Environmental management plan Construction management plan Community engagement plan Environmental noise risk treatment plan
Mobile plant items will be fitted with broadband reversing signals to avoid tonal characteristics associated with traditional reversing beepers at nearby sensitive receptors.	Yes	Mobile plant items will be fitted with broadband reversing signals to avoid tonal characteristics associated with traditional reversing beepers at nearby sensitive receptors. (NV10)	Environmental management plan Construction management plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
			Community engagement plan Environmental noise risk treatment plan
Earth bunds will be constructed to control noise such that noise levels from the target sources are controlled to achieve site compliance with EPA guidelines.	Yes	Earth bunds will be constructed to control noise such that noise levels from the target sources are controlled to achieve site compliance with EPA guidelines. (NV12)	Environmental management plan Construction management plan Community engagement plan Environmental noise risk treatment plan
Manageable processes, such as 'push-back' mining operations, will be implemented to optimise the existing terrain to provide maximum natural noise attenuation.	Yes	Managerial processes will be implemented (such as 'push-back' mining operations) to optimise the direction of mine void excavation so the terrain provides maximum natural attenuation noise from plant and equipment. (NV19)	Environmental management plan Risk management plan Community engagement plan Environmental noise risk treatment plan
The sides of the wet concentrator plant (WCP) will be partially clad on the sides closest to noise-sensitive areas to comply with NIRV recommended noise levels.	Yes	Noise mitigation measures such as bunding, walls or cladding will be installed at the wet concentrator plant to control noise emissions from the plant to achieve compliance. (NV14)	Environmental management plan Risk management plan Community engagement plan Environmental noise risk treatment plan
Plant will be turned off when not in use.	Yes	Plant will be turned off when not in use. (NV23)	Environmental management plan Risk management plan Community engagement plan Environmental noise risk treatment plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
Temporary acoustic barriers will be deployed to reduce noise levels generated from booster pumps used to pump slurry throughout operations	Yes	When pumping units over 500 kVA are located within 800 m of any dwelling, temporary acoustic barriers will be used, such as earth bunds, Echobarrier or FlexShield barriers (when the barrier height exceeds the pump height by at least 0.5 m). The barrier system will incorporate an acoustically absorptive finish to minimise reflected noise. (NV03)	Environmental management plan Risk management plan Community engagement plan Environmental noise risk treatment plan
Consultation with affected residents located in the vicinity of the site will be conducted during the project to investigate any need for alternative noise control measures depending on each individual situation (e.g., acoustic treatment for dwellings).	Yes	Consultation with affected residents located in the vicinity of the site will be conducted during the course of the project to investigate the need for alternative or additional noise control measures depending on each individual situation (e.g., acoustic treatment for dwellings). (NV15)	Environmental management plan Risk management plan Community engagement plan Environmental noise risk treatment plan
Project vehicles will be driven to the speed limit and in a careful manner, avoiding strong acceleration/deceleration, and restricting the use of compression brakes to situations where justified, on safety grounds, such as along long downhill slopes.	Yes	Project vehicles will be driven to the speed limit and in a careful manner, avoiding strong acceleration/deceleration, and restricting the use of compression brakes to situations where justified on safety grounds, such as along long downhill slopes. (NV29)	Environmental management plan Risk management plan Community engagement plan Environmental noise risk treatment plan Traffic management plan
Plant, machinery and vehicles will be maintained in accordance with manufacturers' specifications to minimise emission of noise	Yes	Mobile plant and vehicles will be maintained regularly and in accordance with manufacturers' specifications. Maintenance will include inspections for leaks and spills. (RH19) Equipment will be maintained and operated according to manufacturer/supplier guidelines and recommendations. (GHG05)	Environmental management plan Risk management plan Community engagement plan Environmental noise risk treatment plan
Certain activities, such as overburden excavation and transport of overburden and product, will be scheduled to avoid excessive dust emissions during	Yes	Construction activities will be delayed if significant weather events are forecast. (TE55)	Environmental management plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
forecast adverse weather conditions (principally high winds).		Certain activities, such as overburden excavation and transport of overburden and product, will be scheduled to avoid excessive dust emissions during forecast adverse weather conditions (principally high winds). (AQ14)	Risk management plan Community engagement plan Airborne and deposited dust risk treatment plan
Activities will be restricted, as required, on days when modelling predicts exceedances of air quality criteria at one or more sensitive receptors. Activities to be restricted will include overburden extraction and haulage, ore extraction and grading of roads. Restrictions will be applied to these activities conducted across the whole or part of the project area where (required to achieve compliance with air quality criteria).	Yes	Activities will be restricted, as required, on days when modelling predicts exceedances of air quality criteria at one or more sensitive receptors. Activities to be restricted will include overburden extraction and haulage, ore extraction and grading of roads. Restrictions will be applied to these activities conducted across the whole or part of the project area where required to achieve compliance with air quality criteria. (AQ20)	Environmental management plan Construction management plan Risk management plan Community engagement plan Airborne and deposited dust risk treatment plan
All adjacent landholders will be engaged prior to construction and operations to discuss any concerns that these residents have and dust emissions will be minimised	Yes	All adjacent landholders will be engaged prior to construction and operations to discuss any concerns that these residents have and dust emissions will be minimised. (SE15)	Environmental management plan Construction management plan Risk management plan Community engagement plan Airborne and deposited dust risk treatment plan
The use of low beam lights on vehicles will be promoted except in case of emergency or where safety is compromised.	Yes	The use of low beam lights on vehicles will be promoted except in emergencies or for safety reasons. (SE16)	Environmental management plan Construction management plan Risk management plan Community engagement plan
Visual bunds and screen plantings will be established at locations around the perimeter of the project area to visually screen project activities from sensitive view points.	Yes	Visual bunds and screen plantings will be established at locations around the perimeter of the project area to visually screen project activities from sensitive view points. (VL01)	Environmental management plan Construction management plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
			Risk management plan Community engagement plan Visual amenity management plan
Affected residents located in proximity to the project area will be consulted to discuss site specific visual impact management	Yes	Site-specific visual impact management will be discussed with affected residents located close to the project area. (SE17)	Environmental management plan Construction management plan Risk management plan Community engagement plan Visual amenity management plan
Landscape coloured and non-reflective cladding will be used on building infrastructure.	Yes	Buildings and roofs will be clad with non-reflective materials of a colour that mimics those found in the landscape to reduce visual contrast with the landscape setting. (VL03)	Environmental management plan Construction management plan Risk management plan Community engagement plan Visual amenity management plan
Fixed lighting on infrastructure will be designed to reduce potential for light spill.	Yes	Lighting systems will be designed and used in a way that minimises potential impacts on fauna species, particularly nocturnal species (mammals such as possums, gliders and bats, and birds); including, where applicable, use of light shields and directional lighting to avoid interference with foraging or roosting activities. (TE36)	Environmental management plan Construction management plan Risk management plan Community engagement plan Visual amenity management plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
Screening vegetation will be planned and established around key infrastructure to reduce visual impacts.	Yes	Containers will be stacked at the rail siding to the maximum height of adjacent screening vegetation and/or topography. (VL12)	Environmental management plan Construction management plan Risk management plan Community engagement plan Visual amenity management plan Rehabilitation plan
The final rehabilitated landform will be shaped to reflect surrounding agricultural landscape, with a natural appearance.	Yes	Regular slopes and/or sharp transition angles will be rounded to provide a natural appearance to the final landform. (VL08) Haunted Hills Formation gravel will be nominally compacted, such as under the weight of machinery, to minimise latent settlement of the landform that may affect the final rehabilitated landform profile. (GEO23)	Environmental management plan Community engagement plan Visual amenity management plan Rehabilitation plan
A traffic management plan will be prepared and implemented.	Yes	A traffic management plan will be prepared in accordance with industry standards to address general driver awareness and safety for the project workforce and the inherent risks associated with driving; the plan will be updated as required based on annual driver surveys of the project workforce and in response to recommendations from relevant incident investigations. (TT02)	Environmental management plan Traffic management plan
New intersections and road upgrades will be constructed to Australian standards and satisfy the relevant road authority.	Yes	New intersections will be constructed such that through-traffic movements are maintained to the satisfaction of the responsible road authority. Temporary traffic signals will be used as required to safely control traffic flow through the work site. (TT18)	Environmental management plan Construction management plan Traffic management plan
Local council and regulators will be engaged to identify alternative routes where road closures are required for roadworks.	Yes	Quarterly meetings with key stakeholder during construction to obtain feedback on the efficiency of the road network, transport safety, the asset performance condition and identifying the	Environmental management plan Construction management plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
		need for further monitoring tasks. (Chapter 12 of the Main Report)	Traffic management plan Community engagement plan
Roadworks affecting Princes Highway will be scheduled to minimise closure duration and avoid peak periods.	Yes	Roadworks affecting the Princes Highway, if required under the Bairnsdale rail scenario or road and rail scenario, will be avoided during peak periods, including peak hours and peak times such as school and public holidays, wherever practicable. (TT21)	Environmental management plan Construction management plan Traffic management plan Community engagement plan
The intersection of Princes Highway and Lindenow-Glenaladale Road will be upgraded to roundabout control to increase road safety and avoid excessive slowing of traffic due to B-doubles turning right from Lindenow-Glenaladale Road onto Princes Highway (if required under the Bairnsdale rail and road and rail scenarios).	Yes	The intersection of Princes Highway and Lindenow-Glenaladale Road will be upgraded to roundabout control to increase road safety and avoid excessive slowing of traffic due to B- doubles turning right from Lindenow-Glenaladale Road onto Princes Highway (if required under the Bairnsdale rail and road and rail scenarios). (TT31)	Environmental management plan Construction management plan Traffic management plan Community engagement plan
Current levels of access to national parks and other natural assets will be maintained	Yes	Current levels of access to national parks and other natural assets will be maintained. (SE18)	Environmental management plan Construction management plan Traffic management plan Community engagement plan
The review and update the Lindenow and District Community Plan will be discussed with the East Gippsland Shire Council (	Yes	The review and update the Lindenow and District Community Plan will be discussed with the East Gippsland Shire Council. (SE23)	Community engagement plan
Police checks will be conducted on potential personnel.	Yes	Police checks will be conducted on potential project personnel. (SE28)	Not part of EMF
An employment code of conduct, pre-employment screening and fit for work procedures will be developed and implemented.	Yes	An employment code of conduct, pre-employment screening and fit for work procedures will be developed and implemented. (SE25)	Not part of EMF

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
A community complaints procedure will be developed and implemented.	Yes	A community complaints procedure will be developed and implemented. (SE26) Timely responses will be provided to any community complaints raised. (SE22)	Community engagement plan
A local employment and procurement guideline will be developed and implemented that gives preference to local residents and businesses.	Yes	A local employment and procurement guideline will be developed and implemented that gives preference to local residents and businesses. (SE29)	Environmental management plan Construction management plan
Incentives for new residents to buy locally will be established, working work with the Chamber of Commerce and local industry representative groups.	Yes	Incentives for new residents to buy locally will be established, working work with the Chamber of Commerce and local industry representative groups. (SE30)	Environmental management plan Construction management plan
Capacity and capability of the local community will be built through implementing training courses.	Yes	Capacity and capability of the local community will be built through implementing training courses. (SE31)	Community engagement plan
Ongoing monitoring of baseline rainwater tanks to detect any changes in water quality that are potentially attributable to project activities.	Yes	Sample and analysis of rainwater tanks for total and dissolved metals and suspended solids, and comparison against pre-mining concentrations. (Chapter 12 of Main Report)	Environmental management plan Construction management plan Airborne and deposited dust risk treatment plan Surface water and groundwater management plan Community engagement plan
The mine void will be progressively backfilled, and rehabilitation will be progressive to re-instate pre-mining landforms and re-establish vegetation.	Yes	The open voids will be progressively backfilled with sand tailings and fines tailings and covered with overburden, subsoil and, in areas other than Grassy Woodland revegetation, topsoil. Revegetation with crop, pasture or native vegetation will be undertaken where required. (GW16)	Environmental management plan Rehabilitation plan Native vegetation management plan
Local landholders will be engaged on how land is rehabilitated to ensure compatibility with future stocking requirements.	Yes	Local landholders will be engaged on how land is rehabilitated to ensure compatibility with future stocking requirements. (SE32)	Environmental management plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
			Rehabilitation plan Community engagement plan
Collected cultural heritage materials will be stored by a qualified heritage advisor.	Yes	Collected cultural heritage materials will be stored by a qualified heritage advisor. (CH03)	Environmental management plan Cultural heritage management plan
A cultural heritage management plan will be prepared and implemented in accordance with the *Aboriginal Heritage Act 2006* (Vic) and Aboriginal Heritage Regulations 2018 (Vic). The plan will include site-specific management and salvage procedures (e.g., collection of surface artefacts and excavation of archaeological sites of significance).	Yes	A cultural heritage management plan will be prepared and implemented in accordance with the *Aboriginal Heritage Act 2006* (Vic) and the Aboriginal Heritage Regulations 2018 (Vic). The plan will include site-specific management and salvage procedures (e.g., collection of surface artefacts and excavation of archaeological sites of significance). (CH01)	Environmental management plan Cultural heritage management plan
Staff/contractor inductions will incorporate an environmental component signed off by a suitably qualified representative (e.g., site environmental advisor/specialist).	Yes	Staff/contractor inductions will incorporate an environmental component signed off by a suitably qualified representative (e.g., site environmental advisor/specialist). (RH02) Inductions and training will be provided to all relevant project personnel on the safe storage, handling and transport of dangerous goods and in emergency management. (GW08)	Environmental management plan Risk management plan Construction management plan
Prior to clearing, nest boxes will be installed in areas of potential habitat adjacent to the project footprint to compensate for the removal of hollow-bearing trees and impacts on hollow-dependent fauna known or potentially present (yellow-bellied sheathtail bat, powerful owl, masked owl and eastern pygmy possum).	Yes	Prior to clearing, nest boxes will be installed in areas of potential habitat adjacent to the project footprint to compensate for the removal of hollow-bearing trees and impacts on hollow-dependant fauna known or potentially present (yellow-bellied sheathtail bat, powerful owl, masked owl and eastern pygmy possum). (TE02)	Environmental management plan Risk management plan Construction management plan Biodiversity risk treatment plan Biodiversity management plan Native vegetation management plan
Areas will be revegetated and managed in accordance with the rehabilitation sub-plan to increase overall native vegetation cover in the project	Yes	Progressive rehabilitation will aim to increase the extent of native vegetation cover and habitat connectivity within and	Environmental management plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
area, native vegetation patch size and habitat connectivity, and to exclude stock from such areas.		adjoining the project area prior to clearing and fragmenting habitat in other areas. (TE50) Areas will be revegetated and managed in accordance with the rehabilitation sub-plan to increase overall native vegetation cover in the project area, native vegetation patch size and habitat connectivity, and to exclude stock from such areas. (TE09)	Risk management plan Rehabilitation plan Biodiversity risk treatment plan Biodiversity management plan Native vegetation management plan
Extent of clearance and buffers around no-go areas will be clearly defined to avoid disturbance within areas to be retained.	Yes	The extent of clearance and buffers around no-go areas will be clearly defined to avoid disturbance within areas to be retained. (TE04) Riparian vegetation will be retained where possible to maintain aquatic ecosystem habitat and prevent sedimentation of watercourses. (SW41)	Environmental management plan Risk management plan Construction management plan Biodiversity risk treatment plan Biodiversity management plan Native vegetation management plan
Access tracks expected to experience heavy traffic will be located away from areas of high ecological sensitivity	Yes	Access tracks expected to experience heavy traffic will not be located adjacent to areas of high ecological sensitivity (comprising areas of the Gippsland Red Gum Grassy Woodland and Associated Native Grassland ecological community and 11 EVCs (refer to Table 9.3); hollow-bearing trees; known occurrences and identified potential habitat for swamp everlasting, dwarf kerrawang, gaping leek-orchid, slender wire-lily, blue mat-rush, slender tick-trefoil and sandfly zieria; identified habitat for the giant burrowing frog and Australian grayling; and downstream waterways and wetlands). (TE06) Construction machinery, vehicles and pedestrians will be confined to formed tracks and designated areas, where practicable. (TE34)	Environmental management plan Risk management plan Construction management plan Biodiversity risk treatment plan Biodiversity management plan Native vegetation management plan Traffic management plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
Road works will be avoided on roads used to access areas such as Den of Nargun including Wy Yung Calulu Road and Friday Creek Road.	Yes	Road works will be avoided on roads used to access areas such as Den of Nargun including Wy Yung Calulu Road and Friday Creek Road. (SE58)	Environmental management plan Risk management plan Construction management plan Traffic management plan
Access will be maintained to the Fingerboards information board and a similar meeting point re-established	Yes	Access will be maintained to the Fingerboards information board and a similar meeting point re-established. (SE33)	Community engagement plan Environmental management plan Risk management plan Construction management plan
Water trucks and other suppressants will be used in mining area and haul roads to minimise dust generation.	Yes	Water or appropriate suppressants will be applied to working surfaces, stockpiles, haul roads and other areas where rehabilitation is not yet practical, to minimise dust generation, and in particular, during drier months. (AQ02)	Environmental management plan Risk management plan Construction management plan Airborne and deposited dust risk treatment plan
Drop heights will be minimised as far as practicable to reduce dust emissions.	Yes	Drop heights for topsoil and overburden will be minimised as far as practicable to reduce dust generation. (AQ03) Generation of dust and inhalation of dust by project personnel and members of the public will be minimised through minimising the drop height of truck dumping as far as practicable. (RD10)	Environmental management plan Risk management plan Construction management plan Airborne and deposited dust risk treatment plan
Areas will be cleared in a staged manner, and only as required, to reduce dust generation	Yes	Areas will be cleared in a staged manner, and only as required, to reduce dust generation by minimising the area of exposed ground at any one time. (AQ01)	Environmental management plan Risk management plan Construction management plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
			Airborne and deposited dust risk treatment plan
Surface water will be managed through an adaptive management strategy that includes trigger levels for surface water quantity and quality that determine when remedial action is required (in consultation with affected stakeholders).	Yes	An adaptive management strategy will be implemented, based on water quality and quantity monitoring results, to determine whether offset water that would typically be returned to the Mitchell River may be directed to ephemeral drainage gullies in a controlled manner. (SW35)	Environmental management plan Risk management plan Water quality and hydrology risk treatment plan Surface water and groundwater management plan
Industry Capability Network (ICN) and GROW industry briefings and tender writing workshops will be provided.	Yes	Industry Capability Network (ICN) and GROW industry briefings and tender writing workshops will be provided. (SE45) All tenders will be advertised in local newspapers and relevant procurement portals. (SE63)	Community engagement plan
Tourism authorities, such as Business & Tourism East Gippsland and East Gippsland Marketing Inc., will be engaged regularly to identify economic and business opportunities for the region.	Yes	Tourism authorities, such as Business & Tourism East Gippsland and East Gippsland Marketing Inc., will be engaged regularly to identify economic and business opportunities for the region. (SE35) Kalbar will work with GROW Gippsland to support local economic development, including: • Developing an individualised GROW Gippsland Action Plan with an annual statement of outcomes for publication on the GROW Gippsland website. • Sharing appropriate data to communicate regional procurement opportunities and track GROW Gippsland progress via a shared measurement framework. • Providing opportunities to grow local small to medium sized businesses – either as suppliers to our business, as partners, or as sub-contractors – to improve social outcomes. • Seeking opportunities to work with social enterprises and Aboriginal businesses in the region that deliver social	Community engagement plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
		outcomes as part of doing business, either directly or as part of our supply chain. • Collaborating with other GROW members to identify opportunities to work together to increase opportunities for people with barriers to work and support economic participation in our region. (SE59)	
Local businesses providing short-term accommodation will be engaged to discuss the timing of project works and potential peak periods.	Yes	Local businesses providing short-term accommodation will be engaged to discuss the timing of project works and potential peak periods. (SE36)	Community engagement plan
Local growers will be encouraged to obtain EnviroVeg or Freshcare environmental certification as evidence of 'clean green' production under an environmental management system.	Yes	Local growers will be encouraged to obtain EnviroVeg or Freshcare environmental certification as evidence of 'clean green' production under an environmental management system. (AG12)	Community engagement plan
An annual local community event will be supported that attracts visitors to the region, such as a Harvest Festival, and/or support the East Gippsland Veg Innovation Day	Yes	An annual local community event will be supported that attracts visitors to the region, such as a Harvest Festival, and/or support the East Gippsland Veg Innovation Day. (AG13)	Community engagement plan
The work plan will be adhered to during construction and operation of the project to achieve agreed environmental and social outcomes.	Yes	The work plan will be adhered to during construction and operation of the project to achieve agreed environmental and social outcomes. (AG04)	Risk management plan Environmental management plan
A joint approach will be developed with local horticultural and agricultural producers to identify measures to attract and retain a local workforce.	Yes	A joint approach will be developed with local horticultural and agricultural producers to identify measures to attract and retain a local workforce. (AG10)	Community engagement plan
All agricultural landholders within 2 km of the project area will be consulted to understand where, when and how the local road network is used for the transport of machinery and stock so that strategies can be introduced to reduce potential impacts.	Yes	All agricultural landholders within 2 km of the project area will be consulted to understand where, when and how the local road network is used for the transport of machinery and stock so that strategies can be introduced to reduce potential impacts. (SE37)	Community engagement plan Traffic management plan
Education and training providers will be consulted to identify suitable work placement applicants and provide opportunities to work on the project.	Yes	Education and training providers will be consulted to identify suitable work placement applicants and provide opportunities to work on the project. (SE38)	Community engagement plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
Local applicants will be targeted for employment opportunities on the project, working with GROW Gippsland and other organisations, including to encourage applicants from disadvantaged or vulnerable groups.	Yes	Local applicants will be targeted for employment opportunities on the project, working with GROW Gippsland and other organisations, including to encourage applicants from disadvantaged or vulnerable groups. (SE39) A database will be maintained of people interested in working on the project through which upcoming opportunities can be proactively promoted to subscribers. (SE61)	Community engagement plan
Opportunities will be provided for apprentices to work on the project and work with support networks such as the Australian Apprenticeship Support Network to increase the likelihood that these apprentices will complete their program	Yes	Opportunities will be provided for apprentices to work on the project and work with support networks such as the Australian Apprenticeship Support Network to increase the likelihood that these apprentices will complete their program. (SE40)	Community engagement plan
Information sessions will be provided for potential employees, presentations given at career events and local schools, and careers counsellors will be engaged on job opportunities available on the project.	Yes	Information sessions will be provided for potential employees, presentations given at career events and local schools, and careers counsellors will be engaged on job opportunities available on the project. (SE41)	Community engagement plan
Partnerships will be formed with local labour hire providers to fill short-term and contract jobs.	Yes	Partnerships will be formed with local labour hire providers to fill short-term and contract jobs. (SE42) Potential solutions to labour competition will be identified and pursued through continued communication and engagement with industry training bodies, such as TAFE Gippsland. (AG01)	Community engagement plan
A database of businesses based in Gippsland with services and supplies that could support construction, operations and closure of the project, such as Industry Capability Network (ICN) and Gippsland Business Connect, will be established and maintained.	Yes	A database of businesses based in Gippsland with services and supplies that could support construction, operations and closure of the project, such as Industry Capability Network (ICN) and Gippsland Business Connect, will be established and maintained. (SE43)	Community engagement plan
A range of people working on the mine (including construction, operations and closure) and/or featured roles on the mine will be profiled to give people information on the types of roles available and general competencies and skills that are required	Yes	A range of people working on the mine (including construction, operations and closure) and/or featured roles on the mine will be profiled to give people information on the types of roles available and general competencies and skills that are required. This information will be distributed to education and training	Community engagement plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
		providers and advertised in local newspapers to assist people in getting job ready. (SE44)	
Skill shortages and training requirements will be identified to allow local people to gain qualifications within these areas. Ongoing training will be encouraged and supported through local partnerships with a view to keep abreast of the changing landscape of the mining industry.	Yes	Skill shortages and training requirements will be identified to allow local people to gain qualifications within these areas. Ongoing training will be encouraged and supported through local partnerships with a view to keep abreast of the changing landscape of the mining industry. (SE46)	Community engagement plan
A labour force strategy will be prepared in consultation with local employment networks prior to construction commencing; including targeted strategies to manage potential impacts of project employment on other sectors.	Yes	A labour force strategy will be prepared in consultation with local employment networks prior to construction commencing; including targeted strategies to manage potential impacts of project employment on other sectors. (SE47) Organisations such as the GLaWAC and GEGAC will be engaged on opportunities to encourage local Indigenous youth to conduct training and/or apprenticeships; employment and commercial opportunities on the project will also be discussed. (SE60)	Community engagement plan
Pre-employment medicals and drug testing will be conducted through contracts with local hospitals or medical practices.	Yes	Pre-employment medicals and drug testing will be conducted through contracts with local hospitals or medical practices. (SE49)	Community engagement plan
Local health service providers, education providers and relevant support networks will be engaged with prior to construction, and on a six-monthly basis during construction and operation, to monitor and identify strategies to manage any potential peaks in demand.	Yes	Local health service providers, education providers and relevant support networks will be engaged with prior to construction, and on a six-monthly basis during construction and operations, to monitor and identify strategies to manage any potential peaks in demand. (SE50)	Community engagement plan Emergency preparedness and response plan
Best practice, evidence-based health and wellbeing programs will be investigated in collaboration with East Gippsland and Wellington shires councils.	Yes	A review of the existing capability of emergency services and potential future requirements for these services will be completed in consultation with East Gippsland and Wellington shires and emergency service providers. (SE62)	Community engagement plan
A housing strategy will be developed in consultation with local housing support agencies prior to construction commencing to identify targeted	Yes	A housing strategy will be developed in consultation with local housing support agencies prior to construction commencing to	Community engagement plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
strategies associated with accommodating the non-local workforce.		identify targeted strategies associated with accommodating the non-local workforce. (SE53)	
Targeted strategies will be implemented to reduce potential impacts on housing availability and affordability during construction; including for example working with East Gippsland and Wellington shires to source holiday homes that could be rented to workers during the construction period, and/or assisting community housing agencies in securing short-term accommodation for use as crisis accommodation during construction.	Yes	Targeted strategies will be implemented to reduce potential impacts on housing availability and affordability during construction; including for example working with East Gippsland and Wellington shires to source holiday homes that could be rented to workers during the construction period, and/or assisting community housing agencies in securing short-term accommodation for use as crisis accommodation during construction. (SE52) Workers living in long-term accommodation will be encouraged to share with other project workers. (SE54)	Community engagement plan
Regular consultation will be conducted with local housing support agencies and house prices will be monitored.	Yes	Regular consultation will be conducted with local housing support agencies and house prices will be monitored. (SE55)	Community engagement plan
Human Health Risk Assessment (Appendix A019)			
To comply with statutory requirements, a groundwater monitoring program will be implemented to monitor water quality data for the aquifer within the potentially impacted areas associated with the Mitchell River floodplain. The plan will include trigger levels for environmental protection and for implementation of mitigation measures.	Yes	A baseline groundwater monitoring program has been implemented by Kalbar in and around the project area since 2017 and will continue from the existing monitoring network until construction commences. (Chapter 12 of Main Report) The monitoring program for groundwater will include the following: • Prior to construction, monthly recording of groundwater levels and quarterly sampling of water quality at designated monitoring bores installed in the Coongulmerang Formation aquifer (seven bores), Latrobe Valley Group/Balook Formation aquifer (two bores), Seaspray Group aquifer (one bore) and Latrobe Group Aquifer (two bores). • Ongoing monthly recording of groundwater levels in the Coongulmerang Formation aquifer and Latrobe Valley	Environmental management plan Risk management plan Water quality and hydrology risk treatment plan Surface water and groundwater management plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
		Group/Balook Formation aquifer at 12 locations to be agreed with regulators. • Ongoing quarterly sampling of water quality at designated monitoring bores installed in the Coongulmerang Formation aquifer (seven bores) and the Balook Formation aquifer (five bores). • Ongoing quarterly sampling of water quality in six designated shallow groundwater monitoring bores, including bores at the contractor's work area and processing plant and three bores at the temporary TSF; and analysis for pH, salinity, dissolved metals, radionuclides, major cations and anions, nutrients, and hydrocarbons. • Continuous recording (via data loggers) of groundwater levels in water supply bores drawing on the Latrobe Group Aquifer in a minimum of five monitoring bores, and in three shallow groundwater monitoring bores surrounding the temporary TSF. • Monthly monitoring of water discharge from the borefield (bores drawing on the Latrobe Group Aquifer) into the contingency water dam. Monitoring will include pH, salinity, dissolved metals, radionuclides, and major cations and anions. • Monthly analysis of water quality in the process water dam during the first year of the project. This monitoring will subsequently take place quarterly if consistency in water quality is demonstrated. • Daily records of water extraction from production bores accessing water from the Latrobe Group Aquifer during operations. • Ongoing recording of results from DELWP's State Observation Bore Network for three bores in the Latrobe Valley Group aquifer to the north and east of the project. (Chapter 12 of Main Report)	

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
Monitoring of the Mitchell River waters will be undertaken as part of the overall environmental monitoring program to confirm there are no significant impacts from project activities on water sources in the region.	Yes	• Continuous monitoring (via data loggers) of preconstruction flow rates at DELWP gauging stations on Mitchell River. (Chapter 12 of Main Report) • Analysis of pre-construction water quality quarterly at five established monitoring sites on Mitchell River. (Chapter 12 of Main Report)	Environmental management plan Risk management plan Water quality and hydrology risk treatment plan Surface water and groundwater management plan
Using standard mitigation measures, predicted 24-hour average concentrations of PM^{10} are predicted to exceed the Tier 1 screening criteria on, at most, three days of the year. On the days with elevated concentrations, the project contributes between 19 and 88% to the total 24-hour average PM^{10} concentration at the worst-affected receptor. Additional mitigation measures, for example, ceasing overburden transport in both pits, and product transport between 6:00 p.m. and 7:00 a.m. on selected days, would be sufficient to prevent these exceedances.	Yes	Certain activities, such as overburden excavation and transport of overburden and product, will be ceased when real-time air quality monitoring indicates that air quality trigger levels have been reached near key sensitive receptors. (AQ13)	Environmental management plan Risk management plan Construction management plan Airborne and deposited dust risk treatment plan
Rehabilitation Report (Appendix A020)			
Studies to test range of subsoil options	Partially	Two soil reconstructions conducted. Further field trials planned in-situ.	Environmental management plan Rehabilitation plan
Studies to test range of amendment and fertiliser options	Partially	Two soil reconstructions conducted. Further field trials planned in-situ.	Environmental management plan Rehabilitation plan
Studies of soil management options	Partially	Studies have been conducted. In-situ trials delayed due to Covid.	Environmental management plan Rehabilitation plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
Observations and trials of differing approaches	Partially	Studies have been conducted. In-situ trials delayed due to Covid.	Environmental management plan Rehabilitation plan
Observation and trials of different methods	Partially	Studies have been conducted. In-situ trials delayed due to Covid.	Environmental management plan Rehabilitation plan
Observation of effectiveness of hydromulches or soil stabilisers	Partially	Hydromulches or tackifiers will be used where appropriate to prevent erosion and the more effective use of incident rainfall by germinating seeds. (RH11)	Environmental management plan Rehabilitation plan
Additional design by hydrology consultants	Partially	Work conducted and informing the use of centrifuges and refinement of water balance as outlined in correspondence to IAC.	Environmental management plan Risk management plan Water quality and hydrology risk treatment plan
Field rainfall simulation trials to enable calibration of erosion/landform evolution models	Partially	Field hydraulic conductivity measurements have been conducted. In-situ trials delayed due to Covid.	Environmental management plan Risk management plan Water quality and hydrology risk treatment plan
Development of landform evolution model	Partially	In progress	Environmental management plan Rehabilitation plan
Hazardous materials will be managed (including storage, handling, transport and disposal) in accordance with relevant Safety Data Sheets.	Yes	Areas used for handling and/or storage of concentrated flocculent and hazardous materials will be bunded appropriately to avoid spilled or stored material reaching the surrounding environment and will contain spill response equipment. (TE41)	Environmental management plan Risk management plan Water quality and hydrology risk treatment plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
		Hazardous materials will be managed (including storage, handling, transport and disposal) in accordance with relevant safety data sheets. (RH18)	
Mobile plant and vehicles will be maintained regularly and in accordance with manufacturers specifications. Maintenance will include inspections for leaks and spills	Yes	Mobile plant and vehicles will be maintained regularly and in accordance with manufacturers' specifications; including inspections for leaks and spills. (TE42) Equipment will be maintained and operated according to manufacturer/supplier guidelines and recommendations. (GHG05)	Environmental management plan Risk management plan Water quality and hydrology risk treatment plan Construction management plan
Personnel will be trained in management of hazardous materials and spill response procedures prior to commencement of work	Yes	Personnel will be trained in management of hazardous materials and spill response procedures prior to commencement of work. (RH20)	Environmental management plan Risk management plan Water quality and hydrology risk treatment plan Construction management plan
If a leak or spill occurs, contaminated soil will be disposed of by a qualified specialist at a licenced facility.	Yes	If a leak or spill occurs, contaminated soil will be excavated and disposed of by a qualified specialist at a licenced facility. (TE44)	Biodiversity management plan
Triple interceptor traps will be used to prevent releases of hazardous materials from bunded areas.	Yes	Triple interceptor traps will be used to prevent release of hazardous materials from bunded areas into rehabilitated areas. (RH31)	Environmental management plan Risk management plan Water quality and hydrology risk treatment plan Construction management plan
Construction of stockpiles will be designed to avoid flow pathways to minimise erosion.	Yes	Construction of stockpiles will be designed to avoid flow pathways to minimise erosion. (RH04)	Environmental management plan Risk management plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
			Water quality and hydrology risk treatment plan Construction management plan
The mine void will be progressively backfilled and rehabilitated to minimise the area required for topsoil and overburden stockpiles.	Yes	The mine void will be progressively backfilled and rehabilitated to reduce generation of dust by minimising the area of exposed soil, including for topsoil and overburden stockpiles. (AQ07)	Environmental management plan Rehabilitation plan Airborne and deposited dust risk treatment plan
Seeding times and rates will consider site/local experience to ensure maximum reliability of vegetation establishment. Seed will be re-applied in areas where rehabilitation performance does not meet established targets at a later date when suitable conditions, e.g., rainfall, are considered likely to occur.	Yes	Site/local experience will be considered when determining seed timings and rates to achieve maximum reliability of vegetation establishment. Seed will be re-applied at a later date in areas where rehabilitation performance does not meet established targets when suitable conditions, such as rainfall, are likely to occur. (RH13)	Environmental management plan Rehabilitation plan Native vegetation management plan
Rehabilitated areas will be irrigated where required to achieve satisfactory performance and vegetation establishment.	Yes	Rehabilitated areas will be irrigated where required to promote satisfactory performance and vegetation establishment. (RH14)	Rehabilitation plan Native vegetation management plan
Rehabilitation will be designed to ensure plateau tops are close to level and evenly distribute runoff to drainage paths (swales) discharging off the plateau to adjoining major flow channels. Swales will be designed to be broad, U-shaped, no steeper than current stable drainage paths, consistent in shape with the most stable drainage paths currently present, and to avoid undercutting or overfalls.	Yes	Rehabilitation will be designed to ensure plateau tops are consistent in form to pre-mining landforms. Swales will be designed to be broad, U-shaped, no steeper than current stable drainage paths, and consistent in shape with the most stable drainage paths currently present. (RH07)	Rehabilitation plan Ground control plan
Riparian vegetation will be established in rehabilitated flow channels to increase effective hydraulic roughness of the channels, thereby reducing flow velocities, increasing channel stability to storm flows and minimising erosion.	Yes	Riparian vegetation will be established in rehabilitated flow channels to increase effective hydraulic roughness of the channels, reduce flow velocities, increase channel stability to storm flows and minimise erosion. (RH08)	Rehabilitation plan Native vegetation management plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
			Water quality and hydrology risk treatment plan
Hydroseeding will be used in rehabilitation areas where appropriate to stabilise the soil surface and minimise erosion.	Yes	Hydroseeding will be used in rehabilitation areas, where appropriate, to stabilise the soil surface and minimise erosion. (RH12)	Rehabilitation plan
Rocks will be included in rehabilitated channel beds to increase critical shear of the bed and resist initiation of scour, thereby increasing channel stability to storm flows and minimising erosion.	Yes	Rocks will be included in rehabilitated channel beds to increase critical shear of the bed, resist initiation of scour and increase channel stability to storm flows and minimise erosion. (RH06)	Rehabilitation plan Native vegetation management plan Water quality and hydrology risk treatment plan
The timing of rehabilitation will be determined in consultation with landholders and based on analysis of long-term rainfall patterns to maximise the chance of successful vegetation establishment and rehabilitation performance.	Yes	Site/local experience will be considered when determining seed timings and rates to achieve maximum reliability of vegetation establishment. Seed will be re-applied at a later date in areas where rehabilitation performance does not meet established targets when suitable conditions, such as rainfall, are likely to occur. (RH13)	Rehabilitation plan Native vegetation management plan Community engagement plan
Stockpiles will be vegetated where appropriate to minimise erosion.	Yes	Stockpiles will be vegetated where appropriate to minimise erosion. (RH22)	Environmental management plan Construction management plan Risk management plan Surface water and groundwater management plan Visual amenity management plan
Stockpile slope angles will be constructed as low as practicable and mulch materials and contour ripping will be strategically used to stabilise stockpiles, prevent runoff and minimise erosion.	Yes	Stockpile slope angles will be constructed as low as practicable and mulch materials and contour ripping will be used strategically to stabilise stockpiles, prevent runoff and minimise erosion. (RH23)	Environmental management plan Construction management plan Ground control management plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
The density of deep-rooted trees and shrubs will be increased in areas at risk from tunnel erosion by minimising the volume of seepage flows reaching valley slopes and channels.	Yes	The density of deep-rooted trees and shrubs will be increased in areas at risk from tunnel erosion by minimising the volume of seepage flows reaching valley slopes and channels. (RH24) Seeds will be spread to achieve a stem density significantly higher than the target to allow for losses due to animal damage and other causes; thinning will occur at a later date to achieve the target number of stems per hectare, particularly in areas where a higher (moderate) density of trees is proposed and where there is inclusion of understorey species. (RH34)	Environmental management plan Rehabilitation plan Native vegetation management plan Water quality and hydrology risk treatment plan
Hydromulches will be used where appropriate to prevent erosion and ensure more effective use of incident rainfall by germinating seeds	Yes	Hydromulches or tackifiers will be used where appropriate to prevent erosion and the more effective use of incident rainfall by germinating seeds. (RH11)	Rehabilitation plan Native vegetation management plan Water quality and hydrology risk treatment plan
Grazing will be excluded in rehabilitated flow channels to maintain sufficient levels of vegetation cover on the surface of the channel bed and prevent disturbance of soils by trampling by livestock, thereby increasing channel stability to storm flows and minimising erosion.	Yes	Grazing will be excluded in rehabilitated native grass woodland areas (Zone E) channels and riparian areas (Zone D) and on steeper valley slopes (Zone C) to maintain sufficient levels of vegetation cover and prevent disturbance of soils by trampling by livestock, thereby increasing stability and minimising erosion. (RH25)	Rehabilitation plan Native vegetation management plan Water quality and hydrology risk treatment plan
Topsoil stockpiles scheduled to be in place for four months or longer (or for an unknown duration) will be restricted to a height of 2 m, be flat-topped and treated with soil stabiliser, or revegetated immediately following their construction.	Yes	Stripped topsoil will be transferred directly to nearby rehabilitation areas, or stockpiled separately to overburden adjacent to the active mining area within the disturbed area. (RH01) Topsoil stockpiles scheduled to be in place for four months or longer (or for an unknown duration) will be restricted to a height of 2 m and treated with a soil stabiliser or revegetated immediately following their construction. (RH26)	Environmental management plan Rehabilitation plan Native vegetation management plan
Tree densities in areas planned for grazing land use, particularly in swale areas, will be increased to reduce deep drainage and seepage flows, and to maximise erosion stability.	Yes	Tree densities in areas planned for grazing land use, particularly in swale areas, will be increased to reduce deep drainage and seepage flows, and to maximise erosion stability. (RH27)	Environmental management plan Rehabilitation plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
			Native vegetation management plan Water quality and hydrology risk treatment plan
Revegetated areas will be fenced (electric fencing with multiple closely spaced tapes) to prevent damage by stock or kangaroos, where cost-effective to do so.	Yes	Revegetated areas will be fenced (electric fencing with multiple closely spaced tapes) to prevent damage by stock or kangaroos, where cost-effective to do so. (RH29)	Environmental management plan Rehabilitation plan Native vegetation management plan Water quality and hydrology risk treatment plan
Gypsum will be applied in sufficient quantity over a depth of at least 500 mm to reduce exchangeable sodium and magnesium to acceptable levels (ESP <4 and Ca/Mg ratio >0.5) where material likely to disperse (such as Haunted Hills Formation overburden or fine tails) is placed as part of a constructed subsoil.	Yes	Gypsum will be applied in sufficient quantity to a depth of at least 500 mm as part of a constructed subsoil where material likely to disperse is placed (such as Haunted Hills Formation overburden or fines tailings); to reduce exchangeable sodium and magnesium to acceptable levels (ESP <4 and Ca/Mg ratio >0.5). (RH28)	Environmental management plan Rehabilitation plan
Larger plants that are less susceptible to grazing damage will be used in rehabilitation areas where possible.	Yes	Larger plants that are less susceptible to grazing damage will be used in rehabilitation areas where practicable. (RH15)	Environmental management plan Rehabilitation plan Native vegetation management plan
Guards will be placed on tubestock where required to prevent damage by rabbits and other pest animals.	Yes	Guards will be placed on tubestock where required to prevent damage by rabbits, cockatoos and other pest animals. (RH16)	Environmental management plan Rehabilitation plan Native vegetation management plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
Revegetation will be conducted over as large an area as possible at one time to spread potential impacts of animal grazing over larger areas	Yes	Revegetation will be conducted over as large an area as practicable at one time to spread potential impacts of animal grazing over larger areas. (RH30)	Environmental management plan Rehabilitation plan Native vegetation management plan
Soil stockpiles will be delineated and segregated according to physical composition.	Yes	Site inductions for mining and rehabilitation personnel will include information on the different soil types present across the project area and their corresponding management, including for stockpiling. (RH02)	Environmental management plan Rehabilitation plan
Site inductions will include information on the different soil types present across the project area and their corresponding management, including in relation to stockpiling.	Yes	Site inductions for mining and rehabilitation personnel will include information on the different soil types present across the project area and their corresponding management, including for stockpiling. (RH02)	Environmental management plan Rehabilitation plan
Where possible, ameliorants such as organic mulches and fertilisers will be spread on in-situ topsoils prior to stripping to increase soil fertility	Yes	Where practicable, ameliorants such as organic mulches and fertilisers will be spread on in-situ topsoils prior to stripping to increase soil fertility. (RH21)	Environmental management plan Rehabilitation plan
The timing of rehabilitation will be determined in consultation with landholders and based on analysis of long-term rainfall patterns to maximise the rate of successful vegetation establishment and rehabilitation performance	Yes	Site/local experience will be considered when determining seed timings and rates to achieve maximum reliability of vegetation establishment. Seed will be re-applied at a later date in areas where rehabilitation performance does not meet established targets when suitable conditions, such as rainfall, are likely to occur. (RH13)	Rehabilitation plan Native vegetation management plan
Fines tailings will be placed at depth in the backfilled mine void to ensure any restrictions to drainage are far enough below the soil surface such that the growth of vegetation is unaffected	Yes	Fines tailings will be placed at depth in the backfilled mine void so that any restrictions to drainage are far enough below the soil to avoid impacts on vegetation growth and grazing animals. (RH03)	Rehabilitation plan
Soil Profile Reconstruction Study 1 (Appendix A021)			
Further studies will need to consider both optimisation of soil rhizobium (to maximise N-fixation) and	Partially	In-situ trials have been postponed due to Covid.	Rehabilitation plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
inclusion of Lucerne in the seed mix to take advantage of its deep rooting growth habit as well as its potential to increase fodder production into the spring-summer months.			
Soil Profile Reconstruction Study 2 (Appendix A022)			
Fertiliser rates for topsoil and subsoils should be based on appropriate chemical analysis carried out during soil profile establishment. For topsoil consideration should be given to: • Including a slow-release N fertiliser for example coated urea. • Options for increasing soil potassium to sustainable levels. • Managing boron levels to avoid both deficiency and toxicity.	Partially	In-situ trials have been postponed due to Covid.	Rehabilitation plan
An increase in the rate of lime is required to maintain appropriate pH levels in topsoils.	Yes	Studies have been completed and there will be further trials once construction commences.	Rehabilitation plan.
Further investigation into the apparent lack of response to subsoil water holding capacity of the HHF.	Partially	In-situ trials have been postponed due to Covid.	Rehabilitation plan
Changing gypsum application method and rate to avoid hard setting of HHF subsoils.	Yes	Gypsum will be applied in sufficient quantity to a depth of at least 500 mm as part of a constructed subsoil where material likely to disperse is placed (such as Haunted Hills Formation overburden or fines tailings); to reduce exchangeable sodium and magnesium to acceptable levels (ESP <4 and Ca/Mg ratio >0.5). (RH28)	Rehabilitation plan
Compost inclusion in both topsoil and subsoil.	Yes	Where practicable, ameliorants such as organic mulches and fertilisers will be spread on in-situ topsoils prior to stripping to increase soil fertility. (RH21)	Rehabilitation plan

Recommendation from specialist reports	Adopted? Yes/No/Partially	Mitigation measures and commitments (Source Attachment H of Mitigation Register or otherwise specified).	EMF document
The size of the site means variability in topsoil and overburden physical and chemical properties will be high. • Topsoil samples should be taken at a frequency of one sample per 10 ha. • When intended to be used in rehabilitation, overburden should be sampled and analysed at an initial frequency of one sample per 15,000 m^3 of overburden.	Partially	Further sampling of topsoil and overburden will occur prior to construction. This has been delayed due to Covid.	Environmental management plan Risk management plan Rehabilitation plan
Establishment of longer-term trialling of subsoil management options is strongly recommended.	Partially	In-situ trials have been postponed due to Covid.	Rehabilitation plan Environmental management plan
At all times, separate (but complementary) fertilisation and amendment programmes should be prepared for topsoil and subsoil for each area to be rehabilitated, based on appropriate chemical analyses of topsoil and subsoil materials.	Yes	Topsoil will be managed and maintained throughout rehabilitation activities to promote successful re-grassing and tree planting. (VL11)	Rehabilitation plan Environmental management plan
Proposed Tailings Management Strategy Notes on Post Closure Settlement (Appendix A023)			
Mitigation of the long-term issue of settlement of tailings involves two process: • Understanding the properties of the materials stored and the expected outcomes; • Managing the placement of the various materials to provide the designed surface profile; • Manage overburden deposition methods to achieve designed compaction; and • Continued monitoring and review of consolidation performance.	Yes	Geotechnical assessments of the tailings cell structures will be conducted. Assessments may be undertaken during operations to also observe and test the tailings being produced. (GEO25) Haunted Hills Formation gravel will be nominally compacted, such as under the weight of machinery, to minimise latent settlement of the landform that may affect the final rehabilitated landform profile. (GEO23)	Ground control plan Risk management plan