

Environmental Assessment Report

ABx4 Pty Ltd
DLI 30 Bauxite Project
Quarry
Reedy Marsh

March 2025



ENVIRONMENT PROTECTION AUTHORITY

Environmental Assessment Report

Proponent	ABx4 Pty Ltd
Proposal	DLI30 Bauxite Project Quarry
Location	Reedy Marsh
Class of Assessment	2A
PCE no.	11390
Permit Application No.	PA 24/0052 (Meander Valley)
myDAS Folder No.	22/9483
myDAS Document No.	D25-37460

Assessment Process Milestones

Date	Milestone
16 November 2022	Notice of Intent lodged
22 December 2022	Guidelines Issued
21 August 2023	Permit Application submitted to Council
31 August 2023	Referral received by the Board
1 June 2024	Start of public consultation period
18 June 2024	End of public consultation period
16 July 2024	Additional information (Supplement) requested
14 November 2024	Additional information (Supplement) submitted to the Board
20 February 2025	Date draft conditions issued to proponent
7 March 2025	Statutory period for assessment ends

Glossary/Acronyms

Term	Detail
AMD	Acid and metalliferous drainage
ANZECC	Australian and New Zealand Environment Conservation Council – <i>Guidelines for Fresh and Marine Water Quality 2000</i>
ANZG	<i>Australian and New Zealand Guidelines for Fresh and Marine Water Quality 2018</i>
Board	Board of the Environment Protection Authority
CAS	Conservation Assessment Section – NRE Tasmania
DAD	<i>Eucalyptus amygdalina</i> forest and woodland on dolerite
DOB	<i>Eucalyptus obliqua</i> dry forest
DOV	<i>Eucalyptus ovata</i> forest and woodland
WOB	<i>Eucalyptus obliqua</i> forest with broad-leaf shrubs
DA	Development Application
EC	Electrical Conductivity
EER	Environmental Effects Report
EIA	Environmental Impact Assessment
EMPCA	<i>Environmental Management and Pollution Control Act 1994</i>
EMPCS	Environmental Management and Pollution Control System
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999 (Cth)</i>
GHG	Greenhouse Gases
IECA	International Erosion Control Association's <i>Best Practice Erosion and Sediment Control 2018</i> documents
LUPAA	<i>Land Use Planning and Approvals Act 1993</i>
ML	Mining Lease
NAF	Non-acid Forming
NATA	National Association of Testing Authorities
NC Act	<i>Nature Conservation Act 2002</i>
NOI	Notice of Intent
NRE	Department of Natural Resources and Environment Tasmania
ORP	Oxidation-reduction potential

Report Summary

This report is an environmental assessment of the DL130 Bauxite Project Quarry by ABx4 Pty Ltd.

The proposal involves shallow surface excavation of 50,000 m³ of bauxite ore per year with screening of 40,000 m³ per year and crushing of 1,000 m³ per year to produce bauxite ore, low-grade bauxite and clay. Due to the characteristics of the resource at least 20% of the ore is not expected to require processing (screening). The quarry will operate on a campaign basis for a period of 3 to 4 months per year with the life of the operation anticipated to be up to 20 years.

This report has been prepared based on information provided in the permit application, Environmental Effects Report (EER) and Supplement to the EER. Relevant government agencies and the public were consulted, and their submissions considered as part of the assessment.

Appendix 1 contains details of matters raised by the public and referral agencies during the consultation process.

Appendix 2 contains a table of the proponent's proposed management measures.

Appendix 3 contains the environmental permit conditions for the proposal.

Table of Contents

1. Approval Process.....	6
2. SD Objectives and EIA Principles	7
3. The Proposal	8
4. Project Rationale and Alternatives	14
5. Public and Agency Consultation.....	15
6. Evaluation of Environmental Issues	16
6.1 Issue 1: Air Quality	17
6.2 Issue 2: Water Quality.....	22
6.3 Issue 3: Noise Emissions.....	29
6.4 Issue 4: Natural Values.....	32
6.5 Issue 5: Weed and Disease Management	38
6.6 Issue 6: Waste Management, Dangerous Goods and Environmentally Hazardous Substances	40
6.7 Issue 7: Decommissioning and Rehabilitation.....	42
7. Issues not assessed by the Board.....	44
7.1 Issue 1: Heritage.....	44
7.2 Issue 2: Traffic impacts on Porters Bridge Road and surrounds	44
8. Report Conclusions	45
9. Report Approval.....	46
10. References.....	47
11. Appendices.....	48
Appendix 1: Summary of public and agency submissions	49
Appendix 2: Table of proponent management measures.....	52
Appendix 3: Permit conditions – Environmental no. 11390.....	55

I. Approval Process

The Board of the Environment Protection Authority (the Board) received a Notice of Intent for this proposal on 16 November 2022.

An application for a permit under the *Land Use Planning and Approvals Act 1993* (LUPAA) in relation to the proposal was submitted to Meander Valley Council on 21 August 2023.

This proposal is defined as a 'level 2 activity' under clauses 5(a) and 6(a)(ii), Schedule 2 of the *Environmental Management and Pollution Control Act 1994* (EMPCA), being a quarry extracting up to 50,000 cubic metres and processing up to 40,000 cubic metres of material per year.

Section 25(1) of EMPCA required Council to refer the application to the Board of the Environment Protection Authority (the Board) for assessment under the Act. The application was received by the Board on 31 August 2023.

The Board required that information to support the proposal be provided in the form of an Environmental Effects Report (EER), prepared in accordance with the Guidelines issued by the Board on 22 December 2022. Several drafts of the EER were submitted to EPA for review against the Guidelines before it was finalised and accepted on behalf of the Board on 3 November 2023.

The EER was released for public inspection for 14 days on 1 June 2024. Advertisements were placed in The Examiner and on the EPA website. The EER was also referred to relevant government agencies for comment. Eighty-six (86) representations were received.

On 16 July 2024, the Manager, Assessments under delegation from the Board requested that the proponent submit additional information to address matters raised during the public consultation period. Satisfactory additional information, in the form of a Supplement to the EER, was submitted by the proponent on 20 February 2025.

2. SD Objectives and EIA Principles

The proposal must be considered by the Board in the context of the objectives of the Resource Management and Planning System of Tasmania (RMPS), and the Environmental Management and Pollution Control System (EMPCS). Both sets of objectives are specified in Schedule 1 of EMPCA.

The functions of the Board are to administer and enforce the provisions of EMPCA, and to use its best endeavours to further the RMPS and EMPCS objectives. The Board must assess the proposal in accordance with the Environmental Impact Assessment Principles defined in Section 74 of EMPCA.

3. The Proposal

The main characteristics of the proposal are summarised below. A detailed description of the proposal is provided in Section 2, Part B of the EER.

Activity

The proposed activity includes shallow surface excavation of 50,000 m³ of bauxite ore per year with screening of up to 40,000 m³ per year of material and crushing of 1,000 m³ per year of oversized material. A minimum of 20% of the ore is not expected to require processing (screening). No blasting is proposed. Products include bauxite ore, low-grade bauxite and clay. The quarry will operate on a campaign basis for 3 to 4 months per year. The life of the operation is anticipated to be up to 20 years.

The proposal is situated on an active private pine plantation managed by Forico Pty Ltd (refer Figure 1). The Activity Area was harvested and replanted in 2022. The proposed land use after extraction will remain softwood plantation.

There are two 'pits' proposed which are further broken down into thirteen stages of extraction (refer Figure 2 below).

Extraction of material will be by excavators in 30 m wide panels, which will be progressed in a series of 1-2 m benches to an average depth of 7 m below the existing ground surface. The existing landform will be largely retained with a slight overall lowering of the topography (i.e. the maximum extraction depth will be towards the top of the ridgeline, with shallower extraction occurring downslope).

The proposal includes a maximum disturbed area of 2 ha within the active 'stage' of extraction and a further 10 ha of land required for other aspects of the activity e.g. stormwater infrastructure (drains, sediment basins etc.), the laydown area, roadways, administration / ablution blocks, screening / crushing area, stockpiling and grading / blending areas.

Other activities undertaken as part of the activity include crushing, screening, carting of material, stockpile creation, weed management, refueling / maintenance of vehicles, plant and equipment.

Each stage will be worked from the top down and progressively rehabilitated. Upon completion of rehabilitation of each stage, it will be handed back to the land manager Forico Pty Ltd for continued use as a pine plantation.

Location and planning context

Location	Off Porters Bridge Road, Reedy Marsh, approximately 10 km north-east of Deloraine as shown in Figure 1.
Land zoning	Rural except the initial 1.4 km of the access road which is zoned agricultural.
Land tenure	Private freehold.
Mining lease	2142P/M application is currently being assessed by Mineral Resources Tasmania (MRT).
Lease area	The proposed mining lease (ML) covers approximate 149 ha.
Bond	A bond is yet to be set. MRT will determine an appropriate bond as part of their assessment of the ML application.

Activity Area

Land Use	Currently dominated by intensively managed softwood plantation managed by Forico Pty Ltd. The Activity Area is part of a larger area managed by Forico on highly modified land largely dominated by <i>Pinus radiata</i> plantations.
Topography	Project area is located at an elevation of approximately 300 m AHD and the topography is gradually sloping down to the north-east. The proposed stages are on

	slightly more elevated ground and the administrative infrastructure is proposed to be located at approximately 310 m AHD.
Geology	Jurassic dolerite (tholeiitic) with locally developed granophyre. The area is overlain by Cenozoic cover sequences of ferricrete, silicrete, laterite and derived lag deposits.
Soils	Soils consist of light red-brown clay loam and are shallow in depth. No acid-sulphate soils are mapped in the area.
Hydrology	A minor tributary of Brushy Rivulet is located within the Activity Area but not within the area of the two pits. Groundwater presence has not been conclusively confirmed but, if present, may occur on average at 6 m below ground surface.
Natural Values	The Activity Area is dominated by softwood plantation with associated road networks. Native vegetation is present largely as remnants associated with the road network. There is a 4.8 ha area of dry eucalypt woodland to the north of Pit 2. The ephemeral watercourse that passes under the access road may provide habitat for frog species including the green and gold frog.

Regional information

Climate	Rainfall is approximately 1,040 mm per year. Wind direction is predominantly north-easterly.
Surrounding land zoning, tenure and uses	Brushy Rivulet Conservation Area is located to the north of the Activity Area. To the north-east is Permanent Timber Production Zoned land. Land surrounding the Activity Area is otherwise predominately zoned for agriculture. The closest residence is located approximately 800 m south-west of the Activity Area boundary (Figure 3).
Species of conservation significance	<i>Eucalyptus ovata</i> forest and woodland (listed as a threatened vegetation community under the <i>Nature Conservation Act 2022</i> (NC Act)) and <i>Pimelea curviflora</i> var. <i>gracilis</i> (threatened flora species under the <i>Threatened Species Act</i> (TSP Act) 1995) are present along the access road. No fauna species listed as threatened under the <i>Environment Protection and Biodiversity Conservation Act 1999</i> (EPBC Act) or the TSP Act are known from database information to occur within the study area. No threatened fauna species were identified during natural value surveys.

Proposed infrastructure

Major equipment	Conventional quarry equipment will be used for operations including three excavators, two loaders, two haul trucks, two mobile screening units, a bulldozer, a service truck and three light vehicles.
Other infrastructure	Infrastructure requirements include access to Porters Bridge Road (existing), demountable office and amenities building, all weather haul road to loading area for trucks, equipment laydown area with fuel storage, run-off and sediment management structures.

Inputs

Water	A water truck will be used for dust suppression. Water will be sourced from a TasWater fill-point at either Deloraine or Westbury. Water may also be sourced from nearby landowners subject to agreement or sediment basins if appropriate. Potable water will be trucked to the Activity Area and stored in holdings tanks and may be supplemented with rainwater from building roofs.
Energy	No permanent power supply or connection to grid electricity will be required. One generator will be used for the demountable administration buildings.

Wastes and emissions

Liquid	Acid and metalliferous drainage (AMD) potential is considered to be very low.
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Atmospheric	Dust emissions may be generated from construction, extraction, processing of material, stockpiles / disturbed areas and traffic on unsealed roads within the Activity Area.
Solid	General refuse, such as lunch wrappers, cardboard, and maintenance items will be removed from the Activity Area for disposal at municipal facilities.
Controlled wastes	Sewage will be produced at the amenities building and removed for disposal at appropriate municipal facilities.
Noise	Noise may be generated from construction activities, extraction, crushing / screening of material, and vehicles moving within and on / off the Activity Area.
Greenhouse gases	Equipment and the generator are diesel powered. Transport of excavated material will generate greenhouse gases.

Construction, commissioning and operations

Proposal timetable	Once approval is obtained construction will involve minor upgrades to the access road (1-2 weeks), construction and set-up of administration buildings and laydown area (1-2 weeks) and constructing drains and sediment basins. Commissioning will be minimal and limited to the mobile screening plant, and erosion and sediment controls.
Operating hours (ongoing)	0700 to 1700 hours Monday to Friday 0800 to 1600 hours Saturday Operating on a campaign basis 3-4 months per year.

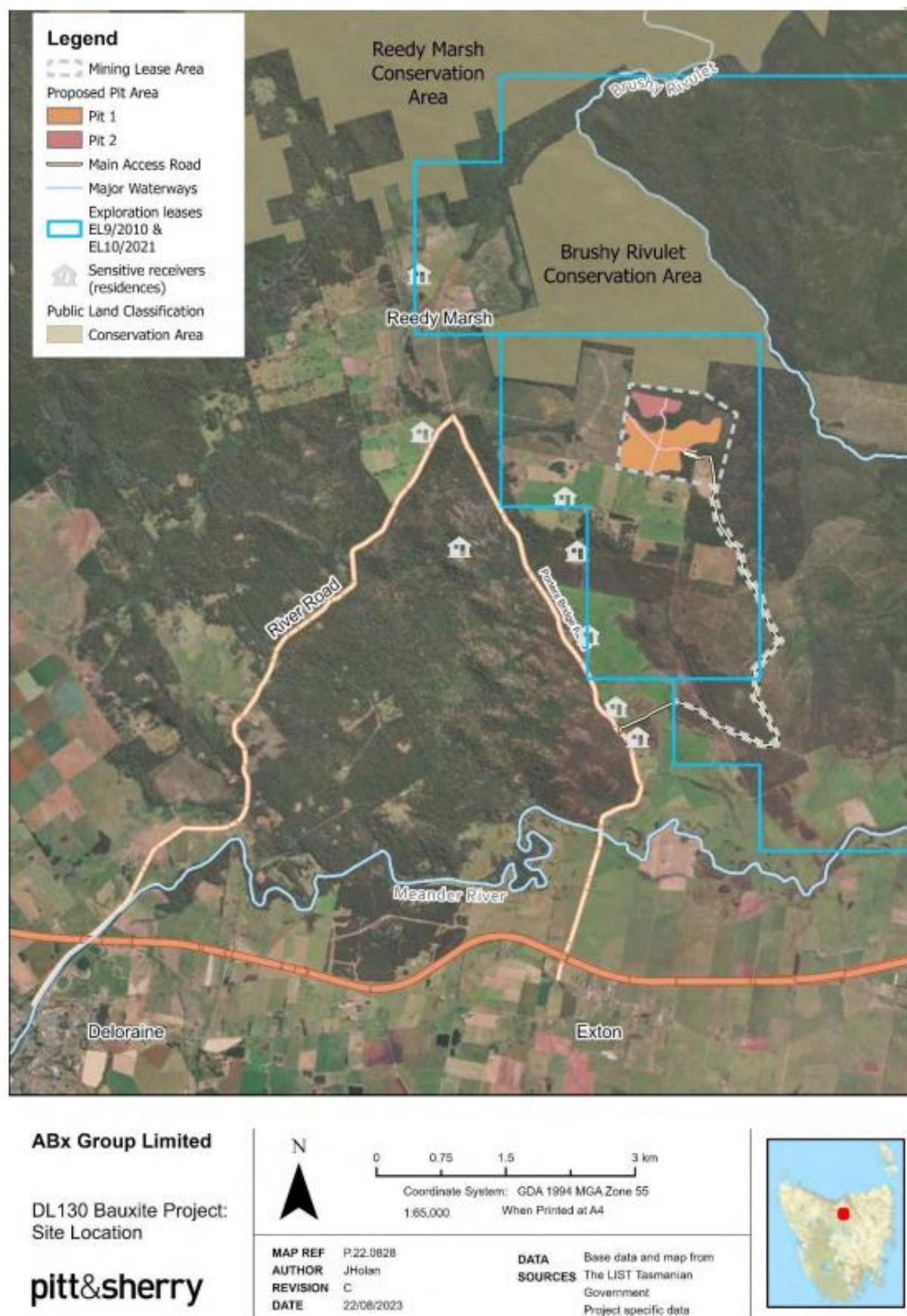


Figure I: Proposed location (Figure I of the EER)

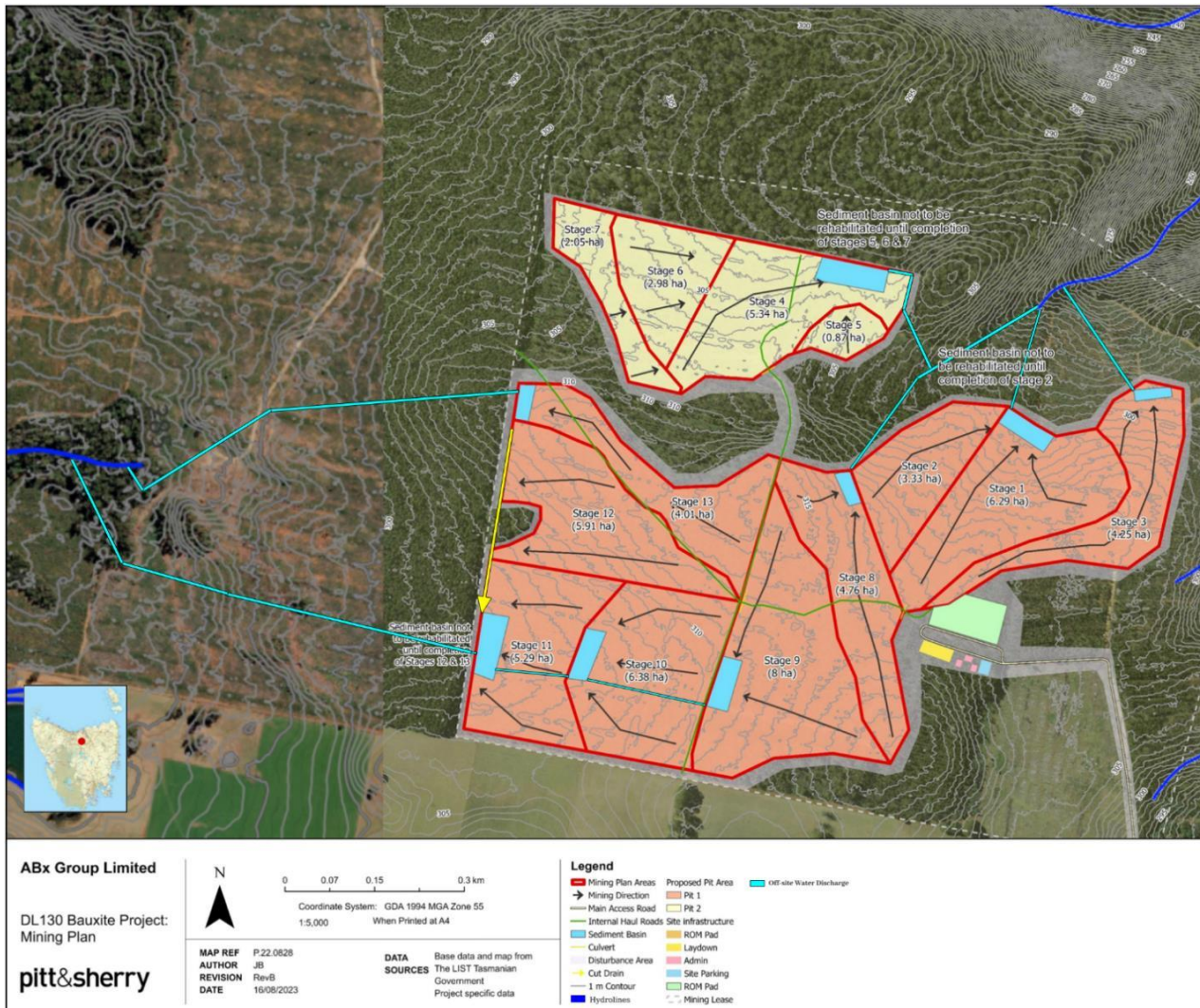
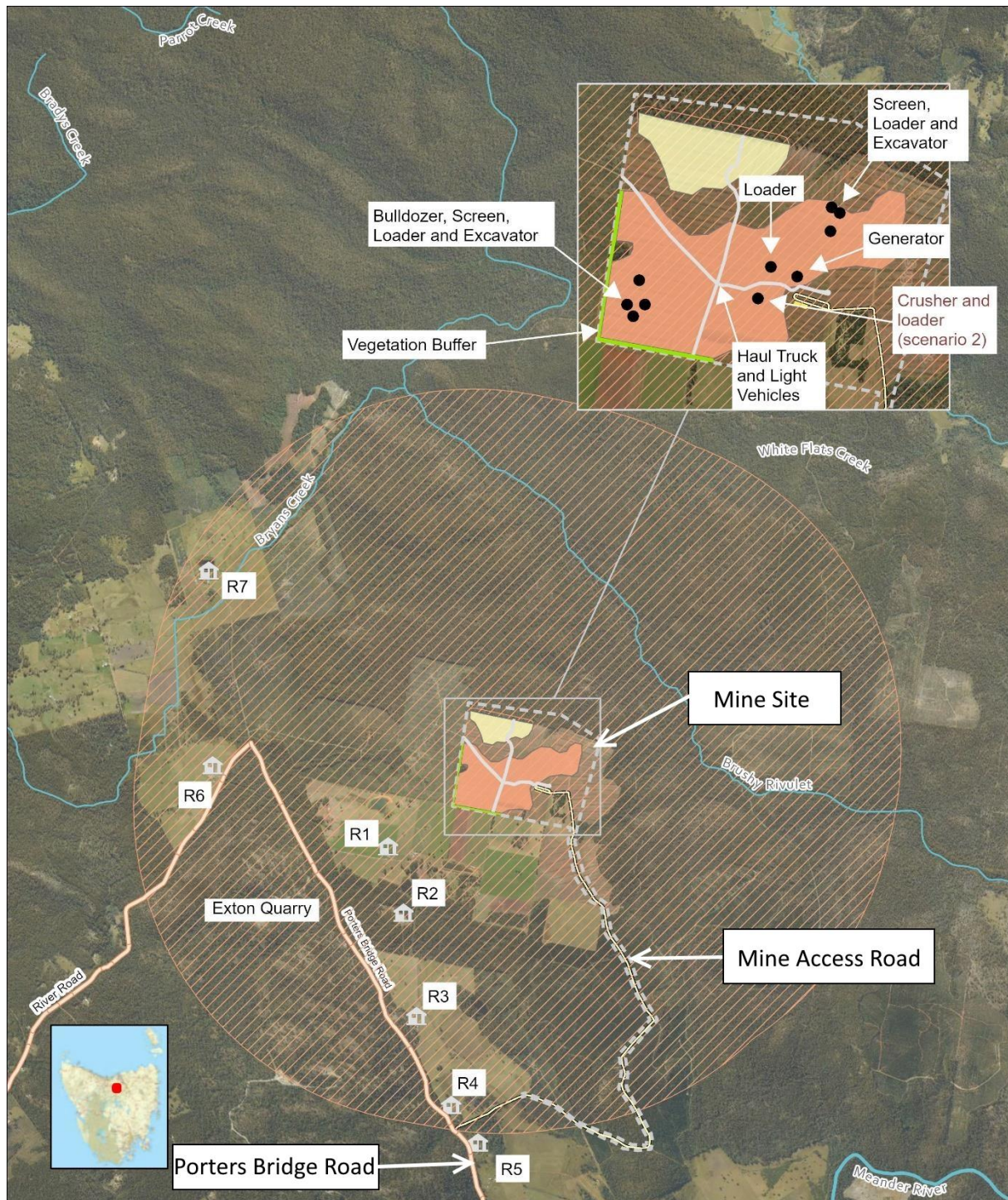


Figure 2: Mining and Stormwater Management Plan (Figure 3 of the Stormwater Management Plan)



ABx Group Limited

DL130 Bauxite Project:
Sensitive receivers and
location of dust and
noise emissions

pitt&sherry



0 0.5 1 2 km
Coordinate System: GDA 1994 MGA Zone 55
1:45,000 When Printed at A4

MAP REF P:22.0828
AUTHOR JHolan
REVISION D
DATE 19/08/2024

DATA Base data and map from
SOURCES The LIST Tasmanian
Government
Project specific data

Legend

- Mining Lease Area
- Proposed Pit Area
 - Pit 1
 - Pit 2
- Main Access Road
- Laydown
- Vegetation buffer
- 3 km radius from pit boundary
- Sensitive receivers (residences) within 3km of Pit boundaries
- Internal Haul Roads

Figure 3: Locations of noise and dust producing equipment and sensitive receivers within 3 km of the pit boundaries (Figure I of the preliminary Dust Management Plan).

4. Project Rationale and Alternatives

According to the EER, the Reedy Marsh bauxite deposit is critical to ensure continuity of supply to market. The main product will be cement grade bauxite which, when used in cement manufacture, reduces the amount of cement needed per tonne of concrete thereby reducing overall carbon dioxide emissions.

An alternative deposit was considered at Fingal, but the landowners did not support the proposal, and the development costs were substantially higher.

The project will generate 12 operational jobs that will be sourced from Deloraine and the local surrounds. A hauling contractor will transport the product to either Bell Bay Port or the Port of Burnie.

5. Public and Agency Consultation

Eight-six (86) public submissions were received during the public consultation period. The main environmental issues raised were:

- Air quality – health impacts from dust (inhalation and ingestion)
- Water quality – contamination and sedimentation of waterways
- Natural values – roadkill, threatened flora and fauna
- Weed and disease management
- Noise emissions
- Acid and metalliferous drainage

The EER was also referred to several government agencies with an interest in the proposal. Comments were received from the following:

- Conservation Assessments Section, Natural Resources and Environment Tasmania
- Parks and Wildlife Services, Natural Resources and Environment Tasmania
- Department of Health and Human Services
- Mineral Resources Tasmania
- TasWater
- Meander Valley Council

The following individuals also provided specialist advice on the EER:

- Regulatory Officer, Environment Protection Authority
- Scientific Officer (Air), Environment Protection Authority
- Scientific Officer (Water), Environment Protection Authority

Appendix I of this report contains a summary of the public and government agency submissions received.

The Supplement to the EER prepared by the proponent provides a response to relevant environmental issues raised during public consultation.

6. Evaluation of Environmental Issues

The following environmental issues are considered relevant to the proposal and have been evaluated in this section:

1. Air Quality
2. Water Quality
3. Noise Emissions
4. Natural Values
5. Weed and Disease Management
6. Waste Management, Dangerous Goods and Environmentally Hazardous Substances
7. Decommissioning and Rehabilitation

General conditions

The following general conditions will be imposed on the activity:

- G1** Activity Area
- G2** Access to and awareness of conditions and associated documents
- G3** Incident response
- G4** Proposed change to activity
- G5** Change of responsibility
- G6** Change of ownership
- G7** Complaints register
- G8** Quarry Code of Practice
- G9** Amendment of required plan and reports
- G10** Notification prior to commencement
- G11** Annual Environmental Review

6.1 Issue 1: Air Quality

6.1.1 Potential impacts

The primary air emission of concern at the quarry is dust but may also include emission of greenhouse gases from plant and equipment that is used to undertake the activity.

Various activities undertaken at the quarry have the potential to produce dust, including excavation of topsoil and product, crushing and screening, stockpiles, movement of machinery, loading and carting of product, and use of internal gravel roads by vehicles. If not managed appropriately, these activities have the potential to cause environmental nuisance beyond the boundary of the Activity Area.

The proposed quarry is located approximately 6 km north of Exton and the Bass Highway with rolling topography that generally slopes down to the southeast. The Activity Area is surrounded primarily by farmland and bushland. The bushland is comprised of mixed uses such as environmental living, conservation areas and covenants as well as public and private forestry.

There are seven sensitive receptors within 3 km of the extractive area. The nearest sensitive receptor to the extractive area is approximately 800 m to the southwest (R1 in Figure 3). There are two sensitive receptors located 120 m north and 260 m south of the intersection between Porters Bridge Road and the quarry access road (R4 and R5 in Figure 3). All other sensitive receptors are more than 1 km from the Activity Area to the northeast, west and south.

The EER states that the dominant wind direction is likely to be from the northwest and north based on data from the Launceston meteorological station. However, meteorological data from the Sheffield meteorological station and EPA's Blanket station at Deloraine both suggest prevailing winds are likely to be from the north, northwest and southeast with some component from the west. The most likely area of impact would be the receptors to the south (under northerly winds) and northwest (under south easterly winds). Frequency of winds from the northeast and east is low so it is anticipated that impacts to the west and southwest are less likely.

6.1.2 Management measures proposed in EER

According to the EER dust generated from the activity will be managed in accordance with Section 7.5 of the *Quarry Code of Practice 2017* as well as the *Environment Protection Policy (Air Quality) 2004*.

The EER states that the following mitigation measures will minimise the generation of dust and emissions during construction and operations:

- Excavation of topsoil will not be undertaken during periods of extended dry, windy weather.
- Most soils require at least 30% ground cover to prevent wind erosion. Where practical, a minimum of at least 50% ground cover will be maintained across any given stage area during mining operations. Where this is unachievable, soils will be stored in locations protected from wind and other forms of erosion and in a configuration that keeps the soil viable during storage.
- Vehicle speed limits within the Activity Area will be restricted to 40 km/h to minimise dust generation.
- Haul roads, including the main access road, stockpiles and crusher drop points will be watered whenever required to prevent dust generation by vehicles. A water cart will be kept permanently in the Activity Area during campaigns. Watering will be commenced immediately whenever dust generation is observed by the Activity Area managers.
- Water for dust suppression will also be sourced off-site at the TasWater fill-point in Deloraine or Westbury. Water may alternatively be sourced from nearby landholders if an agreement is reached. Potable water will be transported to the Activity Area by tanker and stored in holding tanks, which could be supplemented by building roof runoff collection.
- Water may also be sourced from sediment ponds for dust suppression.
- When processing oversize material, the mobile crusher and loader will be located no further south or west than the position indicated in Figure 3.

- Rehabilitation will be carried out progressively during the extraction with a maximum of 2 ha of operational area within a 'stage' at any one time. The 10 ha of service areas will also be managed for dust suppression using water carts during dry periods.
- If campaign breaks last more than 2 months, the excavation panels will either be rehabilitated before the end of the campaign or will be temporarily covered with excavated material to minimise dust production.
- Vehicle exhaust emissions will be minimised by ensuring that all equipment is properly maintained and operated; and
- Outside of active campaigns the Activity Area manager will monitor weather conditions and visit the Activity Area regularly to ensure any dust generated does not cause environmental nuisance. If weather conditions are likely to cause dust emissions, mitigation measures (such as watering haul roads with a water cart) will be implemented.

In response to the representations made by members of the public (detailed below), a Dust Management Plan (DMP) was requested as a supplement to the EER. The DMP provides more detail on the mitigation measures proposed in the EER and also states that:

- Trucks leaving the Activity Area will either be fitted with a tarpaulin cover or be wetted down with an overhead spray bar to be located near the ROM pad.
- Any drill rigs required will be fitted with appropriate dust suppression systems and kept in good repair at all times.
- The access road will be maintained in good condition to minimise the potential for dust emissions.
- Any rock crushing will be restricted to the location shown in Figure 2 and will have sprinklers or water sprays fitted to suppress dust emissions if required.
- The 10 ha of disturbed area for service areas also includes areas currently under rehabilitation or mined out areas waiting to be rehabilitated.
- Areas not being actively extracted will remain under Forico's control and the *Pinus radiata* planted by Forico in 2022 will continue to grow, providing an additional buffer for containing dust emissions.
- Once rehabilitation of each stage has been completed it will be returned to Forico to manage as part of their wider plantation estate.
- In addition to maintaining appropriate cover of stockpiles, sprinklers may be used if necessary to suppress dust emissions.
- Existing trees in the buffer zones around the edges will be retained and fast-growing vegetation will be planted if required to provide a windbreak for minimising dust emissions.
- Nearby residents will be kept informed of proposed campaign dates and contact details for the Activity Area manager to report any issues.
- All complaints will be reported to the EPA, logged on a complaints register and investigated, documented and mitigated promptly.
- The preliminary DMP will be reviewed once a permit is granted to incorporate any additional details required in the permit conditions. The DMP will then be reviewed regularly and updated when necessary.
- Staff and contractors will be made aware of the DMP and its requirements.

6.1.3 Public and agency comment

59 representations raised concerns around dust, particularly the potential for human health impacts by inhalation and ingestion (through consuming home grown produce and drinking water from rainwater tanks containing dust from roofs etc.). Representations also raised concerns about the potential for impacts on

local waterways, native flora and fauna, livestock and contamination of honey harvested by local beekeepers.

The Department of Health's Public Health Services (PHS) provided comment on the advertised EER. PHS noted that dust produced by the activity has the potential to be respirable and would be considered a nuisance, capable of causing non-specific airway symptoms such as coughs, mucus production, throat irritation and wheezing, if it impacted sensitive receptors.

PHS noted that while the EER had identified dust as a potential issue and proposed some mitigation strategies, the Proponent had not quantified the likelihood for the activity to cause environmental nuisance at or beyond the boundary (e.g. through modelling). PHS recommend that the Proponent be open and responsive to any dust complaints received, and to liaise with the EPA about ambient air quality monitoring at sensitive receptors.

PHS also requested further information, in the form of a Dust Management Plan, before a decision was made by the EPA Board. The purpose of the DMP was to assess whether the proposed dust mitigation measures outlined in section 3.1.3 of the EER will adequately minimise generation and migration of dust produced by the activity so as to not adversely impact on neighbouring sensitive receptors.

The draft supplementary Dust Management Plan provided by the Proponent was provided to PHS for review. They responded noting the contents of the DMP, that ongoing compliance with the DMP will be the remit of the EPA and that no further information was required.

6.1.4 Evaluation

It is understood that plantation trees will remain in situ in each stage until extraction is to occur. According to the preliminary Dust Management Plan following completion of mining in each stage it will be rehabilitated back to a condition suitable for continued forestry use and Forico will then continue to manage it as part of their wider plantation estate.

Section 2.1.4 of the EER sets out the proposed schedule for extraction, which suggests that extraction of the stages closest to the nearest sensitive receptor (i.e. stages 9, 10 & 11) will occur from around years 11 to 17. This means that as extraction stages are progressed closer to sensitive receptors vegetation will continue growing, providing additional shelter from wind and acting as dust barrier to help retain any dust emissions within the Activity Area.

The preliminary DMP indicates that a 10 m buffer will be maintained from the Activity Area boundary and that any vegetation within these buffers will be retained. It also states that additional fast-growing vegetation will be planted along the southern and western boundary of the Activity Area to help create and maintain the windbreak that acts as a dust barrier and reduces wind speeds on the Activity Area (see Figure 1 of the preliminary DMP). When the stages on the southern and western boundary are ready for extraction the vegetative buffer should be well established which will help reduce wind speeds to retain dust emissions from the Activity Area.

While the proposal includes a maximum disturbed area of 12 ha, it is important to note that active extraction is restricted to a maximum of 2 ha to be disturbed at any given time. The remaining 10 ha is comprised of service areas including access/internal roads, laydown areas, stormwater infrastructure (drains, sediment ponds etc.), the administration block, and the screening, stockpiling and grading/blending areas.

The EER indicates that rehabilitation will be undertaken progressively to ensure that the disturbed area is minimised and the 2 ha maximum disturbed area at any given time is not exceeded. This will minimise the areas from which dust emissions may arise in each stage as material is extracted.

Condition **DCI** requires any disused section of the Activity Area to be rehabilitated concurrently with extractive activities, it also specifies that the maximum disturbed area at any given time must not exceed 12 ha and that the active extraction area for must not exceed 2 ha at any given time.

The EER states that given the distances to the nearest sensitive receptors, the terrain, vegetation, scale of the activity, and the frequency and duration of the operational campaigns, effective control of dust emissions will be achievable.

While this statement is generally supported, appropriate management of dust emissions will be required to ensure that environmental nuisance is not caused at the nearest sensitive receptors. Therefore, a suite of conditions will be imposed to ensure that the mitigation measures proposed are implemented, but also to allow flexibility to ensure management measures remain effective and adaptable.

Standard condition **A1** requires that any vehicles carrying loads containing material which may blow, or spill, must be equipped with effective control measures to prevent escape of the material from vehicles when they leave the Activity Area or travel on public roads.

Condition **A2** is a standard condition requiring that dust emissions must be controlled to the extent necessary to prevent environmental nuisance beyond the boundary of the Activity Area.

Condition **A3** is a standard condition requiring dust emissions from areas of the Activity Area used by vehicles be controlled by dampening or by other effective measures. Standard condition **A4** requires that any dust produced by the operation of crushing and/or screening plant must be controlled to the extent necessary to prevent environmental nuisance using methods such as water sprays, dust extraction equipment or enclosures.

As detailed above, a preliminary Dust Management Plan (DMP) was provided as part of the Supplement to the EER.

The preliminary DMP states that dust monitoring such as use of dust deposition gauges (DDGs) is not proposed. The preliminary DMP states that due to the nature of the operation and location within a largely plantation forestry setting, the results of quantitative dust monitoring are unlikely to provide information that would be useful in the day to day or long-term management of dust.

This conclusion is not supported. The installation of DDGs, especially in the early stages of operation is likely to have several benefits, including:

- Assurance that dust emissions are being monitored to ensure that environmental nuisance is not being caused by the activity at the nearest sensitive receptors.
- Provision of background data on dust levels before the quarry is operational.
- Demonstrating compliance at the Activity Area boundary from the beginning of the operation to ensure appropriate dust management measures are in place before extraction occurs in the areas closest to the nearest sensitive receptors.
- In the event a complaint(s) is received, data can be used to determine if the activity has contributed to the dust emission or whether it may be from another source e.g. forestry or agricultural. Having background data will also assist this process.

Condition **A5** requires a revised Dust Management Plan to be submitted to the Director for approval within 30 days of the conditions taking effect. The revised DMP must also be prepared in accordance with any guidelines provided by the Director. Once approved by the Director the condition requires the Proponent to act in accordance with the DMP. The condition enables the person responsible to submit a revised DMP for approval to provide some flexibility in achieving the aims of the DMP.

Condition **A6** requires development of a Dust Monitoring Program to be submitted to the Director for approval within 30 days of the conditions taking effect. The program must also be prepared in accordance with any guidelines provided by the Director and be undertaken in accordance with a method approved by the Director. The condition specifies that background dust monitoring must be undertaken for a period of three months prior to the commencement of operations and that dust monitoring must also continue upon commencement of operations. Once approved by the Director the condition requires the Proponent to act in accordance with the program.

The Air Specialist notes that it is preferable for background monitoring to be undertaken during the summer period to represent the worst-case scenario during drier conditions. As a minimum, the program should include the use of at least two dust deposition gauges, one near the southern boundary of the main extractive area (i.e. near stages 10 and 11) and another between the access road and the residence located to the south of the access road, being the locations most likely to be impacted by nuisance dust.

In the event that dust complaints are received, updates to the Dust Management Plan or Dust Monitoring Program to include additional mitigation measures or additional monitoring may be required.

Condition **MI** requires any samples or measurements required by the permit conditions to be taken by a person with training, experience and knowledge of the appropriate procedures. The condition also requires the integrity of samples to be maintained and sample analysis to be conducted by a testing facility accredited by NATA, or another approved testing facility.

The condition also requires records of methods employed, results of sample analysis, measurements taken and records of equipment maintenance to be retained for a period of at least three years and that any testing equipment must be maintained in accordance with the manufacturer's specifications.

6.1.5 Conditions

The proponent will be required to comply with the following conditions:

- DC1** Progressive rehabilitation
- A1** Covering of vehicles
- A2** Control of dust emissions
- A3** Dust emissions from traffic areas
- A4** Control of dust emissions from crushing and screening plant
- A5** Dust Management Plan
- A6** Dust Monitoring Program
- MI** Samples and measurements for monitoring purposes

6.2 Issue 2: Water Quality

6.2.1 Potential impacts

The EER included a Stormwater Management Plan as Appendix E. A revised Stormwater Management Plan was requested as part of the Supplement to provide further details on management of stormwater.

A number of the activities have the potential to be sources of pollutants (e.g. sediments, fuel/oil, and other chemicals) that may impact surface and groundwater quality if not managed appropriately. These include crushing, screening, carting of material, stockpile creation, weed management, potential use of coagulants/flocculants on water, and refueling / maintenance of vehicles, plant and equipment.

The proposed extractive stages are located on a broad north-south ridge at an elevation of approximately 300 m above high datum (AHD). The Activity Area drains predominantly to the northeast via two minor tributaries (approximately 200 m from the closest stage) of the Brushy Rivulet, which then travels approximately 10 km in a southeasterly direction where it drains into the Meander River. A small portion of the Activity Area in the southwest corner drains to the west onto private land, which subsequently drains to Bryans Creek, some 2.5 km west of the Activity Area through a series of drainage lines / depressions (refer Figures 2 and 4).

As shown in Figure 2 the sediment basins associated with various stages are proposed to discharge at six locations (i.e. from sediment basins), which effectively report to three main drainage areas. The overland discharge area to the northeast of Pit 2 eventually reports to two tributaries of Brushy Rivulet and the other overland discharge areas are located along the western boundary of the Activity Area onto private land which eventually reports to Bryans Creek through a series of drainage lines / depressions.

The Stormwater Management Plan provided as a supplement to the EER states that an agreement is not currently in place with the landowner to the west to discharge onto their land and that discussions with this landowner are ongoing. As a contingency, the Stormwater Management Plan includes an option to pump water from the western sediment basins (i.e. for stages 9 to 13) to one of the other sediment basins that discharge to the northeast. This would only occur if an agreement with the landowner could not be reached, eliminating the need to discharge onto their land (refer to section 6.4 of the Stormwater Management Plan for further details of this contingency).

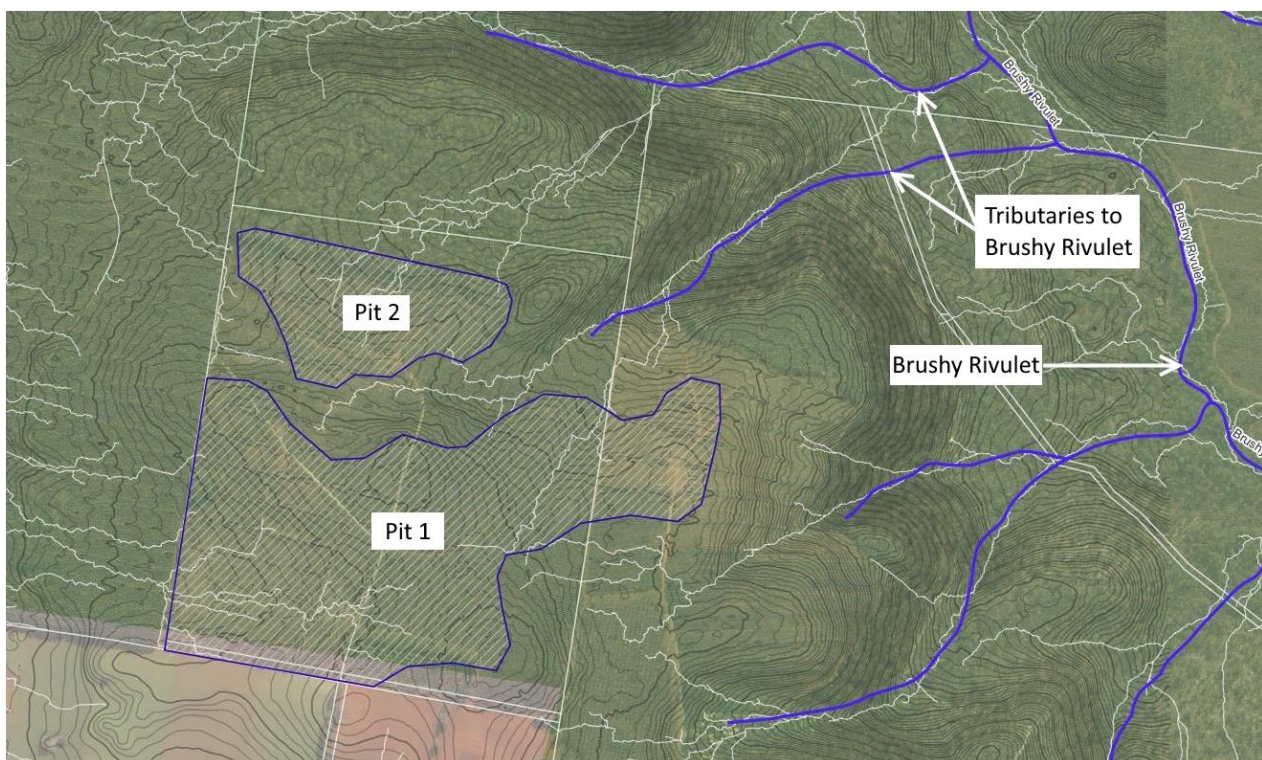


Figure 4: Proposed mining area, tributaries (blue); overland flow paths (light white) and cadastral parcels (white) (Figure 2 of the Stormwater Management Plan).

Particle size distribution and erodibility

The Stormwater Management Plan provides details on particle size distribution and soil erodibility based on site sampling. The findings indicate soils are reasonably homogenous across the Activity Area with nearly all samples being dominated by silty gravel and one sample classified as low plasticity clay (with gravel). These soil types are classified as having a low to medium erodibility potential but may create turbid runoff if disturbed due to the release of silt particles. The geology is not associated with dispersibility or erodibility.

Metal leachability tests

Section 4.2 of the Stormwater Management Plan provides leachability testing from drill samples of the ore and basement materials. The results were compared to the *Australian and New Zealand guidelines for fresh and marine water quality 2018* (ANZG) criteria for 95% species protection. While most of the metals reported leachable concentrations either below the laboratory reporting limits or the adopted criteria, there were reported concentrations at or above the 95% species protection criteria:

- One nickel and one zinc sample each reported maximum concentrations at the criteria;
- Aluminium and copper reported maximum concentrations marginally above the criteria (1.38 and 1.07 times respectively); and
- Chromium reported maximum concentrations at 8.6 times the criteria, but below the 80% species protection criteria.

The procedures used under laboratory conditions reflect worst case and that based on the proposed stormwater management infrastructure and processes, these concentrations are unlikely to occur in stormwater runoff from the Activity Area.

Acid and metalliferous drainage potential

Section 3.6.2 of the EER considers the potential for acid and metalliferous drainage (AMD) and states that AMD is typically generated by the oxidation of sulphides, particularly pyrite. High sulphur bauxites have a higher potential for producing AMD, with high sulphur bauxites defined as containing more than 0.70% sulphur.

The EER notes that assay test work undertaken on over 1400 samples from the Activity Area show that the ore is considered to be low sulphur bauxite, with an average sulphur (as sulphur trioxide SO₃) content of 0.25%.

The EER also notes that the bauxite includes neutralising elements such as calcium and magnesium and that it is expected the overall chemistry of the bauxite will be slightly alkaline and non-acid forming (NAF). This means that the geology naturally provides a buffer which would neutralise small amounts of acid if generated.

The EER states AMD from the activity is therefore not likely to pose a significant risk to surface or ground water.

Groundwater

The EER notes that the 'wet clay' samples identified during subsurface investigations have not been confirmed as representing groundwater, but that as a precautionary approach it has been assumed to represent groundwater.

The EER states that extraction depth will maintain a 1 m buffer above the assumed groundwater level to reduce the risk of intercepting groundwater. The EER notes that the bauxite is not expected to be significantly leachable as discussed above, which limits the potential for impacts on groundwater.

Nevertheless, the EER also states that in the event groundwater is intercepted, it will be captured and directed to the relevant sediment basin(s), which will be periodically tested for pH, assisting the detection of any potential risks to groundwater and informing any remedial actions that may be required, as detailed in section 3.6.3 of the EER.

Proposed stormwater management infrastructure and management processes

Based on the results of the erodibility classification and leachability testing a hydrologic and hydraulic assessment was undertaken to determine appropriate infrastructure to manage the expected stormwater flows in and around the proposed activity (refer to section 6 of the Stormwater management Plan).

The infrastructure proposed includes eight sediment basins designed in accordance with the methodology prescribed by the International Erosion Control Association's *Best Practice Erosion and Sediment Control 2018* documents (IECA) (refer to Figure 2 for locations). Section 6.3 of the Stormwater Management Plan provides calculations for the minimum size requirement for each basin. The inlet to each basin will be rock lined to prevent erosion with discharge by a stabilised spillway with features to reduce the risk of erosion.

In order to maintain sufficient capacity in the sediment basins, operational procedures outlined in the EER include dewatering of the sediment basins before any storm event likely to produce runoff. The dewatering system proposed will be either by pump, siphon or floating decant. The EER also states that water may be retained between storm events for use in dust suppression.

The Stormwater Management Plan states that extraction will commence on the upper slope of each stage, progressing downslope towards the sediment basin which will allow stabilisation and rehabilitation of the upper slopes to commence once extraction has concluded in those areas. This will minimise the amount of sediment laden runoff reporting to the sediment basin and minimise the risk of erosion.

Should monitoring (visual or sampling) identify high turbidity, section 8 of the SMP sets out contingency measures that may be used including installing debris screens and riser outlet pipes and / or using chemical additives such as coagulants and/or flocculants.

Operational and environmental monitoring

Section 9.2 of the Stormwater Management Plan details the proposed operational and environmental monitoring to be undertaken. Prior to controlled discharges (by pump) of water from a sediment basin, water quality will be sampled to determine compliance with the following:

- Post-storm de-watering – 90th percentile suspended solids (TSS) concentration not exceeding 50 mg/L (as per IECA); and
- pH in the range of 6.5 to 7.5 (as per the ANZG as it is more stringent than the IECA criteria).

The Stormwater Management Plan states that whenever possible, water samples collected from the sediment basin will be tested in a laboratory before discharge to ensure that the suspended solid content is below the recommended criteria. It also notes that sufficient sampling will be conducted to enable a site-specific calibration between suspended solids concentrations (mg/L) and NTU turbidity readings. This will allow utilisation of turbidity meters to determine when water quality is likely to have reached the equivalent of 50 mg/L TSS.

Should sampling show the specified water quality objective criteria are not being met, appropriate chemical treatment will likely be required, as detailed in section 8 of the Stormwater Management Plan.

In addition to the operational monitoring of the sediment basins detailed above, the Stormwater Management Plan also proposes to undertake environmental monitoring when sediment basins are actively discharging (refer to section 9.2.2 of the Stormwater Management Plan). The purpose of this monitoring is to detect any potential impacts to the identified waterways in the event of an uncontrolled discharge:

- Sampling of stormwater will be conducted as early as possible once discharge occurs from a sediment basin.
- Sampling will be by grab sampling of the discharge water, as close as possible to the basin(s) discharge point.
- All discharging basins will be sampled concurrently, if more than one basin is discharging.
- Water quality parameters including pH, dissolved oxygen, oxidation reduction potential (ORP), colour, conductivity and temperature will be recorded for each sample collected.

- Samples will be sent to a National Association of Testing Authorities (NATA) accredited laboratory and will be analysed for eight heavy metals (arsenic, cadmium, chromium, copper, lead, nickel, zinc, mercury) and aluminium.
- Analytical results will be compared to the ANZG 95% species protection criteria and ANZECC criteria, as detailed in Table 4 of the Stormwater Management Plan.
- If the specified criteria are exceeded, subsequent discharges will also include sampling at:
 - the most downstream point of the tributary into which the stormwater is being discharged; and
 - Brushy Rivulet, upstream and downstream of the tributary junction point.
- If stormwater discharge concentrations exceed the upstream concentrations in Brushy Rivulet, an assessment will be completed to determine whether modification of the stormwater management measures are required to improve stormwater discharge quality.

6.2.2 Management measures proposed in EER

According to the EER the hydrologic and hydraulic assessment adopts a conservative approach in estimating the location and size of each sediment basin and the cut-off drains by treating each stage separately. Section 3.2.3 of the EER notes that the characteristics of these sediment basins will ensure that best practice is used to minimise any potential impacts to the receiving environments, including:

- Designing basins using the methodology prescribed in IECA;
- Development of type D basins, due to the Activity Area characteristics and multiple inflow locations. Preliminary estimates of the sizes of the sediment basins indicates that it is feasible to construct and maintain them throughout the life of the activity; and
- Quarrying activity within each stage will start on the upper slope, progressing towards the sediment basin at the lowest elevation of each stage. Rehabilitation of the disturbed land will occur simultaneously, commencing on the upper slopes, then down towards the sediment basins, as shown in Figure 2.

The EER notes that drainage and erosion control from screening and crushing activities will be managed in accordance with Section 7.9 of the *Quarry Code of Practice 2017*.

According to the EER sediment and erosion control management measures will include:

- Placement of silt fences at the base of each cleared area with runoff conveyed to the sediment basins via cut-off drains / bunds.
- Construction of cut off drains between the upstream undisturbed areas and the excavated areas to enable clean stormwater to be diverted from disturbed areas.
- Construction of check dams at the bottom of cut off drains to limit potential for erosion.
- The use of sediment basins to capture and treat sediment laden stormwater from within extraction areas.
- Protection of stockpiles from erosion, including establishing vegetative cover and installation of temporary silt fences at the downstream face to prevent erosion of material. In addition, minor contour banks or cut-off drains will be placed upstream to prevent runoff eroding the base of stockpiles.
- Maintaining and adapting (if necessary) the erosion and sediment control measures as excavation of each pit progresses.
- Progressive rehabilitation will be carried out concurrently with extraction in each stage, with a maximum of 2 ha of operational area disturbed within a pit at any one time.
- Where breaks between campaigns will last more than 1-2 months, the excavation panels will either be rehabilitated before the end of the campaign or will be covered with excavated material to minimise runoff.

- Runoff from any storage zones will be captured and treated by a sediment basin during operations and between campaigns.
- Scouring at the inlet to each sediment basin will be prevented by rock lining the base of the basin at the inlet location.
- Extraction depth will maintain a 1 m buffer above the assumed groundwater level and a geologist will be at the Activity Area to observe excavation within 1 m of the assumed groundwater depths to identify signs of groundwater and minimise the likelihood of intercepting groundwater.
- If groundwater is intercepted, it will be channelled along drainage lines to a sediment basin.
- Monitoring of sediment basins will be carried out on a routine basis to monitor pH, ORP, EC, DO, colour, and temperature.
- If low pH values are recorded regularly, treatment of sediment basins will be required (e.g. adding lime).

In addition to the commitments made in the EER, the revised Stormwater Management Plan provided as a Supplement to the EER also includes the following additional sediment and erosion control operations:

- Marking out of the initial excavation areas and collecting the topsoil by loader and excavator.
- Installation of silt fences at the base of each cleared area with runoff conveyed to the sediment basins by cut-off drains.
- Construction of cut-off drains between the upstream undisturbed areas and the excavated areas so that the 'clean stormwater' is diverted from the extraction area.
- The check-dams will be aligned 'tip-to-toe' and dished in the middle.
- Maintain and adapt remediation measures for erosion and sediment control as excavation progresses.
- Include storage zones in the sediment basins, which collect, and hold settled sediment between periods of maintenance (desilting).
- Rock lining the bottom of the inlets to the basins to prevent scouring.
- Maintain the minimum storage zone volume recommended for a Type D basin, being 50% of the settling volume. Lesser or greater volumes will correspondingly increase or decrease the frequency of de-silting required to maintain the required volume.

Section 9.1 of the Stormwater Management Plan also sets out the proposed inspection and maintenance requirements which are designed to keep stormwater management infrastructure working effectively.

Section 9.2 of the Stormwater Management Plan details the proposed operational and environmental monitoring to be undertaken. The SMP includes additional analysis of samples for eight heavy metals and aluminum.

The EER also states that an AMD Contingency Plan will be developed to ensure appropriate procedures have been developed and can be implemented effectively in the unlikely event that AMD is suspected or confirmed.

6.2.3 Public and agency comment

53 public representations were received in relation to the potential for negative impacts on water quality within Brushy Rivulet and the Meander River from stormwater runoff generated by the activity, including contamination and sedimentation. Three representations also raised concerns in relation to the potential for impacts to groundwater from AMD that may be generated by the activity.

6.2.4 Evaluation

The conclusions made in the EER and Stormwater Management Plan relating to erodibility, leachability, acid mine drainage and groundwater are noted and supported. In addition, the proposed stormwater infrastructure, including the management processes and contingency measures outlined are considered appropriate for the type and scale of extraction proposed.

Based on the information provided, uncontrolled discharge of stormwater is not anticipated to occur frequently and usually only during significant and / or prolonged storm events. During these storm events there will be significant dilution through runoff from the surrounding areas, and also turbidity inputs from surrounding forestry and agricultural areas reporting to Brushy Rivulet and the Meander River.

It is noted that the revised Stormwater Management Plan has incorrectly applied the ANZG 2018 in applying a default guideline value (DGV) for total chromium of 4.3 µg/L, by combining the chromium III (Cr (III)) and chromium VI (Cr (VI)) DGVs. The ANZG freshwater DVG for Cr (VI) is set as 1 µg/L, which means the highest reported concentration exceeds the Cr (VI) DVG by 37 times.

The Water Specialist made the following points in relation to the potential risks from chromium to receiving waters:

- The activity is located a significant distance from any identifiable waterway. While in wet weather, water may pool, there is no evidence of direct overland flow from the Activity Area to receiving waters. The nearby creeks are groundwater fed.
- The testing undertaken was under controlled conditions. In reality, chromium will tend to bind to entrained solids and not be bioavailable.
- The DVG is the 95%ile confidence value for dissolved chromium and 10 samples from across the site were analysed, including half from basement material, which adds to the conservative nature of the assessment.
- The results of analysis are considered indicative of the natural geology, there are no chemical processes associated with the proposal which would concentrate chromium.
- Chromium III is known to be less toxic than Cr (VI) and is less likely to be bioavailable due to its low solubility. Notwithstanding, as there is not a suitable toxicant guideline value for Chromium III, the value for Cr (VI) of 1 µg/L has been used for reference, for analysis of risk in this assessment.
- Whilst a dilution factor of 37 may appear significant, stormwater will only discharge from the Activity Area in an uncontrolled manner during significant storm events. There is ample distance for removal of contaminants through binding to particulate and sediment settling prior to discharging to receiving waters. There is also likely to be significant initial dilution prior to discharge from sediment basins during significant storm events.

The Water Specialist concluded that based on the information provided and the points above, there is minimal risk to receiving waters from any discharge of stormwater subject to application of the proposed stormwater management as detailed in the Stormwater Management Plan.

As mentioned above, the proposed method of discharge is by controlled pumping to overland flow within vegetated areas that have a minimum distance of 200 m between the closest discharge point and the mapped tributaries. This allows for infiltration to ground and under normal discharge conditions (via the pumped dewatering system) it is not anticipated that significant runoff would directly reach these tributaries.

Nevertheless, the Proponent does have an obligation to ensure that environmental harm to the surrounding environment is minimised and will be required to monitor when discharges occur, whether that be before dewatering a sediment basin, during uncontrolled discharges during significant storm events, or at any other time discharge occurs.

The proposed installation and maintenance of perimeter cut off drains to prevent clean stormwater from entering the extractive areas is supported. To reflect these commitments, standard condition **SW1** requires construction of perimeter cut off drains / bunds and any other stormwater management infrastructure required (such as sediment ponds) to ensure stormwater is managed appropriately.

SW2 is a standard condition requiring all reasonable measures to be implemented to ensure solids entrained in stormwater are retained within the Activity Area, and that any polluted stormwater discharged from the Activity Area is first collected and treated to the extent necessary to prevent environmental harm or nuisance. It also requires that any discharge does not degrade the visual quality of any receiving waters.

While the resource is expected to have a low likelihood of AMD generation based on low sulphur content, the EER proposes to include monitoring of pH in the sediment basin monitoring program (as outlined in the Stormwater Management Plan). Low pH results may be indicative of AMD forming material and would require further investigation. Although the EER commits to the development of an AMD Contingency Plan, the risk of AMD formation is low and the relatively simple extractive method means that standard measures to manage pH would be applied to mitigate any environmental impacts, such as adding lime to the sediment basins. It is considered that any AMD contingency measures could be incorporated into a revised Stormwater Management Plan if required.

Condition **SW3** requires that the activity be undertaken in accordance with the approved Stormwater Management Plan. This includes design and maintenance of proposed stormwater infrastructure, operational and environmental monitoring, and implementation of any contingency measures, if required based on monitoring results. **SW3 (3)** requires the Plan to be reviewed every five years, and when required by the Director, to ensure the plan remains contemporary and effective.

The Stormwater Management Plan has proposed a total suspended solids limit not exceeding 50 mg/L and has committed to undertaking sufficient sampling to enable a site-specific calibration between total suspended solids (TSS) and NTU turbidity readings to enable field analysis. It is considered appropriate to include a 60 maximum NTU limit based on the recommendations in IECA. This will allow for quick field-based assessment of turbidity in real time prior to a correlation being made between TSS and NTU turbidity readings. TSS can only be determined by laboratory analysis and thus there is likely to be a significant delay between the sample collection and obtaining results, which is not useful for managing stormwater in real time.

Condition **SW4** requires that when outflow from any sediment basin is visibly turbid a turbidity measurement must be undertaken and that if turbidity exceeds 60 NTU an investigation into the possible causes of the exceedance must be conducted and a report provided to the Director.

When sufficient data to make a correlation between TSS and NTU turbidity readings has been collected, the condition enables a case to be put to the Director to consider amendment of this limit based on site-specific conditions.

Condition **MI** described under Key Issue 1: Air Quality is also relevant to water quality.

Based on the information provided in the EER and EER Supplement (including the Stormwater Management Plan) the likelihood of encountering groundwater during operations is low due to the shallow depth of the extractive pits. The risk of impacts to groundwater through ingress of contaminated surface water can be adequately managed through surface water management as described in the EER and EER Supplement. No specific groundwater conditions are therefore imposed.

6.2.5 Conditions

The proponent will be required to comply with the following conditions:

SW1 Perimeter drains or bunds

SW2 Stormwater

SW3 Stormwater Management Plan

SW4 Investigation trigger level

6.3 Issue 3: Noise Emissions

6.3.1 Potential impacts

According to the EER the surrounding area is comprised mostly of farmland and bushland with the Bass Highway located approximately 6 km to the south. The EER also notes that the Exton Quarry and Porters Bridge Road Quarry are located approximately 1.9 km and 2.5 km southwest of the activity respectively. A noise impact assessment was prepared for the proposal and is contained in Appendix F of the EER.

There are seven sensitive receptors within 3 km of the extractive area. The nearest sensitive receptor is a rural residence located approximately 800 m to the southwest (R1 in Figure 3). There are also two sensitive receptors located 120 m north and 260 m south of the intersection between Porters Bridge Road and the quarry access road (R4 and R5 in Figure 3). All other sensitive receptors are more than 1 km from the Activity Area to the northwest, west and south.

The EER states that the following equipment will produce noise emissions:

- a bulldozer
- three excavators
- two loaders
- a mobile crusher
- two mobile screens
- a generator service truck
- two haul trucks
- three light vehicles

The following activities will occur as part of the proposal and will generate noise emissions:

- clearing of topsoil using a bulldozer for each extractive stage;
- extraction of resource (up to 50,000 m³ per year) by excavators;
- carting material from each stage to either the processing area (if processing is required) or directly offsite using the internal haul / access roads;
- screening material (up to 40,000 m³ per year if required);
- loading material into trucks (if processing was required) for transport to external stakeholders;
- truck movements and other use of ancillary equipment associated with quarry operations; and
- crushing any oversized material (approximately 1,000 m³ per year if required).

The quarry will operate on a campaign basis three to four months each year with approximately 78 truck movements occurring each day during a campaign. The EER states that the proposed hours of operation are 0700 to 1700 hours on weekdays and 0800 to 1600 hours on Saturdays.

Noise modelling was undertaken using SoundPLAN modelling software with sound power levels based on noise measurements of equivalent equipment at various Tasmanian industrial and quarrying sites, in the absence of site-specific equipment. Two scenarios were modelled with the results presented in Table 1.

- Normal operations (Scenario 1): including material extraction with an excavator, mobile screen, loader and bulldozer located in the southwestern corner of Stage 2, another excavator, mobile screen and loader located in the northern area of Stage 2 and a loader and dispatch trucks and generator located at the ROM pad.
- Mobile crusher (Scenario 2): including crushing of oversized material at the end of each campaign, with only a mobile crusher, excavator, loader and dispatch trucks, located approximately 270 metres west of the access road (as shown in Figure 3).

Location	Distance from Site Boundary – m	Scenario 1 – Normal Operations - dB(A)	Scenario 2 – Mobile Crusher – dB(A)
R1 - 620 Porters Rd	780	43.7	44.8
R2 - 550 Porters Rd	1200	40.4	40.5
R3 - 420 Porters Rd	2110	36.0	36.1
R4 - 340 Porters Rd	2895	39.0	33.2
R5 - 304 Porters Rd	3170	35.3	32.6
R6 - 875 River Road	2275	34.8	34.0
R7 - 114 Kellys Rd	2700	32.8	32.5

Table 1: SoundPLAN results (Table 2 of the Noise Assessment, Appendix F of the EER).

The two scenarios will not operate concurrently and the mobile crusher will only be operated once extractive activities have concluded.

Predicted noise emissions from the activity at sensitive receptors were determined to be just under the 45 dB(A) daytime noise limit specified in the Quarry Code of Practice. The EER also noted that worst case (conservative) weather conditions were used in the modelling and that penalties were included for low frequency and tonality, thus making the predictions conservative.

The EER states that traffic impacts (transport of the product from the Activity Area and light vehicle movements) were included in the modelling.

The EER concludes that the noise emissions from the proposed activity meet the Quarry Code of Practice daytime noise limits and are consistent with the *Environment Protection Policy (Noise) 2009* and not anticipated to result in environmental nuisance at sensitive receptors.

6.3.2 Management measures proposed in EER

The EER notes no specific noise mitigation measures are required, but proposes the following measures as good practice:

- Maintaining plant and equipment in good order;
- Consideration of noise emissions when selecting plant and equipment;
- Implementing a 40 km/hr speed limit within the Activity Area;
- Use of broad band styler reversing beepers within the Activity Area;
- Minimising drop heights and scraping of loader buckets on the ground;
- The mobile crusher should not be located any further west or southwest than the position indicated in Figure 3 of the EER; and
- No crushing will occur outside of the proposed hours of operation.

6.3.3 Public and agency comment

34 representations raised concern regarding the noise impacts from the proposed quarry and quarry traffic on residences within the vicinity of the proposal and to the community of Reedy Marsh.

6.3.4 Evaluation

The operational hours proposed are in keeping with the acceptable standard outlined in the Quarry Code of Practice and condition **NI** is imposed to ensure these operational hours are adhered to. The results of the noise impact assessment presented in the EER suggest that noise emissions should be below the 45

dB(A) daytime noise limit specified in the Quarry Code of Practice. Condition **N2** sets the noise emission limits that are applied to the activity, consistent with the Quarry Code of Practice.

Should any complaints be received, condition **N3** requires the Director to be notified within 24 hours. Although modelling suggests noise impacts are unlikely, the level of public concern regarding noise is high and it is prudent to impose conditions requiring additional noise surveys if required. Condition **N4** requires a noise survey to be undertaken if any process or equipment changes at the quarry which could substantially alter the character or increase the volume of noise emissions from the Activity Area. **N4 (1.2)** specifies that a noise survey must be completed where the Director is of the opinion that a noise survey is required (for example if complaints suggest further investigations are warranted).

Condition **N5** sets the minimum requirements for developing a noise survey method, which must be approved by the Director, and requires a noise survey report to be submitted to the Director once the survey has been completed.

6.3.5 Conditions

The proponent will be required to comply with the following conditions:

- N1** Operating hours
- N2** Noise emission limits
- N3** Noise complaints
- N4** Noise survey requirements
- N5** Noise Survey Method and Reporting

6.4 Issue 4: Natural Values

6.4.1 Potential impacts

Activities associated with operation of a quarry have the potential to disturb, injure or kill threatened fauna or flora species and vegetation communities if not managed appropriately.

The EER notes that the Activity Area is largely dominated by softwood plantation that was harvested and replanted in 2022, with native vegetation present mostly as remnants associated with the road access corridor and 4.8 ha of dry eucalypt woodland (DOB) occurring on the northern boundary (refer Figure 5). The EER states that the access road corridor does not require widening and will only require periodic maintenance (pruning) to maintain the existing access route for heavy vehicles.

The Natural Values Assessment (NVA – Appendix A of the EER) indicates that there is an area of *Eucalyptus ovata* forest and woodland (DOV), listed as threatened under the *Nature Conservation Act 2002* (NC Act) located at the access road junction with Porters Bridge Road. The NVA states that this community can equate to Tasmanian Forests and Woodlands dominated by Black Gum or Brookers Gum (*E. ovata* / *E. brookeriana*) listed as a threatened ecological community (critically endangered) under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

The EER states that the DOV community will not be disturbed, except for light pruning to improve sight distances at the access road junction with Porters Bridge Road. The EER also states that the DOB community located along the northern boundary of the activity area will not be disturbed and this is reflected in the staging plan (refer Figure 2).

The NVA identified three slender curved riceflower plants (*Pimelea curviflora* var. *curviflora*), listed under the *Threatened Species Protection Act 1995* (TSP Act), within a disturbed margin of the access road corridor (see Figure 10b of the NVA). The EER states that as these plants were identified on the road margin, they can be easily avoided and commits to a barrier / fence to be installed to prevent accidental disturbance. The EER goes on to state that prior to any access road upgrades, which are anticipated to be minimal, a preclearance survey for this species will be undertaken to confirm no other individuals are present.

The NVA notes that the activity area supports, to some degree, potential habitat for a number of threatened fauna species including *Sarcophilus harrisii* (Tasmanian devil), *Dasyurus maculatus subsp. maculatus* (spotted-tailed quoll), *Dasyurus viverrinus* (eastern quoll), *Perameles gunnii* (eastern barred bandicoot), *Aquila audax subsp. fleayi* (Tasmanian wedge-tailed eagle), *Haliaeetus leucogaster* (white-bellied sea-eagle), *Lathamus discolor* (swift parrot), *Tyto novaehollandiae* (Tasmanian masked owl), and *Litoria raniformis* (green and gold frog).

No sightings or evidence (e.g. dens) of the above-mentioned species were identified during field surveys.

Scattered stringybark trees (*Eucalyptus obliqua*) within the DOB community may be suitable as nesting habitat for the swift parrot and Tasmanian masked owl. The DOV community identified near the access road junction was also considered to be suitable foraging habitat for the swift parrot.

The NVA considered that the activity area has limited potential to support den sites for the marsupial carnivores and eastern barred bandicoot, but that there is potential for opportunistic foraging to occur.

While four recorded wedge-tailed eagle nests are located in the vicinity, only one (NRD #193) is located within 1000 m of the activity area, 540 m to the southwest of the access road intersection with Porters Bridge Road (refer Figure 6). The NVA notes that while modelling shows the first 400-500 m of the access road could be visible from the nest, the modelling does not consider vegetation, which would effectively obscure the access road from the nest.

The NVA also notes that the area generally only has marginal nesting habitat for white-bellied sea eagles due to lack of suitable trees and significant waterbodies.

The NVA found that there was potential habitat for the green and gold frog within the activity area where an ephemeral watercourse runs under the access road approximately 750 m from the junction with Porters Bridge Road.

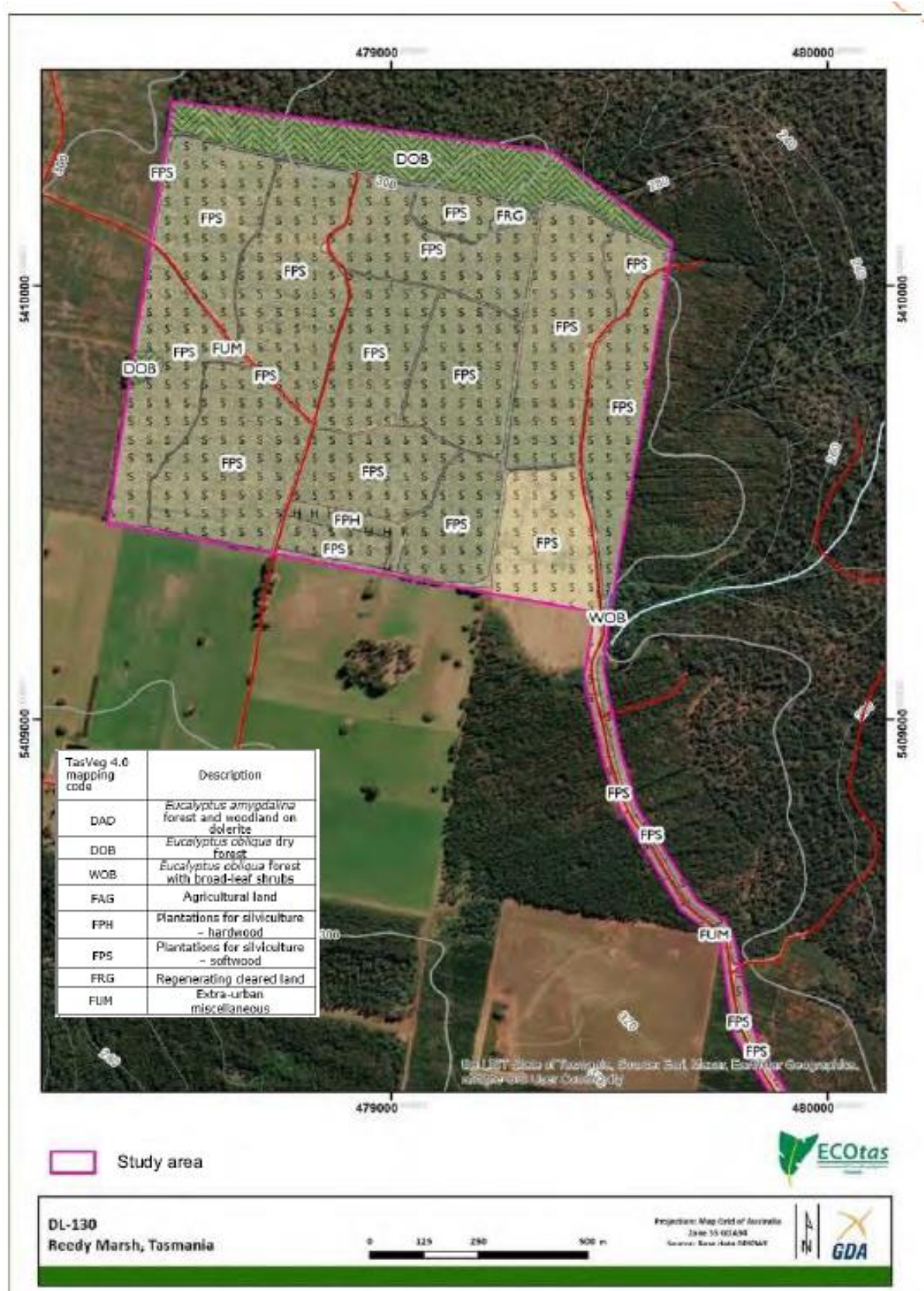


Figure 5: Vegetation communities (Figure 9 of the EER).

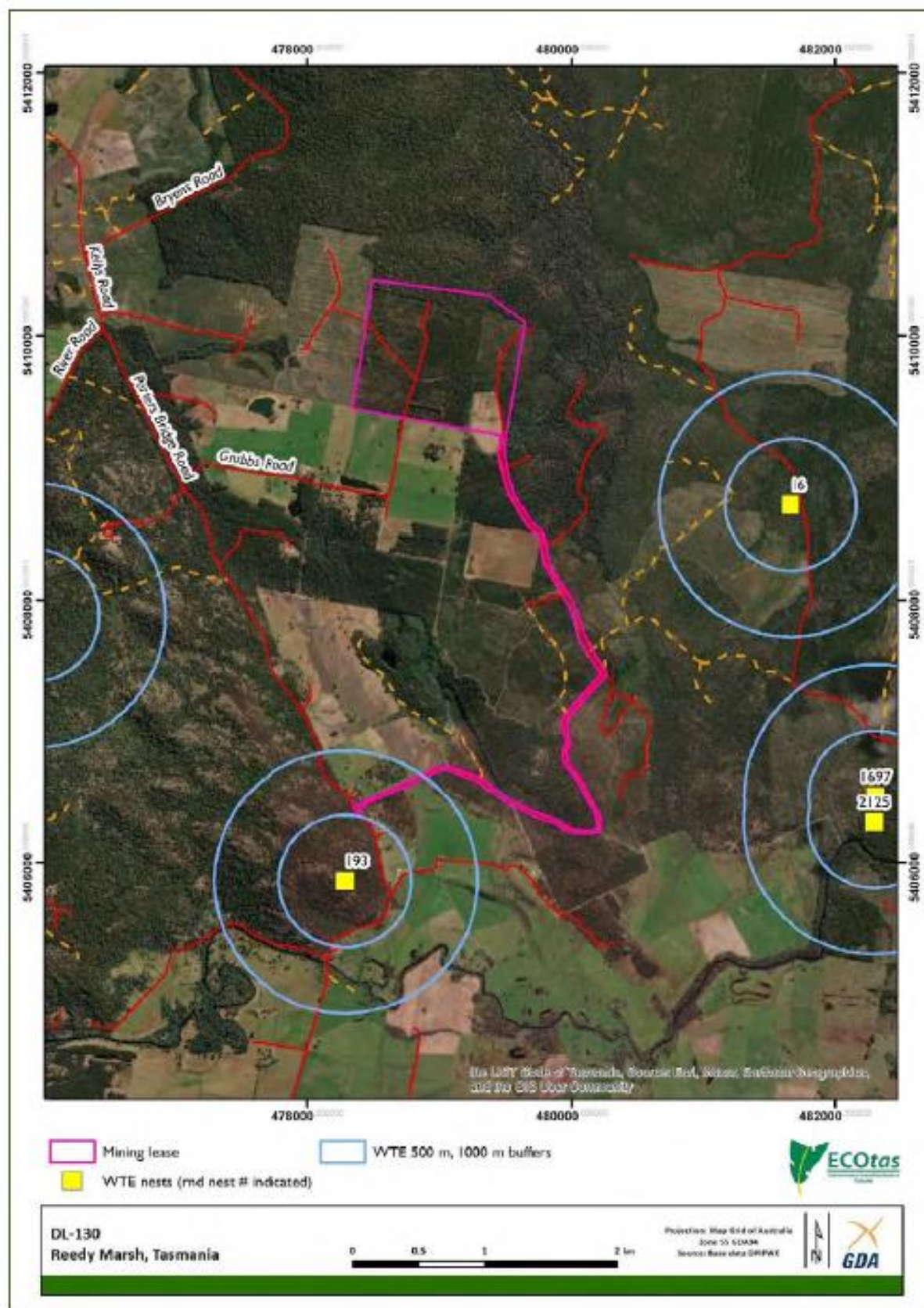


Figure 12. Known wedge-tailed eagle nests relative to the study area (500 m and 1,000 m buffers surrounding known nests indicated)

Figure 6: Known Wedge-tailed Eagle nests (Figure 12 of Appendix A to the EER).

6.4.2 Management measures proposed in EER

The EER states that to minimise potential impacts on the DOV community, weeds will be prevented from spreading into the community, a barrier/fence will be installed to prevent accidental disturbance, and the current drainage regime will be maintained or improved where required.

The EER states that prior to any access road upgrades, which are anticipated to be minimal, a preclearance survey for the species will be undertaken to confirm no other slender curved riceflower plants individuals are present.

According to the EER preclearance surveys for Tasmanian devil and spotted-tailed quoll dens will be undertaken. The EER also notes that if any potential den sites for the Tasmanian devil are recorded in the activity area and exclusion zones cannot be established, the dens will be monitored and managed in accordance with the Tasmanian Devil Guidelines with any dens that cannot be avoided requiring a permit to take under the *Nature Conservation Act, 2002*.

Roadkill mitigation measures will be implemented in accordance with the Tasmanian Devil Guidelines, including:

- Placing speed limits on the access road between dusk and dawn;
- Cartage will only occur during daylight hours;
- Installing advisory signage; and
- Providing education and awareness training for drivers.

The EER notes that as the current nest survey will likely be older than the two years prescribed by the *Guidelines for Natural Values Surveys – Terrestrial Development Proposals 2015* when development occurs, a new nest survey will be required within the modelled potential habitat. The EER also notes that ground surveys should be practical given the relatively small areas of potential nesting habitat mapped and easy to traverse terrain.

The EER states that the DOV and DOB vegetation communities will not be disturbed as part of the proposal and therefore potential impacts to the swift parrot and Tasmanian masked owl can be avoided.

The EER includes the following measures to protect nearby waterways and potential green and gold frog habitat:

- Runoff will be managed, contained and treated as detailed in the revised Stormwater Management Plan provided as a supplement to the EER.
- The ephemeral stream on the access road will be reassessed by an ecologist at the time of development as neighbouring activities have been observed during the assessment period to indicate that the waterways may no longer be potential habitat for the species; and
- If the ephemeral stream is still deemed to be potential habitat, and the road becomes degraded through the course of a campaign, drainage measures such as silt fences will be installed to ensure water quality is not adversely impacted.

6.4.3 Public and agency comment

60 of the representations expressed concerns around the potential impacts on vegetation communities, flora and fauna species from clearing of vegetation.

37 of the representations expressed concerns about potential impacts on the Brushy Rivulet Conservation Area located north of and adjacent to the proposal.

27 of the representations expressed concerns in relation to the potential for the proposal to impact on wildlife from increased traffic (i.e. roadkill).

25 Representations raised concerns regarding the proposed use of Rural zoned land for quarrying purposes, with this land being classed as Prime Agricultural land.

The Conservation Assessment Section (CAS) of NRE Tasmania supported the findings of the Natural Values Assessment and provided the following specific comments relevant to the proposal:

- Given the small amount of vegetation likely to be cleared for the access road, there is a very low risk of any threatened flora being within the road detour area and a survey of the proposed road detour is not necessary.
- A survey for new eagle nests within a 1 km line of sight from the development footprint is supported. Searches for the presence of nests should be undertaken outside of the breeding season management constraint period (July to January, inclusive).

6.4.4 Evaluation

The recommendation that the areas identified adjacent to the access road corridor as comprising *Eucalyptus ovata* forest and woodland (DOV) be excluded from disturbance and managed by way of instituting a barrier fence or similar is supported.

Condition **FFI** requires that the interface between the activity area and the DOV community be delineated with a fence or similar method approved by the Director so that no disturbance of the DOV community occurs beyond the fence. Condition **FFI** also requires the activity to be undertaken in a manner that does not cause degradation, including sedimentation, of the DOV community.

In addition, the recommendation in the NVA that the three specimens of *Pimelea curviflora* var. *curviflora* (slender curved riceflower) be excluded from disturbance, preferably by a fence or similar barrier during road maintenance or upgrade works is also supported. Condition **FF2** requires the activity to be conducted in a manner that does not cause degradation or disturbance to the area(s) identified as being inhabited by this species. Based on the requirement for exclusion fencing and the advice from CAS, no further surveys for slender curved riceflower are required.

A number of representations expressed concern about the clearance of vegetation. The EER clearly states that neither the DOB or DOV vegetation communities will be cleared and that the only clearance of vegetation will be of the softwood plantation trees already planted and trimming / minor removal (excluding DOV) of vegetation along the access road to maintain safe access for heavy vehicles.

Similarly, as there is no clearance of the DOB community proposed, which is located between 'Pit 2' and the Brushy Rivulet Conservation Area, there are not anticipated to be any significant impacts to the Conservation Area from the proposal. Condition **FF3** requires that the interface between the activity area and the DOB community be delineated with a fence or similar method approved by the Director and that no disturbance of the DOB community occurs beyond the fence.

While there is potential habitat identified for the marsupial carnivores and the eastern barred bandicoot, the previous use as a softwood plantation means the areas to be extracted is already highly disturbed having been harvested and replanted in 2022. While the EER demonstrates there is unlikely to be a significant impact on these species, the commitment to a pre-clearance survey for Tasmanian devil and spotted-tailed quoll dens is supported. This is required by condition **FF4**.

Similarly, the activity is not proposing to operate outside the standard operating hours specified in the Quarry Code of Practice and the EER also specifically states that carting material will only occur during daylight hours, meaning that during winter and autumn even though the operational hours may be within the night-time period (defined as one hour prior to sunset to one hour after sunrise), no cartage will occur during those times. The road-kill risks to fauna are therefore considered minimal.

Representations note that a new eagle nest (#3462) was recorded in June 2024, which was not considered in the NVA. This new nest is located approximately 40 m north of the nest (#193) which was identified and discussed in the NVA. While the addition of this nest is considered unlikely to significantly impact the conclusions of the NVA, the commitment to undertake a revised eagle nest survey is supported given the time that will have elapsed since the original survey was completed. CAS advised that the survey should be carried out by at least one trained assessor outside of the breeding season management constraint period (July to January inclusive). The nest survey is required by condition **FF5**.

Water quality is considered and discussed further under Key Issue 2, which contains a number of commitments and conditions designed to minimise any potential for impacts on water quality on and off the Activity Area. These measures will minimise the potential for any impacts on the green and gold frog if present and any other aquatic biota within the nearby waterways.

Conditions relating to weeds and diseases (see Issue 5), and waste management and hazardous substances (see Issue 6) are also considered relevant and will help manage any potential risks to natural values on and off the Activity Area.

It is noted that the majority of the Activity Area is within an area mapped as having Class 3 land capability on LISTmap, which is defined as Prime Agricultural Land under the *State Policy on the Protection of Agricultural Land 2009*. However, Principle 4 of the State Policy does make provision for allowing extractive uses on Prime Agricultural Land and, while Principle 10 of the Policy restricts new plantation forestry development, it is noted that the Activity Area has previously been converted to softwood plantation and will be returned to this use after extraction. Plantation forestry is also identified as an agricultural use in Clause 7 Definitions of the Policy.

6.4.5 Conditions

The proponent will be required to comply with the following conditions:

- FF1** Protection of *Eucalyptus ovata* forest and woodland (DOV)
- FF2** Protection of *Pimelea curviflora* var. *curviflora* (slender curved riceflower)
- FF3** Protection of *Eucalyptus obliqua* dry forest (DOB)
- FF4** Tasmanian devil (*Sarcophilus harrisii*) and spotted-tailed quoll (*Dasyurus maculatus maculatus*) den survey
- FF5** Tasmanian wedge-tailed eagle (*Aquila audax subsp. fleayi*) nest survey

6.5 Issue 5: Weed and Disease Management

6.5.1 Potential impacts

The movement of vehicles, plant, and equipment have the potential to introduce or spread weeds and diseases to, from or around the Activity Area if not managed appropriately. Product stockpiles can also be contaminated with weeds or diseases which may then be transported to other areas if not managed appropriately.

The EER indicates that the Activity Area is almost entirely comprised of managed softwood plantation which was recently harvested and replanted in late 2022 by Forico (land manager).

The EER states that English broom (*Cytisus scoparius*), Spanish heath (*Erica lusitanica*), gorse (*Ulex europaeus*) and blackberry (*Rubus* sp.) are all present within the Activity Area and are declared weeds under the *Biosecurity Regulations 2022*. The EER notes that there is an extensive gorse infestation mainly along the access route.

6.5.2 Management measures proposed in EER

The EER states that weeds will be managed to minimise the potential for spread to surrounding forestry and agricultural land and the adjacent Brushy Rivulet Conservation Area. Key management measures include:

- Hygiene protocols for machinery, vehicles and personnel entering the Activity Area.
- A weed and disease hygiene management plan developed and implemented for the activity to minimise the risk of further infestations to the Activity Area, and to prevent the spread of the declared and environmental weeds off the Activity Area.
- All external haul trucks will remain on all-weather roads; and
- Wash down procedures will be implemented for all earthmoving equipment.

The EER also states that to ensure the Activity Area remains free of *Phytophthora cinnamomi* (PC), the access road and internal tracks will be maintained in good condition and be well drained to ensure minimal pooling of water. The risk of introduction of any freshwater pathogens, such as chytrid fungus to the Activity Area will also be minimised by these management measures.

The EER notes that the operational policy is to not transport or purchase soils to minimise the risk of introducing further weeds or diseases to the Activity Area.

6.5.3 Public and agency comment

Three representations expressed concerns with the potential to introduce PC to the Brushy Rivulet Conservation Area located downslope of the proposed quarry.

CAS supported the commitment to develop a weed and disease hygiene management plan, and the implementation of hygiene protocols and wash down procedures for machinery, vehicles and personnel entering the Activity Area.

6.5.4 Evaluation

While the EER states that there was no symptomatic field evidence of pathogens within the Activity Area, the inclusion of a machinery washdown policy is supported to ensure that the activity area remains free of diseases. This is supported by condition **OPI** which requires that, prior to entering the activity area, machinery must be washed in accordance with the Weed and Disease Guidelines.

It is noted there are extensive weed infestations particularly along the access road, and that ongoing management of these infestations will be critical in ensuring operations do not further spread these infestations. The commitment to develop a Weed and Disease Management Plan is supported and is required to be submitted to the Director for approval under condition **OP2**. Once approved the person responsible is required to act in accordance with the plan.

6.5.5 Conditions

The proponent will be required to comply with the following conditions:

OPI Machinery washdown

OP2 Weed & Disease Management Plan

6.6 Issue 6: Waste Management, Dangerous Goods and Environmentally Hazardous Substances

6.6.1 Potential impacts

Solid wastes from the activity could cause environmental nuisance or harm if not suitably stored or disposed of. Inappropriate storage, handling and disposal of environmentally hazardous substances including fuels and oils, has the potential to contaminate soil, surface water and groundwater.

The EER identifies two main waste streams from the operation, being general refuse (i.e. food scraps / wrappers) and sewage (collected in mobile toilets with blackwater tanks).

Use of hazardous substances, particularly liquids, will be required at the quarry. Fuel, oils and lubricants are used to operate and maintain machinery, and although they won't be stored at the quarry, they will be brought to the Activity Area when required.

It is also anticipated that due to the abundance of invasive weeds that the weed management program will likely include a spraying program, where chemicals related to weed spraying will be used and / or stored within the Activity Area.

6.6.2 Management measures proposed in EER

The EER states the following mitigation measures for solid waste management:

- All waste materials will be disposed of at an approved facility, in accordance with EPA and / or Meander Valley Council requirements.
- Rubbish bins will be provided with lids at appropriate locations around the Activity Area and all staff will be required to avoid littering and collect and bin any rubbish they observe on the Activity Area.
- Refuse will be periodically taken to an approved waste disposal facility; and
- Wastes will be reused and recycled where possible.

The EER states the following mitigation measure for liquid waste management:

- All ablution blocks will be temporary and will contain black water storage tanks which will be emptied or removed by a suitably qualified waste disposal contractor for sewage disposal to the municipal wastewater treatment plant.

The EER includes the following mitigation measures for dangerous goods and environmentally hazardous materials:

- The fuel tanker will:
 - be located within a bunded area (with 110% capacity of the tank) when it is within the Activity Area for refuelling; and
 - carry appropriate fuel clean up equipment.
- An appropriate spill kit(s) will be permanently located at the office.
- Refuelling and lubrication will be undertaken away from any freestanding water.
- Maintenance and repair facilities and the workshop will be appropriately designed and operated in order to contain and clean up any spills that may occur.
- Oil spill absorption materials will be used immediately for clean-up if there are any spills.
- If there are any residual contaminated soils evident outside the bunded area after a spill and clean up, it will be excavated immediately and taken for disposal or treatment at an appropriately licensed facility.
- All workers will be trained to respond to spills and leaks.
- The EPA will be notified as soon as possible of any spills; and

- All equipment will be properly maintained with regular servicing to prevent ongoing oil or fuel leaks.

Furthermore, the EER also states that any refuelling and equipment repairs will be undertaken in the designated laydown facility which will be appropriately designed, bunded and equipped to contain and clean any spills that may occur.

The EER indicates that the fuel storage and transport requirements of the *Dangerous Goods (Road and Rail Transport) Act 2010* and *Work Health and Safety Act 2012* will be met.

6.6.3 Public and agency comment

No public representations or agency submissions were received in relation to waste management, dangerous goods and environmentally hazardous materials.

6.6.4 Evaluation

The proposed management of solid and liquids wastes is generally supported and considered appropriate. The activity is required to operate in accordance with the Quarry Code of Practice, which specifies waste standards, through condition **G8**. No specific waste management conditions are considered necessary.

Condition **H1** requires appropriate spill kits to be kept within the activity area and maintained in functional condition. Conditions **H2** and **H3** require hazardous materials to be contained and managed appropriately to prevent contamination of soil, groundwater, and waterways.

Standard information items **LO1** and **O11** are included to ensure the proponent is aware of legislation relating to storage and handling of dangerous goods and substances, and best practice in relation to waste management.

Based on the information provided in the EER, the management measures proposed and the inclusion of the above conditions, it is considered that the potential risks from waste, dangerous goods and environmentally hazardous substances can be appropriately managed to limit the potential for environmental harm or nuisance to occur.

6.6.5 Conditions

The proponent will be required to comply with the following conditions:

- H1** Spill kits
- H2** Storage and handling of hazardous materials
- H3** Handling of hazardous materials – mobile

Other information included in the permit:

- LO1** Storage and handling of dangerous goods, explosives, and dangerous substances
- O11** Waste management hierarchy

6.7 Issue 7: Decommissioning and Rehabilitation

6.7.1 Potential impacts

Temporary or permanent cessation of quarrying operations have the potential to cause ongoing impacts to the environment if rehabilitation is not managed appropriately. Rehabilitation is necessary to ensure the long-term stability of the Activity Area, prevent erosion and sedimentation, reduce uncontrolled dust emissions, and minimise the potential for establishment of weeds, diseases or pathogens.

According to the EER the final land use, as agreed with the landowner is to return the land to softwood plantation timber production.

The EER states that decommissioning will include cleaning and preparation of portable infrastructure and equipment (demountable offices, ablution block, mobile plant) for removal. Access roads will remain in place for the landowner to use in managing plantation activities.

According to the EER, rehabilitation of extractive stages will be undertaken progressively with all disturbed areas being rehabilitated on mine closure. All waste rock material, screened fines and topsoil will be used during rehabilitation. The EER notes that some vegetation will establish naturally as stockpiled topsoil will be removed and managed in a way that preserves seeds and nutrients.

A maximum of 2 ha will be open for extraction purposes at any one time with progressive rehabilitation undertaken as soon as practicable after extraction is completed.

The EER notes that given the method of extraction required for extracting the resource (shallow surface excavation up to 7 m depth), there will be minimal alteration of the landform. The stormwater infrastructure will also be decommissioned following rehabilitation, with natural surface flows reinstated, reducing the risk of water ponding and potential for erosion.

6.7.2 Management measures proposed in EER

The EER states that decommissioning and rehabilitation will be ongoing and carried out in accordance with Section 8 of the Quarry Code of Practice.

The EER notes that the main areas of focus for decommissioning and rehabilitation will include:

- infrastructure located on the eastern side of the activity area (e.g. demountable offices / toilets, car park and laydown area, workshop and hydrocarbon storage area, ore stockpile area, water tanks (potable and non-potable), ROM pad (high-grade ore and low-grade ore), cut off drains, sumps and sediment basins;
- resource / excavation areas; and
- access and haul roads.

Rehabilitation will follow the principles below:

- Rehabilitation of areas disturbed as part of the activity will be in accordance with appropriate post-mining land uses (i.e. continued softwood plantation) and will be clearly defined in a closure plan;
- Consultation with relevant stakeholders will be undertaken;
- Progressive rehabilitation will be undertaken over the life of the activity, where appropriate;
- Monitoring of rehabilitation success will be based on agreed criteria with the relevant stakeholders;
- Implementation of appropriate technologies / methods to help improve rehabilitation techniques and reduce the potential for environmental impacts; and
- Development of designs for appropriate landforms that will behave and evolve in a predictable manner, according to the design principles established.

6.7.3 Public and agency comment

No public representations or agency submissions were received in relation to decommissioning and rehabilitation.

6.7.4 Evaluation

The proposed guiding principles, general measures outlined in the EER and supplementary information and commitment to undertake decommissioning and rehabilitation in accordance with the Quarry Code of Practice are all generally supported.

While the EER states there will be a maximum of 2 ha open for active extraction purposes, an additional 10 ha of land will comprise the amenities (e.g. offices, laydown area, roads, drains, ponds etc.) and areas waiting to be, or actively undergoing rehabilitation.

Condition **DC1** requires that worked out or disused areas of the activity area must be rehabilitated concurrently with other extractive activities occurring within the activity area in accordance with the QCP and sets the maximum area of disturbed land allowed within the Activity Area at any given time at 12 ha (**DC1(2.1)**). The condition also restricts the maximum area for active extraction at any given time to 2 ha (**DC1(2.2)**), noting that this limit is included within the 12-ha set for the entire activity by **DC1(2.1)**.

Conditions **DC2** and **DC3** set out the requirements for when either temporary suspension or permanent cessation of quarrying activities are proposed. Permanent cessation also triggers condition **DC4** which requires submission of a Decommissioning and Rehabilitation Plan for the Director's approval. Condition **DC5** sets out the broad steps that must be undertaken upon permanent cessation of the activity, including implementation of an approved DRP.

Condition **DC6** requires surface soils to be removed before opening new areas of the quarry and stockpiled separately for future use in rehabilitation. Furthermore, the stockpiles must be protected from erosion and other disturbance.

6.7.5 Conditions

The proponent will be required to comply with the following conditions:

DC1 Progressive rehabilitation

DC2 Temporary suspension of activity

DC3 Notification of cessation

DC4 DRP requirements

DC5 Rehabilitation following cessation

DC6 Stockpiling of surface soil

7. Issues not assessed by the Board

The following issues have been raised during the assessment process but are not the responsibility of the Board under the EMPCA. These may be issues which are more appropriately addressed by another regulatory agency.

1. Heritage (European and Aboriginal)
2. Traffic impacts on Porters Bridge Road and surrounds
3. *State Policy on the Protection of Agricultural Land, 2009*

7.1 Issue 1: Heritage

Historic Heritage

The EER states the Activity Area has been intensely disturbed by logging and clearing activities. One historic feature, a logger's hut, was identified during the heritage field survey. The hut is located 370 m north of the south-western corner of the Activity Area adjacent to Stage 12. The heritage assessment notes that the hut is in poor condition and likely to be of local significance but not State or Nationally significant. The hut area has been excluded from the mining area.

Aboriginal Heritage

The EER states three Aboriginal sites were identified during a field assessment. These sites comprise isolated artefacts. The Aboriginal Heritage Assessment recommended that, if possible, these sites should be protected and left in-situ but, if they are likely to be impacted, the artefacts should be salvaged and relocated to a safe location.

7.2 Issue 2: Traffic impacts on Porters Bridge Road and surrounds

Traffic Impacts

The EER states that traffic volumes in the vicinity of the Activity Area are expected to increase by 102 vehicles (78 truck and dog trailer movements and 24 light vehicle movements) per day during quarry campaigns. Traffic is proposed travel along Porters Bridge Road and then Meander Valley Road before following three possible routes to either Bell Bay Port or Burnie Port. The EER Traffic Impact Assessment states that during the morning and afternoon peak hours, approximately 8 heavy vehicles per hour are expected to access or egress the Activity Area. The Traffic Impact Assessment states this is considered to represent minimal additional traffic volumes on Porters Bridge Road and Meander Valley Road.

The potential noise impacts from traffic movements are discussed in Key Issue: 3 Noise.

8. Report Conclusions

This assessment has been based on the information provided by the proponent, ABx4 Pty Ltd, in the case for assessment (the EER), and additional information provided (Supplement).

This report incorporates specialist advice provided by EPA scientific and regulatory staff, the Department of Natural Resources and Environment Tasmania, and other government agencies, and considers issues raised in public submissions.

It is concluded that:

1. the RMPS and EMPCS objectives have been duly and properly pursued in the assessment of the proposal; and
2. the assessment of the proposal has been undertaken in accordance with the Environmental Impact Assessment Principles; and
3. the proposal is capable of being managed in an environmentally acceptable manner such that it is unlikely that the RMPS and EMPCS objectives would be compromised, provided that the Permit Conditions – Environmental No. 11390 appended to this report are imposed and duly complied with.

9. Report Approval

Environmental Assessment Report and conclusions, including environmental conditions, adopted:



Andrew Paul

CHAIRPERSON, BOARD OF THE ENVIRONMENT PROTECTION AUTHORITY

Meeting date: 4 March 2025

10. References

Pitt & Sherry (2023) DLI30 Bauxite Project Environmental Effects Report (dated 3 October 2023), prepared for ABx Group Ltd by Pitt & Sherry.

Pitt & Sherry (2025) Supplement to DLI30 Environmental Effects Report (dated 17 February 2025), prepared for ABx Group Ltd by Pitt & Sherry.

11. Appendices

- Appendix 1 Summary of public and agency submissions
- Appendix 2 Table of proponent management measures
- Appendix 3 Permit conditions – Environmental no. 11390

Appendix I: Summary of public and agency submissions

Table 2: Matters raised during public consultation period

Representation No. / Agency	Comments and Issues	Further Information Requested
59 representations / Public Health Services	<p>Many representations have raised concerns regarding the impacts of air quality to sensitive receivers within the vicinity of the proposal and to the broader community of Reedy Marsh from an increase in bauxite dust generated by quarrying activities. There are specific concerns regarding the health implications of bauxite dust suggesting that it is toxic, carcinogenic and can cause respiratory illnesses/issues in persons.</p> <p>Some representations have raised additional concerns around the generation of bauxite dust contaminating rainwater tanks and contaminating / covering homegrown gardens impacting on local produce being grown and consumed in the Reedy Marsh area.</p> <p>Public Health Services have provided the following comment in relation to the health implications of bauxite dust: Dust generated from activities associated with the DLI 30 bauxite project has the potential to be respirable and would be considered a nuisance, capable of causing non-specific airway symptoms such as cough, mucus production, throat irritation, and wheezing if it impacted sensitive receptors.</p> <p>Public Health Services requested further information, in the form of a Dust Management Plan. The purpose of a Dust Management Plan is to ensure that any dust generated is controlled on site, thereby ensuring neighbouring sensitive receptors are not adversely impacted.</p>	<p>The following additional information is required:</p> <ul style="list-style-type: none"> A Dust Management Plan detailing the mitigation measures that will be implemented to prevent dust leaving the site boundary, specifically at the south edge of the site during quarry plan stages 10 and 11. <p>There is direct line of sight from the closest sensitive receiver located at 620 Porters Bridge Road to the extraction point proposed for quarry plan stages 10 and 11, with no topographical or vegetative barrier in between.</p> <p>The proposed direction of quarrying may provide a visual and physical barrier to the west, however, the southern edge of the quarry may be visible for the duration of these two stages (years 13-15 & years 15-17) for the period of the campaign (3-4 months per year).</p> <p>Therefore, further information in the form of a dust management plan is required on how dust emissions will be managed during this stage of quarrying to prevent dust leaving the site boundary in this location, including consideration of avoiding potential health impacts from dust.</p> <p>Additional mitigation measures may include but not be limited to, relocating the mobile equipment further from the site boundary, creating a berm on the southern end of the site with several rows of plantation trees to the south of the berm, or revegetating the southern side of the berm with native species.</p>
53 Representations	<p>Concerns have been raised regarding the impacts of water quality from increased contamination and sedimentation by surface water runoff to the surrounding environment, specifically the Brushy Rivulet Conservation Area and waterways on and near the proposed site including the Brushy Rivulet and Meander River. Further concerns have been raised regarding the impacts to groundwater and the potential for Acid and metalliferous drainage (AMD) to occur from the proposed pit excavation on site.</p>	<p>The following additional information is required, with the information to also then inform an updated Stormwater Management Plan:</p> <ul style="list-style-type: none"> The off-site water discharge locations from the proposed settlement ponds have not been adequately addressed. Identify the off-site discharge locations of water from the proposed sediment ponds to the receiving environment. Particle size distribution (PSD) of the soils. The results of soil erodibility classification testing to IECA standards.

Representation No. / Agency	Comments and Issues	Further Information Requested
		<ul style="list-style-type: none"> A contingency plan to lower turbidity before off-site discharge (i.e. floc and drop) to the receiving environment. Other potential contaminants of concern associated with metal loads off site have not been investigated. The results of water leachability tests are required to clarify if this is a risk to water quality off-site discharges. A new monitoring schedule, as a table including parameters and frequency plus appropriate proposed discharge limits. <p>Contingency planning and actions to manage inflows of groundwater into the extraction areas and the exposure of bedrock that contains granophyre's which could contain AMD sulphide minerals.</p>
60 Representations	Concerns have been raised regarding the impacts to native flora and fauna and threatened flora and fauna from the proposed quarry, specifically in relation to the clearance of vegetation and threatened vegetation communities.	Sufficient information was received in the EER relating to this matter and no further information was requested.
37 Representations	Concerns have been raised regarding the impacts to the Brushy Rivulet Conservation Area located north of the quarry site, specifically the impacts from dust and water run-off generated by quarrying activities to flora and fauna within the conservation area.	These matters are also covered by the above requested additional information (i.e. the dust management plan and revised stormwater management plan).
34 Representations	Concerns have been raised regarding the noise impacts from the proposed quarry and quarry traffic to residences within the vicinity of the proposed site and to the community of Reedy Marsh.	Sufficient information was received in the EER relating to this matter and no further information was requested.
27 Representations	Concerns have been raised regarding the impacts to roadkill along the quarry access road and Porters Bridge Road from increased traffic movements generated by the quarry.	Sufficient information was received in the EER relating to this matter and no further information was requested.
3 Representations	Concerns have been raised regarding the risk of the spread of weeds and disease from the quarry proposal.	Sufficient information was received in the EER relating to this matter and no further information was requested.
3 Representations	Concerns have been raised regarding the impacts to Climate Change from the operation of a quarry in the area for 20-30 years, specifically in relation to intensified weather activities such as strong winds and increased rainfall/flooding in the area.	No further information requested. Not considered within the EPA Board's area of responsibility.
22 Representations	Concerns have been raised regarding the impacts to local vegetation and soil	These matters are also covered by the above requested additional information (i.e. the dust

Representation No. / Agency	Comments and Issues	Further Information Requested
	degradation from increased dust and sedimentation generated by the quarry.	management plan and revised stormwater management plan).
1 Representation	One representation raised concerns around the impacts to the Loggers Hut that has been identified on the proposed site.	No further information requested. Not considered within the EPA Board's area of responsibility.
28 Representations	Concerns have been raised regarding the proponent's lack of community consultation for the proposal and the advertising timeframe to submit representations.	No further information requested. The advertising period is set by the requirements of S.27G of EMPCA.
60 Representations	60 representations have raised concerns regarding the impacts to road safety from increased heavy traffic traversing Porters Bridge Road as a result of increased quarrying traffic in the Reedy Marsh area.	No further information requested. Not considered within the EPA Board's area of responsibility.
38 Representations	Some representations raised the issue of ongoing costs to ratepayers for the maintenance roads (including Porters Bridge Road) that will be utilised by increased quarry traffic.	No further information requested. Not considered within the EPA Board's area of responsibility.
37 Representations	Concerns have been raised regarding impacts to the amenity and liveability of Reedy Marsh for residents as a result of the quarry.	No further information requested. Not considered within the EPA Board's area of responsibility.
25 Representations	Concerns have been raised regarding the proposed use of Rural zoned land for quarrying purposes, with this land being classed as Prime Agricultural land.	Sufficient information was received in the EER relating to this matter and no further information was requested.
21 Representations	Concerns have been raised regarding the impacts to tourism and local businesses in the area if the quarry is approved for operation.	No further information requested. Not considered within the EPA Board's area of responsibility.
30 Representations	Concerns have been raised questioning the viability of the ABx4 Pty Ltd company and their lack of social licence to operate in the Reedy Marsh area.	No further information requested. Not considered within the EPA Board's area of responsibility.
13 Representations	Some representations have raised concerns regarding the devaluation to property in Reedy Marsh as a result of the quarry being approved.	No further information requested. Not considered within the EPA Board's area of responsibility.
8 Representations	Concerns have been raised regarding the limited jobs that will be created from the proposed quarry lifespan of 20-30 years.	No further information requested. Not considered within the EPA Board's area of responsibility.

Appendix 2: Table of proponent management measures

Table 2: Proponent management measures (Table 11 of EER)

Number	Action	Timing
Air quality		
1	Rehabilitation will be carried out progressively during extraction with a maximum of 2 ha of operational area disturbed at any one time.	Ongoing from Project commencement
2	During campaign breaks lasting more than 1-2 months, the excavation panels will either be rehabilitated prior to the end of the campaign or will be covered with excavated material to minimise dust production.	During campaign breaks
3	Excavation of topsoil will not be undertaken during periods of extended dry and windy weather.	Ongoing from Project commencement
4	Where practical a minimum 50% ground cover will be maintained across a given resource area during mining operations. Where this is unachievable, soils will be stored in locations protected from wind and other forms of erosion in a configuration that keeps the soil viable during storage.	Ongoing from Project commencement
5	Outside of campaigns the site manager will monitor weather conditions and visit the Activity Area regularly to ensure any dust generated will not cause environmental nuisance. If weather conditions are likely to cause dust emissions, mitigation measures (such as watering haul roads with a water cart) will be implemented.	During campaign breaks
6	Rock crushing will occur in the north-east corner of the Project Area to ensure dust from crushing does not travel to the nearest residence (located to the south west of the Property).	Ongoing from Project commencement
7	Vehicle speed limits within the Activity Area will be restricted to 40 km/h to minimise dust generation.	Ongoing from Project commencement
Water quality		
8	Following the stormwater plan.	Ongoing from Project commencement
9	Rehabilitation will be carried out progressively during the extraction with a maximum of 2 ha of operational area within a stage at any one time.	Ongoing from Project commencement
10	During breaks lasting more than 1-2 months between campaigns, the excavation panels will either be rehabilitated prior to the end of the campaign or will be covered with excavated material to minimise runoff.	Ongoing from Project commencement during campaign breaks
11	Implementing temporary silt fences at the downstream face to prevent transport of material.	Ongoing from Project commencement
12	Ensuring routine monitoring of sediment basins to monitor pH, ORP, EC, DO, colour, and temperature.	Ongoing from Project commencement
Noise emissions		
13	Ensuring all plant and equipment will be maintained and in good order at all times, especially noise control equipment such as mufflers and exhaust pipes.	Ongoing from Project commencement

Number	Action	Timing
14	Considering noise control issues carefully when selecting new plant or equipment or engaging contractors to carry out work within the Activity Area.	Ongoing from Project commencement
15	Ensuring all heavy vehicles based in the Activity Area use broad band style reversing beacons.	Ongoing from Project commencement
16	Avoiding unnecessary noises such as “dropped loads” or scraping loader buckets on the ground.	Ongoing from Project commencement
Natural values		
17	Threatened vegetation community, <i>Eucalyptus ovata</i> forest and woodland, will be excluded from any disturbance by: <ul style="list-style-type: none"> • Installing barrier fencing or similar • Preventing the spread of weeds into the community; and • Maintaining the current drainage regime. 	Ongoing from Project commencement
18	Avoiding clearance of the DOB to the north of Pit 2.	During Pit 2 operations
19	Excluding the threatened Slender curved riceflower plants occurring on the road margins from disturbance through installing barrier fencing or similar.	Ongoing from Project commencement
20	A preclearance survey for marsupial carnivore dens.	Prior to Project commencement
21	Roadkill mitigation measures, including: <ul style="list-style-type: none"> • Speed limits on the access road between dusk and dawn • Installing advisory signage; and • Providing education and awareness training for drivers. 	Ongoing from Project commencement
22	A preclearance eagle nest survey within the modelled potential habitat within a minimum of 500 m from the proposed operational areas (and likely within 1 km line-of-sight of such areas).	Prior to Project commencement
23	Ensuring runoff is managed by implementing silt fencing on the side of tracks and around development that is in close proximity to water sources to protect aquatic fauna.	Ongoing from Project commencement
Weeds, pests and pathogens		
24	Developing a formal Weed and Pathogen Management Plan.	Ongoing from Project commencement
25	Maintaining appropriate hygiene protocols, including wash down procedures for vehicles entering and exiting the Project Area.	Ongoing from Project commencement
26	Ensuring the area remains free of PC and freshwater pathogens by maintaining puddle free access roads, internal tracks and quarrying areas.	Ongoing from Project commencement
Waste		
27	Quarried solid waste material that is not of sufficient grade for blending will be used to rehabilitate the stages followed by being covered in topsoil.	Ongoing from Project commencement
28	Ensuring waste is disposed of to an appropriately approved or licensed facility, in accordance with EPA and/or Meander Valley Council requirements.	Ongoing from Project commencement

Number	Action	Timing
29	Ensuring rubbish bins (with lids) are located at appropriate locations across the Activity Area with staff required to avoid littering and collect any rubbish observed across the Project Area.	Ongoing from Project commencement
30	Removing waste regularly to maintain good housekeeping practices.	Ongoing from Project commencement
31	Ensuring liquid waste from temporary ablution blocks is emptied/removed by a suitably qualified waste disposal contractor for sewage disposal and taken to the municipal wastewater treatment plant.	Ongoing from Project commencement
32	Ensuring the pH of water collected in the sediment basins is monitored and if low pH is detected regularly, treatment for AMD will be implemented.	Ongoing from Project commencement
33	Developing an AMD contingency plan which will incorporate dosing the sediment basins with lime or another appropriate medium.	Ongoing from Project commencement
34	Ensuring disturbed areas are covered as soon as practicable to prevent exposure and erosion of the remaining profile.	Ongoing from Project commencement
Environmentally hazardous materials		
35	Ensuring the fuel storage and transport requirements of the <i>Dangerous Substances (Safe Handling) Act 2005</i> are met (as outlined).	Ongoing from Project commencement
36	Ensuring fuel and oil brought to the Activity Area are stored in an appropriately designed and operated bunded area.	Ongoing from Project commencement
37	Refuelling and repair of equipment is undertaken in a designated laydown area that is appropriately designed, bunded and equipped to contain and clean any spills that may occur.	Ongoing from Project commencement
38	Maintaining a sediment pond with hydrocarbon separator to remove potential hydrocarbon contamination from the laydown area.	Ongoing from Project commencement
Environmental impacts of traffic		
39	Ensuring only minimal upgrades to roads occur (filling potholes, minor trimming).	Ongoing from Project commencement
40	Installing sediment fences around waterways.	Ongoing from Project commencement
41	Maintaining current road drainage conditions.	Ongoing from Project commencement
42	Limiting cartage to and from the Project Area to within daylight hours.	Ongoing from Project commencement
43	Limiting vehicle speed between dusk and dawn.	Ongoing from Project commencement
44	Ensuring drivers are educated on safe driving practices.	Ongoing from Project commencement

Appendix 3: Permit conditions – Environmental no. I I 390

PERMIT PART B

PERMIT CONDITIONS - ENVIRONMENTAL No. 11390

Issued under the *Environmental Management and Pollution Control Act 1994*

Activity: **The operation of a quarry with materials handling (crushing, screening)
(ACTIVITY TYPE: Crushing, grinding, milling or separating into different
sizes (rocks, ores or minerals))
DL130 BAUXITE PROJECT QUARRY, OFF PORTERS BRIDGE ROAD
REEDY MARSH TAS 7304**

The above activity has been assessed as a level 2 activity under the *Environmental Management and Pollution Control Act 1994*.

Acting under Section 25(5)(a)(i) of the EMPCA, the Board of the Environment Protection Authority has required that this Permit Part B be included in any Permit granted under the *Land Use Planning and Approvals Act 1993* with respect to the above activity.

Municipality: **MEANDER VALLEY**
Permit Application Reference: **PA 24/0052**
EPA file reference: **22/9483**

Date conditions approved: 07 March 2025

Signed:



CHAIRPERSON, BOARD OF THE ENVIRONMENT
PROTECTION AUTHORITY

DEFINITIONS

Unless the contrary appears, words and expressions used in this Permit Part B have the meaning given to them in **Schedule 1** of this Permit and in the EMPCA. If there is any inconsistency between a definition in the EMPCA and a definition in this Permit Part B, the EMPCA prevails to the extent of the inconsistency.

ENVIRONMENTAL CONDITIONS

The person responsible for the activity must comply with the conditions contained in **Schedule 2** of this Permit Part B.

INFORMATION

Attention is drawn to **Schedule 3**, which contains important additional information.

Table Of Contents

Schedule 1: Definitions.....	5
Schedule 2: Conditions.....	7
Maximum Quantities.....	7
Q1 Regulatory limits	7
General.....	7
G1 Activity Area.....	7
G2 Access to and awareness of conditions and associated documents.....	7
G3 Incident response.....	7
G4 Proposed change to activity.....	7
G5 Change of responsibility.....	8
G6 Change of ownership.....	8
G7 Complaints register.....	8
G8 Quarry Code of Practice.....	8
G9 Amendment of required plans and reports.....	8
G10 Notification prior to commencement.....	8
G11 Annual Environmental Review.....	8
Atmospheric.....	9
A1 Covering of vehicles.....	9
A2 Control of dust emissions.....	9
A3 Dust emissions from traffic areas.....	9
A4 Control of dust emissions from crushing and screening plant	10
A5 Dust Management Plan.....	10
A6 Dust Monitoring Program.....	10
Decommissioning And Rehabilitation.....	11
DC1 Progressive rehabilitation.....	11
DC2 Temporary suspension of activity.....	11
DC3 Notification of cessation.....	12
DC4 DRP requirements.....	12
DC5 Rehabilitation following cessation.....	12
DC6 Stockpiling of surface soil.....	12
Flora And Fauna.....	13
FF1 Protection of Eucalyptus ovata forest and woodland (DOV).....	13
FF2 Protection of Pimelea curviflora var. curviflora (slender curved riceflower).....	13
FF3 Protection of Eucalyptus obliqua dry forest (DOB).....	13
FF4 Tasmanian devil (Sarcophilus harrisii) and spotted-tailed quoll (Dasyurus maculatus maculatus) den survey.....	13
FF5 Tasmanian wedge-tailed eagle (Aquila audax subsp. fleayi) nest survey.....	13
Hazardous Substances.....	14
H1 Spill kits.....	14
H2 Storage and handling of hazardous materials.....	14
H3 Handling of hazardous materials - mobile.....	14
Monitoring.....	14
M1 Samples and measurements for monitoring purposes.....	14
Noise Control.....	15
N1 Operating hours.....	15
N2 Noise emission limits.....	15
N3 Noise complaints.....	15
N4 Noise survey requirements.....	15
N5 Noise Survey Method and Reporting.....	16
Operations.....	16

OP1 Machinery washdown.....	16
OP2 Weed & Disease Management Plan	16
Stormwater Management.....	17
SW1 Perimeter drains or bunds.....	17
SW2 Stormwater.....	17
SW3 Stormwater Management Plan.....	17
SW4 Investigation trigger level.....	17
Schedule 3: Information.....	18
Legal Obligations.....	18
LO1 Storage and handling of dangerous goods, explosives and dangerous substances.....	18
LO2 EMPCA.....	18
LO3 Aboriginal relics requirements.....	18
LO4 MRDA.....	18
Other Information.....	18
OI1 Waste management hierarchy.....	18
OI2 Notification of incidents under section 32 of EMPCA	18
OI3 Release of Relevant Information.....	

Attachments

Attachment 1: Activity Area (modified: 14/02/2025 14:58).....	1 page
Attachment 2: Mapped DOV vegetation community (modified: 17/02/2025 14:40).....	1 page
Attachment 3: Mapped DOB vegetation community (modified: 17/02/2025 14:35).....	1 page

Schedule 1: Definitions

In this Permit Part B:-

50,000 cubic metres is considered equivalent to 70,000 tonnes.

Aboriginal Relic has the meaning described in section 2(3) of the *Aboriginal Heritage Act 1975*.

active extraction means when ground is being disturbed by machinery for the purposes of extracting material.

Activity means any environmentally relevant activity (as defined in Section 3 of EMPCA) to which this document relates, and includes more than one such activity.

Activity Area means the area to be used for the Activity when these conditions take effect, as depicted in Attachment 1.

Authorized Officer means an authorized officer under section 20 of EMPCA.

Background Noise Level is the level that is exceeded 90% of the time for each measurement interval when measured in the absence of the subject site noise. Background noise is described using the $L_{A90,T}$ descriptor.

Control Location (Noise) means a location chosen to represent the general ambient sound without contribution from noise sources at the activity.

Director means the Director, Environment Protection Authority holding office under section 18 of EMPCA and includes a delegate or person authorised in writing by the Director to exercise a power or function on the Director's behalf.

Dominant or Intrusive Noise Characteristics means any noise characteristic that contributes to a noise being considered louder than would be indicated by the A-weighted sound pressure level measured, or that exacerbates nuisance or harm caused by the noise.

DRP means Decommissioning and Rehabilitation Plan.

EMPCA means the *Environmental Management and Pollution Control Act 1994*.

Environmental Harm and **Material Environmental Harm** and **Serious Environmental Harm** each have the meanings ascribed to them in Section 5 of EMPCA.

Environmental Nuisance has the meanings ascribed to it in Section 3 of EMPCA.

Environmentally Hazardous Material means any substance or mixture of substances of a nature or held in quantities which present a reasonably foreseeable risk of causing serious or material environmental harm if released to the environment and includes fuels, oils, waste and chemicals but excludes sewage.

EPA Board means the Board of the Environment Protection Authority established under section 13 of EMPCA and includes a delegate or person authorised in writing by the EPA Board to exercise a power or function on the EPA Board's behalf.

Guide to Eagle Nest Searching and Nest Activity Checks means the document titled *Guide to Eagle Nest Searching and Nest Activity Checks*, by the Environment Protection Authority, dated May 2023, and any amendments to or substitution of this document.

Maximum Disturbed Area means the area disturbed to facilitate the activity and includes but is not limited to; vegetation disturbance, soil disturbance, access roads, hardstand, working area, vehicle parking and infrastructure (i.e. buildings, site office, sheds etc).

Noise Measurement Procedures Manual means the document titled *Noise Measurement Procedures Manual*, by the Department of Environment, Parks, Heritage and the Arts, dated July 2008, and any amendment to or substitution of this document.

Noise Sensitive Premises means residences and residential zones (whether occupied or not), schools, hospitals, caravan parks and similar land uses involving the presence of individual people for extended periods, except in the course of their employment or for recreation.

Non-Trivial Environmental Incidents means an incident requiring the person responsible to implement actions to control or respond to the incident to minimise environmental harm and/or nuisance.

Normal Ambient Noise refers to the ambient noise of the receiver location in the absence of the subject site noise. Ambient noise level is measured in L_{Aeq} .

Person Responsible is any person who is or was responsible for the environmentally relevant activity to which this document relates and includes the officers, employees, contractors, joint venture partners and agents of that person, and includes a body corporate.

Planning Authority means the Council(s) for the municipal area(s) in which the Activity Area is situated.

Pollutant has the meaning ascribed to it in section 3 of EMPCA.

Quarry Code of Practice means the document of this title published by the Environment Protection Authority in May 2017, and includes any subsequent versions of this document.

Reporting Period means the 12 months ending on 31 December of each year.

Stormwater means water runoff as a consequence of a rainfall event, whether surface flow, piped flow, or flow within conduits, including any contaminants collected by the water during its passage.

Stormwater Management Plan means the document titled *DL130 Bauxite Project - Stormwater Management Plan*, by Pitt & Sherry, dated 24 January 2025, and any amendments to or substitution of this document.

Threatened Species means has the meaning ascribed in the *Threatened Species Act 1995*.

Weed means a plant species that has, or is likely to have, an adverse impact on the environment because of the introduction, spread or increase in population size of the species in an area; and includes a declared weed as defined in the *Biosecurity Act 2019* and subordinate regulations.

Weed And Disease Guidelines means the document titled *Weed and Disease Planning and Hygiene Guidelines - Preventing the spread of weeds and diseases in Tasmania*, by the Department of Primary Industries, Parks, Water and Environment, dated March 2015, and any amendment to or substitution of this document.

Schedule 2: Conditions

Maximum Quantities

Q1 Regulatory limits

- 1** The activity must not exceed the following limits :
 - 1.1** 40,000 cubic metres per year of rocks, ores or minerals processed.
 - 1.2** 50,000 cubic metres per year of rock or gravel extracted.

General

G1 Activity Area

The activity must be confined to the Activity Area.

G2 Access to and awareness of conditions and associated documents

A copy of these conditions and any associated documents referred to in these conditions must be held in a location that is known to and accessible to the person responsible for the activity. The person responsible for the activity must ensure that all persons who are responsible for undertaking work within the Activity Area, including contractors and sub-contractors, are familiar with these conditions to the extent relevant to their work.

G3 Incident response

If an incident causing or threatening environmental nuisance, serious environmental harm or material environmental harm from pollution occurs in the course of the activity, then the person responsible for the activity must immediately take all reasonable and practicable action to minimise any adverse environmental effects from the incident.

G4 Proposed change to activity

- 1** The person responsible must notify the Director in writing prior to implementing any change to the activity authorised by this document that may cause or increase the emission of a pollutant or which may result in environmental harm or environmental nuisance (even temporarily). A change includes, but is not limited to, any of the following:
 - 1.1** an increase in the discharge of a pollutant, or the location of its discharge.
 - 1.2** the construction, installation, alteration or removal of any structure or equipment used in the course of carrying out the activity.
 - 1.3** any clearance of native vegetation or earthworks.
 - 1.4** a change in the quantity or characteristics of materials used in carrying out the activity.
- 2** The notification must be in an approved form and include the following:
 - 2.1** details of the proposed change;
 - 2.2** an assessment of the environmental impacts that may result from the change;
 - 2.3** any relevant approvals held by the person responsible; and
 - 2.4** any advice from the relevant planning authority to the effect that approval is not required.
- 3** The person responsible must provide additional information as requested by an Authorized Officer.

- 4 The proposed change must not be implemented until the Director has confirmed in writing that they are satisfied that no other approval or variation of this document is required.
- 5 For the avoidance of doubt, a notification of a proposed change under this provision is not required if the proposed change is part of a referral to the EPA Board for assessment under sections 24, 25 or 27 of EMPCA.

G5 Change of responsibility

If the person responsible for the activity intends to cease to be responsible for the activity, that person must notify the Director in writing of the full particulars of any person who will become the person responsible for the activity, before such cessation.

G6 Change of ownership

If the owner of the Activity Area changes or is to change, then, as soon as reasonably practicable but no later than 30 days after becoming aware of the change or intended change in the ownership of the Activity Area, the person responsible must notify the Director in writing of the change or intended change of ownership.

G7 Complaints register

- 1 A public complaints register must be maintained. The public complaints register must, as a minimum, record the following detail in relation to each complaint received in which it is alleged that environmental harm (including an environmental nuisance) has been caused by the activity:
 - 1.1 the date and time at which the complaint was received;
 - 1.2 contact details for the complainant (where provided);
 - 1.3 the subject matter of the complaint;
 - 1.4 any investigations undertaken with regard to the complaint; and
 - 1.5 the manner in which the complaint was resolved, including any mitigation measures implemented.
- 2 Complaint records must be retained for a period of at least 3 years.

G8 Quarry Code of Practice

Unless otherwise required by these conditions or required in writing by the Director, the activity (or activities) undertaken within the Activity Area must comply with the Acceptable Standards provisions of the *Quarry Code of Practice*.

G9 Amendment of required plans and reports

- 1 The plans and reports required by these conditions must be amended to address any matter required by the Director, as advised by notice in writing.
- 2 Amended plans and reports must be resubmitted within the timeframe that the Director specifies.

G10 Notification prior to commencement

The Director must be notified in writing of the commencement of operations at least 14 days before that occurs.

G11 Annual Environmental Review

- 1 Unless otherwise specified in writing by the Director, a publicly available Annual Environmental Review for the activity must be submitted to the Director each year within three months of the end of the reporting period. Without limitation, each Annual Environmental Review must include the following information:

- 1.1 a statement by the General Manager, Chief Executive Officer or equivalent for the activity acknowledging the contents of the Annual Environmental Review;
- 1.2 subject to the *Personal Information Protection Act 2004*, a list of all complaints received from the public during the reporting period concerning actual or potential environmental harm or environmental nuisance caused by the activity and a description of any actions taken as a result of those complaints;
- 1.3 details of environment-related procedural or process changes that have been implemented during the reporting period;
- 1.4 a summary of the amounts (tonnes or litres) of both solid and liquid wastes produced and treatment methods implemented during the reporting period. Initiatives or programs planned to avoid, minimise, re-use, or recycle such wastes over the next reporting period should be detailed;
- 1.5 details of all non-trivial environmental incidents and/or incidents of non compliance with these conditions that occurred during the reporting period, and any mitigative or preventative actions that have resulted from such incidents;
- 1.6 a summary of the monitoring data and record keeping required by these conditions. This information should be presented in graphical form where possible, including comparison with the results of at least the preceding reporting period. Special causes and system changes that have impacted on the parameters monitored must be noted. Explanation of significant deviations between actual results and any predictions made in previous reports must be provided;
- 1.7 identification of breaches of limits specified in these conditions and significant variations from predicted results contained in any relevant EIS or EMP, an explanation of why each identified breach of specified limits or variation from predictions occurred and details of the actions taken in response to each identified breach of limits or variance from predictions;
- 1.8 a list of any issues, not discussed elsewhere in the report, that must be addressed to improve compliance with these conditions, and the actions that are proposed to address any such issues;
- 1.9 a summary of fulfilment of environmental commitments made for the reporting period. This summary must include indication of results of the actions implemented and explanation of any failures to achieve such commitments; and
- 1.10 a summary of any community consultation and communication undertaken during the reporting period.

Atmospheric

A1 Covering of vehicles

Vehicles carrying loads containing material which may blow or spill must be equipped with effective control measures to prevent the escape of the materials from the vehicles when they leave the Activity Area or travel on public roads. Effective control measures may include tarpaulins or load dampening.

A2 Control of dust emissions

Dust emissions from within the Activity Area must be controlled to the extent necessary to prevent environmental nuisance beyond the boundary of the Activity Area.

A3 Dust emissions from traffic areas

Dust emissions from areas of the Activity Area used by vehicles must be limited or controlled by dampening or by other effective measures.

A4 Control of dust emissions from crushing and screening plant

- 1** Dust produced by the operation of all crushing and/or screening plant must be controlled by the use of one or more of the following methods to the extent necessary to prevent environmental nuisance:
 - 1.1** the installation of fixed water sprays at all crushers and/or screening plant and at all necessary points where processed material changes direction due to belt transfer;
 - 1.2** the installation of dust extraction equipment at all crushers and/or screening plant and at all necessary points where processed material changes direction due to belt transfer;
 - 1.3** the enclosure of the crushing and/or screening plant and the treatment of atmospheric emissions by dust extraction equipment; or
 - 1.4** any other method that has been approved in writing by the Director.

A5 Dust Management Plan

- 1** Unless otherwise approved by the Director in writing, within thirty (30) days of the date on which these conditions take effect, a revised Dust Management Plan must be submitted to the Director for approval. The plan is to have the aim of ensuring that dust emissions are managed to prevent environmental harm or nuisance at or beyond the boundary of the Activity Area. This requirement will be deemed to be satisfied only when the Director indicates in writing that the submitted document adequately addresses the requirements of this condition.
- 2** Unless otherwise approved by the Director in writing, the plan must be consistent with Section 3.1 of the EER and supplementary preliminary Dust Management Plan.
- 3** The plan must be prepared in accordance with any guidelines provided by the Director.
- 4** Without limitation, the plan must include details of the following:
 - 4.1** a table containing all of the major commitments made in the plan;
 - 4.2** an implementation timetable for key aspects of the plan; and
 - 4.3** a reporting program to regularly advise the Director of the results of the plan.
- 5** Once approved the person responsible must act in accordance with the approved plan.
- 6** The person responsible may apply to the Director to vary or substitute the plan. Any variation or substitution of the plan approved by the Director, by notice in writing, replaces the earlier approval with effect from the date specified in the notice.
- 7** Unless otherwise approved by the Director in writing, the plan must be reviewed:
 - 7.1** Every five (5) years from the date of approval of the most recent plan; and
 - 7.2** Where the Director is of the opinion that the plan requires review within a specified timeframe.

A6 Dust Monitoring Program

- 1** Unless otherwise approved by the Director in writing, within thirty (30) days of the date on which these conditions take effect, a Dust Monitoring Program must be submitted to the Director for approval. The program is to have the aim of monitoring dust emissions at the boundary of the Activity Area to ensure that dust emissions are managed to prevent environmental harm or nuisance at or beyond the boundary of the Activity Area. This requirement will be deemed to be satisfied only when the Director indicates in writing that the submitted document adequately addresses the requirements of this condition.
- 2** The program must be prepared in accordance with any guidelines provided by the Director.

- 3 Dust monitoring must be undertaken in accordance with a method approved in writing by the Director, as may be amended from time to time with written approval of the Director.
- 4 Unless otherwise approved by the Director in writing:
 - 4.1 Background dust monitoring must occur for a minimum period of three (3) months prior to the commencement of operations; and
 - 4.2 Dust monitoring must continue upon commencement of operations.
- 5 Once approved the person responsible must act in accordance with the approved program.
- 6 The person responsible may apply to the Director to vary or substitute the program. Any variation or substitution of the program approved by the Director, by notice in writing, replaces the earlier approval with effect from the date specified in the notice.
- 7 Unless otherwise approved by the Director in writing, the program must be reviewed:
 - 7.1 Every five (5) years from the date of approval of the most recent program; and
 - 7.2 Where the Director is of the opinion that the program requires review within a specified timeframe.

Decommissioning And Rehabilitation

DC1 Progressive rehabilitation

- 1 Unless otherwise approved by the Director in writing, worked out or disused sections of the Activity Area must be rehabilitated concurrently with extractive activities on other sections of the Activity Area. Progressive rehabilitation must be carried out in accordance with the relevant provisions of the *Quarry Code of Practice*, unless otherwise approved in writing by the Director.
- 2 Unless otherwise approved by the Director in writing:
 - 2.1 The maximum disturbed area of land at any given time without rehabilitation must not exceed 12 hectares; and
 - 2.2 The maximum area for active extraction must not exceed 2 ha at any given time.

DC2 Temporary suspension of activity

- 1 Within 30 days of becoming aware of any event or decision which is likely to give rise to the temporary suspension of the activity, the person responsible for the activity must notify the Director in writing of that event or decision. The notice must specify the date upon which the activity is expected to suspend or has suspended.
- 2 During temporary suspension of the activity the Activity Area must be managed and monitored by the person responsible for the activity to ensure that emissions from the Activity Area do not cause serious environmental harm, material environmental harm or environmental nuisance.
- 3 If required by the Director, a Care and Maintenance Plan for the activity must be submitted to the Director for approval, by a date specified in writing by the Director. This requirement will be deemed to be satisfied only when the Director indicates in writing that the submitted document adequately addresses the requirements of this condition.
 - 3.1 The plan must be prepared in accordance with any guidelines provided by the Director.
 - 3.2 Once approved the person responsible must act in accordance with the approved Care and Maintenance Plan.

3.3 The person responsible may apply to the Director to vary or substitute the Care and Maintenance Plan. Any variation or substitution of the plan approved by the Director, by notice in writing, replaces the earlier approval with effect from the date specified in the notice.

- 4** Unless otherwise approved in writing by the Director, if the activity on the Activity Area has substantially ceased for 2 years or more, rehabilitation of the Activity Area must be carried out in accordance with the requirements of these conditions as if the activity has permanently ceased.

DC3 Notification of cessation

Within 30 days of becoming aware of any event or decision which is likely to give rise to the permanent cessation of the activity, the person responsible for the activity must notify the Director in writing of that event or decision. The notice must specify the date upon which the activity is expected to cease or has ceased.

DC4 DRP requirements

- 1** Unless otherwise approved in writing by the Director, a Decommissioning and Rehabilitation Plan (DRP) for the activity must be submitted for approval to the Director within 30 days of the Director being notified of the planned cessation of the activity. The DRP must be prepared in accordance with any guidelines provided by the Director. This requirement will be deemed to be satisfied only when the Director indicates in writing that the submitted document adequately addresses the requirements of this condition.
- 2** The person responsible may apply to the Director to vary or substitute the DRP. Any variation or substitution of the plan approved by the Director, by notice in writing, replaces the earlier approval with affect from the date specified in the notice.

DC5 Rehabilitation following cessation

- 1** Following permanent cessation of the activity, and unless otherwise approved in writing by the Director, the Activity Area must be rehabilitated including:
 - 1.1** stabilisation of any land surfaces that may be subject to erosion;
 - 1.2** removal or mitigation of all environmental hazards or land contamination, that might pose an ongoing risk of causing environmental harm; and
 - 1.3** decommissioning of any equipment that has not been removed.
- 2** Where a Decommissioning and Rehabilitation Plan (DRP) has been approved by the Director, decommissioning and rehabilitation must be carried out in accordance with that plan.
- 3** The person responsible may apply to the Director to vary or substitute the DRP. Any variation or substitution of the plan approved by the Director, by notice in writing, replaces the earlier approval with effect from the date specified in the notice.

DC6 Stockpiling of surface soil

Prior to commencement of extractive activities on any portion of the Activity Area, surface soils must be removed in that portion of the Activity Area to be disturbed by the conduct of the activity and stockpiled for later use in rehabilitation of the Activity Area. Topsoil must be kept separate from other overburden and protected from erosion or other disturbance.

Flora And Fauna

FF1 Protection of *Eucalyptus ovata* forest and woodland (DOV)

- 1 The interface between the access road corridor and the DOV community, as identified in Attachment 2, must be delineated with a fence or similar method approved in writing by the Director within thirty (30) days of the date on which these conditions take effect;
- 2 Unless otherwise approved in writing by the Director:
 - 2.1 there must be no disturbance of the vegetation beyond this fence; and
 - 2.2 the activity must be conducted in a manner that does not cause degradation or disturbance to the DOV community.

FF2 Protection of *Pimelea curviflora* var. *curviflora* (slender curved riceflower)

Unless otherwise approved in writing by the Director, the activity must be conducted in a manner that does not cause degradation or disturbance (including sedimentation) to the areas identified in Appendix A of the EMP as being inhabited by the species slender curved riceflower.

FF3 Protection of *Eucalyptus obliqua* dry forest (DOB)

- 1 The interface between 'Pit 2' and the DOB community, as identified in Attachment 3, must be delineated with a fence or similar method approved in writing by the Director within thirty (30) days of the date on which these conditions take effect;
- 2 Unless otherwise approved in writing by the Director:
 - 2.1 there must be no disturbance of the vegetation beyond this fence; and
 - 2.2 the activity must be conducted in a manner that does not cause degradation or disturbance to the DOB community.

FF4 Tasmanian devil (*Sarcophilus harrisii*) and spotted-tailed quoll (*Dasyurus maculatus maculatus*) den survey

- 1 At least thirty (30) days prior to the commencement of operations, or by a date otherwise specified in writing by the Director, a survey of the area to be disturbed for Tasmanian devil and spotted-tailed quoll dens must be conducted.
- 2 The person(s) conducting the survey must be appropriately qualified in the identification of the species and its habitat.
- 3 A report outlining the findings of the survey must be submitted to the Director.
 - 3.1 If any dens will be adversely impacted by the activity, this must be brought to the attention of the Department which administers the *Threatened Species Protection Act 1995* prior to such impact occurring.
 - 3.2 This requirement will be deemed to be satisfied only when the Director indicates in writing that the submitted document adequately addresses the requirements of this condition.

FF5 Tasmanian wedge-tailed eagle (*Aquila audax* subsp. *fleayi*) nest survey

- 1 Unless otherwise approved in writing by the Director:
 - 1.1 no more than 12 months prior to the commencement of operations, a survey for nests of the Tasmanian wedge-tailed eagle must be undertaken between February and June within the Activity Area and within 1 km of the boundary of the Activity Area.
 - 1.2 eagle nest searches should be undertaken in accordance with the *Guide to Eagle Nest Searching and Nest Activity Checks*.

- 1.3 a report outlining the findings of the survey must be submitted to the Director for approval within thirty (30) days of the survey being undertaken.
- 2 Works including vegetation clearance must not commence without written approval from the Director.

Hazardous Substances

H1 Spill kits

Spill kits appropriate for the types and volumes of materials handled within the Activity Area must be kept in appropriate locations and maintained in a functional condition to assist with the containment of spilt environmentally hazardous materials.

H2 Storage and handling of hazardous materials

- 1 Unless otherwise approved in writing by the Director, environmentally hazardous materials held within the Activity Area must be:
 - 1.1 stored within maintained and functional impervious bunded areas, spill trays or other containment systems; and
 - 1.2 managed to prevent unauthorised discharge, emission or deposition of pollutants:
 - 1.2.1 to soils within the boundary of the Activity Area in a manner that is likely to cause serious or material environmental harm;
 - 1.2.2 to groundwater;
 - 1.2.3 to waterways; or
 - 1.2.4 beyond the boundary of the Activity Area.

H3 Handling of hazardous materials - mobile

- 1 Where mobile containment of environmentally hazardous materials is utilised for the fuelling or servicing of mobile or fixed plant within the Activity Area, all reasonable measures must be implemented to prevent unauthorised discharge, emission or deposition of pollutants:
 - 1.1 to soils within the boundary of the Activity Area in a manner that is likely to cause serious or material environmental harm;
 - 1.2 to groundwater;
 - 1.3 to waterways; or
 - 1.4 beyond the boundary of the Activity Area.
- 2 Reasonable measures may include spill kits, spill trays/bunds or absorbent pads, and automatic cut-offs on any pumping equipment.

Monitoring

M1 Samples and measurements for monitoring purposes

- 1 Any sample or measurement required under these conditions must be taken and processed in accordance with the following:
 - 1.1 sampling and measuring must be undertaken by a person with training, experience, and knowledge of the appropriate procedure;
 - 1.2 the integrity of samples must be maintained prior to delivery to a testing facility;
 - 1.3 sample analysis must be conducted by a testing facility accredited by the National Association of Testing Authorities (NATA), or a testing facility approved in writing by the Director, for the specified test;

- 1.4 details of methods employed in taking samples and measurements and results of sample analysis, and measurements must be retained for at least three (3) years after the date of collection; and
- 1.5 sampling and measurement equipment must be maintained and operated in accordance with manufacturer's specifications and records of maintenance must be retained for at least three (3) years.

Noise Control

N1 Operating hours

- 1 Unless otherwise approved in writing by the Director, activities associated with the extraction of rock, gravel, sand, clay or minerals; heavy vehicles entering/leaving the Activity Area; loading of product; and crushing/screening, must not be undertaken outside the hours of 0700 hours to 1700 hours on weekdays and 0800 hours to 1600 hours on Saturdays.
- 2 Notwithstanding the above paragraph, activities must not be carried out on Sundays, and public holidays that are observed Statewide (Easter Tuesday excepted).

N2 Noise emission limits

- 1 Noise emissions from the Activity Area at any noise sensitive premises in other ownership and expressed as the equivalent continuous A-weighted sound pressure level must not exceed:
 - 1.1 45 dB(A) between 0700 hours and 1900 hours (Day time); and
 - 1.2 40 dB(A) between 1900 hours and 2200 hours (Evening time); and
 - 1.3 35 dB(A) between 2200 hours and 0700 hours (Night time).
- 2 Where the combined level of noise from the activity and the normal ambient noise exceeds the noise levels stated above, this condition will not be considered to be breached unless the noise emissions from the activity are audible and exceed the background noise level by at least 5 dB(A).
- 3 The time interval over which noise levels are averaged must be 10 minutes or an alternative time interval specified in writing by the Director.
- 4 Noise emissions from the site should not contain any dominant or intrusive noise characteristics when measured or observed at any noise sensitive premises as assessed in accordance with the *Noise Measurement Procedures Manual*. Where noise emissions from the site contain any dominant or intrusive noise characteristics at any noise sensitive premises, measured noise levels must be adjusted for tonality, impulsiveness, modulation and low frequency in accordance with the *Noise Measurement Procedures Manual*.
- 5 All methods of measurement must be in accordance with the *Noise Measurement Procedures Manual*.

N3 Noise complaints

In the event that a noise complaint is received in relation to the Activity Area, the complaint must be reported to the Director within 24 hours.

N4 Noise survey requirements

- 1 Unless otherwise approved in writing by the Director, a noise survey must be completed:
 - 1.1 within six (6) months after any change to the activity which is likely to substantially alter the character or increase the volume of noise emitted from the Activity Area; and

- 1.2 Where the Director is of the opinion that a noise survey must be completed within a specified timeframe.

N5 Noise Survey Method and Reporting

- 1 Noise surveys must be undertaken in accordance with a survey method approved in writing by the Director, as may be amended from time to time with written approval of the Director.
- 2 Without limitation, the survey method must address the following:
 - 2.1 measurements must be carried out at day, evening and night times (where applicable) at each location; and
 - 2.2 measurement locations, and the number thereof, must be specified, with one location established as a control location (noise).
- 3 Measurements and data recorded during the survey must include:
 - 3.1 operational status of noise producing equipment and throughput of the activity;
 - 3.2 subjective descriptions of the sound at each location;
 - 3.3 details of meteorological conditions relevant to the propagation of noise; and
 - 3.4 the equivalent continuous (L_{eq}) and L_1 , L_{10} , L_{50} , L_{90} and L_{99} A-weighted sound pressure levels measured over a period of 10 minutes or an alternative time interval specified by the Director.
- 4 A noise survey report must be forwarded to the Director within 30 days from the date on which the noise survey is completed
- 5 The noise survey report must include the following:
 - 5.1 the results and interpretation of the measurements required by these conditions;
 - 5.2 a map of the area surrounding the activity with the boundary of the Activity Area, measurement locations, and noise sensitive premises clearly marked on the map;
 - 5.3 any other information that will assist with interpreting the results and whether the activity is in compliance with these conditions and EMPCA; and
 - 5.4 recommendations of appropriate mitigation measures to manage any noise problems identified by the noise survey.

Operations

OP1 Machinery washdown

Prior to entering the Activity Area, machinery must be washed in accordance with the Weed and Disease Guidelines, or any subsequent revisions of that document.

OP2 Weed & Disease Management Plan

- 1 Within three (3) months of the date on which these conditions take effect, or by a date otherwise specified in writing by the Director, a Weed & Disease Management Plan must be submitted to the Director for approval. This requirement will be deemed to be satisfied only when the Director indicates in writing that the submitted document adequately addresses the requirements of this condition.
- 2 The plan must be consistent with the Weed and Disease Guidelines.
- 3 Once approved the person responsible must act in accordance with the approved plan.
- 4 The person responsible may apply to the Director to vary or substitute the plan. Any variation or substitution of the plan approved by the Director, by notice in writing, replaces the earlier approval with effect from the date specified in the notice.

Stormwater Management

SW1 Perimeter drains or bunds

Perimeter cut-off drains, or bunds, must be constructed at strategic locations within the Activity Area to prevent surface run-off from entering the area used or disturbed in carrying out the activity. All reasonable measures must be implemented to ensure that sediment transported along these drains, or bunds, remains within the Activity Area.

SW2 Stormwater

- 1** Polluted stormwater that will be discharged from the Activity Area must be collected and treated prior to discharge to the extent necessary to prevent serious or material environmental harm, or environmental nuisance.
- 2** Notwithstanding the above, all stormwater that is discharged from the Activity Area must not carry pollutants such as sediment, oil and grease in quantities or concentrations that are likely to degrade the visual quality of any receiving waters outside the Activity Area.
- 3** All reasonable measures must be implemented to ensure that solids entrained in stormwater are retained within the Activity Area. Such measures may include appropriately sized and maintained sediment settling ponds or detention basins.

SW3 Stormwater Management Plan

- 1** Unless otherwise specified in these conditions, the activity must be undertaken in accordance with the approved Stormwater Management Plan.
- 2** The person responsible may apply to the Director to vary or substitute the plan. Any variation or substitution of the plan approved by the Director, by notice in writing, replaces the earlier approval with effect from the date specified in the notice.
- 3** Unless otherwise approved by the Director in writing, the plan must be reviewed:
 - 3.1** Every five (5) years from the date of approval of the most recent plan; and
 - 3.2** Where the Director is of the opinion that the plan requires review within a specified timeframe.

SW4 Investigation trigger level

- 1** Unless otherwise specified in writing by the Director, when the outflow from any sediment basin associated with the activity is visibly turbid, a turbidity measurement must be undertaken.
- 2** Unless otherwise specified in writing by the Director, if the turbidity measured at a sediment basin outflow exceeds 60 NTU then an investigation into the possible causes of the exceedance must be conducted and a report summarising the outcomes of all such investigations submitted to the Director within three months of the initial detection of the exceedance.

Schedule 3: Information

Legal Obligations

LO1 Storage and handling of dangerous goods, explosives and dangerous substances

- 1** The storage, handling and transport of dangerous goods, explosives and dangerous substances must comply with the requirements of relevant State Acts and any regulations thereunder, including:
 - 1.1** *Work Health and Safety Act 2012* and subordinate regulations;
 - 1.2** *Explosives Act 2012* and subordinate regulations; and
 - 1.3** *Dangerous Goods (Road and Rail Transport) Act 2010* and subordinate regulations.

LO2 EMPCA

The activity must be conducted in accordance with both the conditions in this document and the obligations of the *Environmental Management and Pollution Control Act 1994* (EMPCA) and subordinate regulations. The conditions of this document do not replicate legislated obligations; therefore, you should ensure you are aware of your obligations under EMPCA and subordinate regulations.

LO3 Aboriginal relics requirements

- 1** Aboriginal relics, objects, sites, places and human remains regardless of whether they are located on public or private land, are protected under the *Aboriginal Heritage Act 1975*.
- 2** Unanticipated discoveries of Aboriginal heritage must be reported to Aboriginal Heritage Tasmania on **1300 487 045** as soon as possible.

LO4 MRDA

Operations must be undertaken in accordance with a mining plan approved by the Director of Mines and a Mining Lease issued under the *Mineral Resources Development Act 1995* (MRDA).

Other Information

OI1 Waste management hierarchy

- 1** Wastes should be managed in accordance with the following hierarchy of waste management:
 - 1.1** waste should be minimised, that is, the generation of waste must be reduced to the maximum extent that is reasonable and practicable, having regard to best practice environmental management;
 - 1.2** waste should be re-used or recycled to the maximum extent that is practicable; and
 - 1.3** waste that cannot be re-used or recycled must be disposed of at a waste depot site or treatment facility that has been approved in writing by the relevant planning authority or the Director to receive such waste, or otherwise in a manner approved in writing by the Director.

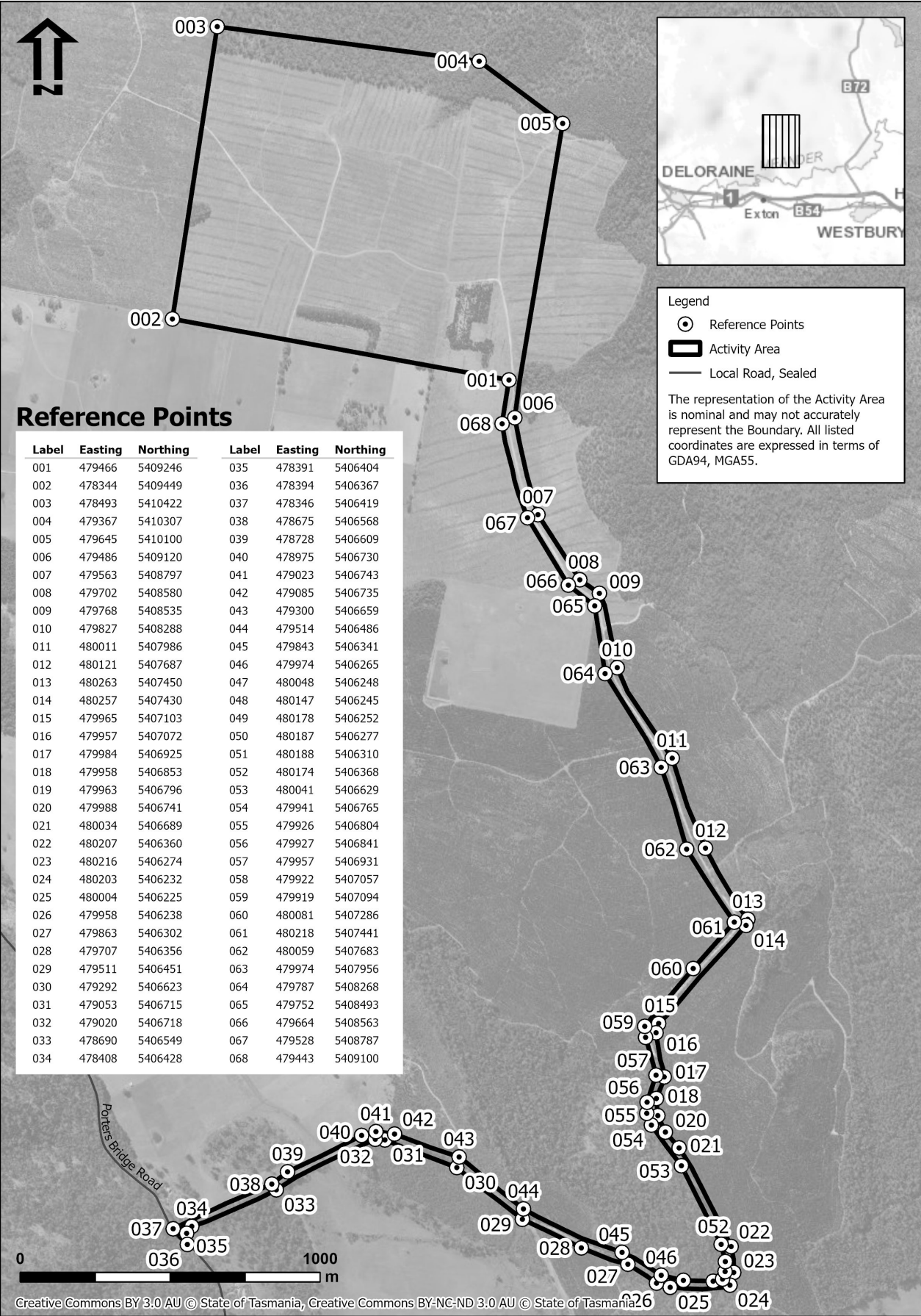
OI2 Notification of incidents under section 32 of EMPCA

Where a person is required by section 32 of EMPCA to notify the Director of the release of a pollutant, the Director can be notified by telephoning **1800 005 171** (a 24-hour emergency telephone number).

OI3 Release of Relevant Information

Under the provisions of section 23AA of EMPCA relevant information relating to monitoring of environmental impacts required under these conditions may be subject to publishing or public release by the Director.

Attachment 1: Activity Area



Attachment 2: Mapped DOV vegetation community



Attachment 3: Mapped DOB vegetation community

