

Environmental Assessment Report

Tongamah Sand Extractive Pit Off Tasman Highway, Tongamah

Boral Construction Materials Group Ltd

June 2020



ENVIRONMENT PROTECTION AUTHORITY

Environmental Assessment Report

Proponent	Boral Construction Materials Group Ltd
Proposal	Tonganah Sand Extractive Pit
Location	Off Tasman Highway, Tonganah
NELMS no.	10338
Permit Application No.	PLA 2019/93 (Dorset Council)
Electronic Folder No.	EN-EM-EV-DE-259052
Document No.	M662415
Class of Assessment	2A

Assessment Process Milestones

16 December 2019	Guidelines Issued
30 September 2019	Permit Application submitted to Council
30 September 2019	Application/Referral received by the Board
25 March 2020	Start of public consultation period
8 April 2020	End of public consultation period
17 June 2020	Date draft conditions issued to proponent
19 June 2020	Statutory period for assessment ends

Acronyms

AHT	Aboriginal Heritage Tasmania
Board	Board of the Environment Protection Authority
EER	Environmental Effects Report
DPIPWE	Department of Primary Industries, Parks, Water and Environment
EIA	Environmental Impact Assessment
EMPC Act	<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>
LUPA Act	<i>Land Use Planning and Approvals Act 1993</i>
MRT	Mineral Resources Tasmania
PCAB	Policy and Conservation Advice Branch, Natural and Cultural Heritage
QCoP	<i>Quarry Code of Practice 2017</i>
RMPS	Resource Management and Planning System
SD	Sustainable Development

Report Summary

This report provides an environmental assessment of a sand extractive pit at Tonganah proposed by Boral Construction Materials Group Ltd.

The proposal involves the extraction and screening of up to 20,000 cubic meters of sand per annum. Vegetation and topsoil will be stripped to expose the sand resource which will be extracted by a wheel loader, then carted to a stockpile or screener. Product will then be transported off-site to various clients.

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

Further details of the assessment process are presented in section 1 of this report. Section 2 describes the statutory objectives and principles underpinning the assessment. Details of the proposal are provided in section 3. Section 4 reviews the need for the proposal and considers the alternatives. Section 5 summarises the public and agency consultation process. The detailed evaluation of environmental issues is contained in section 6. Other issues are discussed in section 7. The report conclusions are contained in section 8.

Appendix I contains the environmental permit conditions for the proposal.

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I Approval Process

An application for a permit under the *Land Use Planning and Approvals Act 1993* (LUPA Act) in relation to the proposal was submitted to Dorset Council on 30 September 2019.

The proposal is defined as a 'level 2 activity' under clauses 5(b) and 6(a)(ii), schedule 2 of the *Environmental Management and Pollution Control Act 1994* (EMPC Act), being a sand extractive pit with materials handling (vibratory screening).

Section 25(1) of the EMPC Act 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 on 30 September 2019.

The assessment has been undertaken by the Director, Environment Protection Authority under delegation from the Board.

The Board required that information to support the proposal be provided in the form of an Environmental Effects Report (EER) prepared in accordance with guidelines issued on 16 December 2019.

Several drafts of the EER were submitted to EPA Tasmania for review against the guidelines before it was finalised. The EER was released for public inspection for 14 days starting on 25 March 2020. An advertisement was placed in *The Examiner* and on the EPA website. The EER was also referred to relevant government agencies for comment. No public representations were received.

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 in the context of the objectives of the Environmental Management and Pollution Control System (EMPCS) (both sets of objectives are specified in Schedule 1 the EMPC Act). The functions of the Board are to administer and enforce the provisions of the Act, 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 the EMPC Act.

The assessment has been undertaken by the Director, Environment Protection Authority under delegation from the Board.

3 The Proposal

The main characteristics of the proposal are summarised in Table I. A detailed description of the proposal is provided in Section I of the EER.

Table I: Summary of the proposal’s main characteristics

Activity	
Extraction and screening of a maximum of 20,000 cubic metres of sand per annum.	
Location and planning context	
Location	Off Tasman Highway, Tonganah, as shown in Figure I.
Land zoning	Rural resource
Land tenure	Permanent Timber Production Zone
Mining lease	3M/2019
Lease area	32 hectares
Bond	\$160,000
Existing site	
Land Use	Permanent Timber Production Zone
Topography	The proposed extractive pit is located on the crest of a low ridge between valleys. The site generally slopes down to the north.
Geology	Dominantly non-marine sequences of gravel, sand, silt, clay and regolith (Tertiary).
Soils	Sandy and free draining with low levels of nutrients and humus. Highly erodible in silt and clay layers.
Hydrology	Tributaries to the Great Forester River and Arnon River both exist near the site. Sediment settlement pond exists at the northern end of The Land which is utilised by the neighbouring extractive pit.
Natural Values	The site is dominated by <i>Eucalyptus amygdalina</i> coastal forest and woodland with small areas near the boundary of extra urban miscellaneous and water (sediment pond). There were potential habitat and range boundaries identified for several threatened flora and fauna species, as detailed in Section I of the EER.
Local region	
Climate	Rainfall approximately 972mm per annum. Wind direction predominantly westerly and north-westerly.
Surrounding land zoning, tenure and uses	The Land is surrounded by permanent timber production zone land with several existing sand extraction operations located to the south and west of The Land.
Species of conservation significance	None.
Proposed infrastructure	
Major equipment	Wheel loader, vibrating screen, excavator, trucks with trailers.
Other infrastructure	Stockpiles, stormwater intercept drains and sediment traps, hardstand area.

Inputs	
Water	None.
Energy	Diesel for powering mobile plant and equipment.
Other raw materials	Lubricant required for routine maintenance of equipment.
Wastes and emissions	
Liquid	Stormwater runoff from extraction and stockpile areas.
Atmospheric	Dust from internal and external traffic, excavation and movement of sand, screen and blow-off from stockpiles.
Solid	General refuse including food scraps, paper and packaging.
Controlled wastes	None.
Noise	From screening equipment, excavator and wheel loader on-site and from vehicles on-site and going to and from The Land.
Greenhouse gases	Greenhouse gases from internal combustion engines will be produced from the excavator, wheel loader and trucks.
Construction, commissioning and operations	
Proposal timetable	Commence operations in June 2020.
Operating hours (ongoing)	0700 to 1900 hours Monday to Friday 0800 to 1600 hours Saturday No operation on Sunday or public holidays
Other key characteristics	
None.	

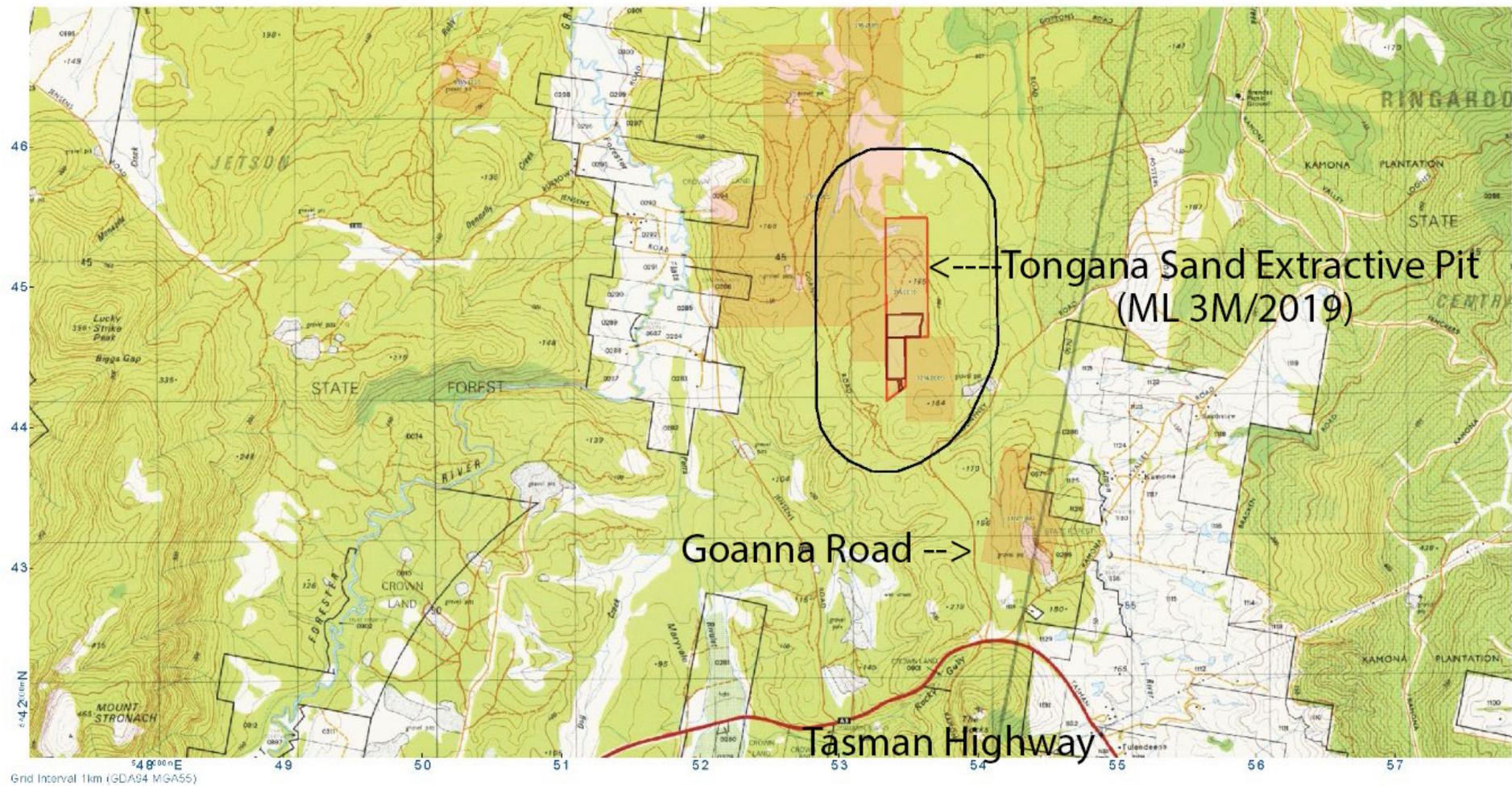


Figure 1: Site location (Figure 3 of the EER).

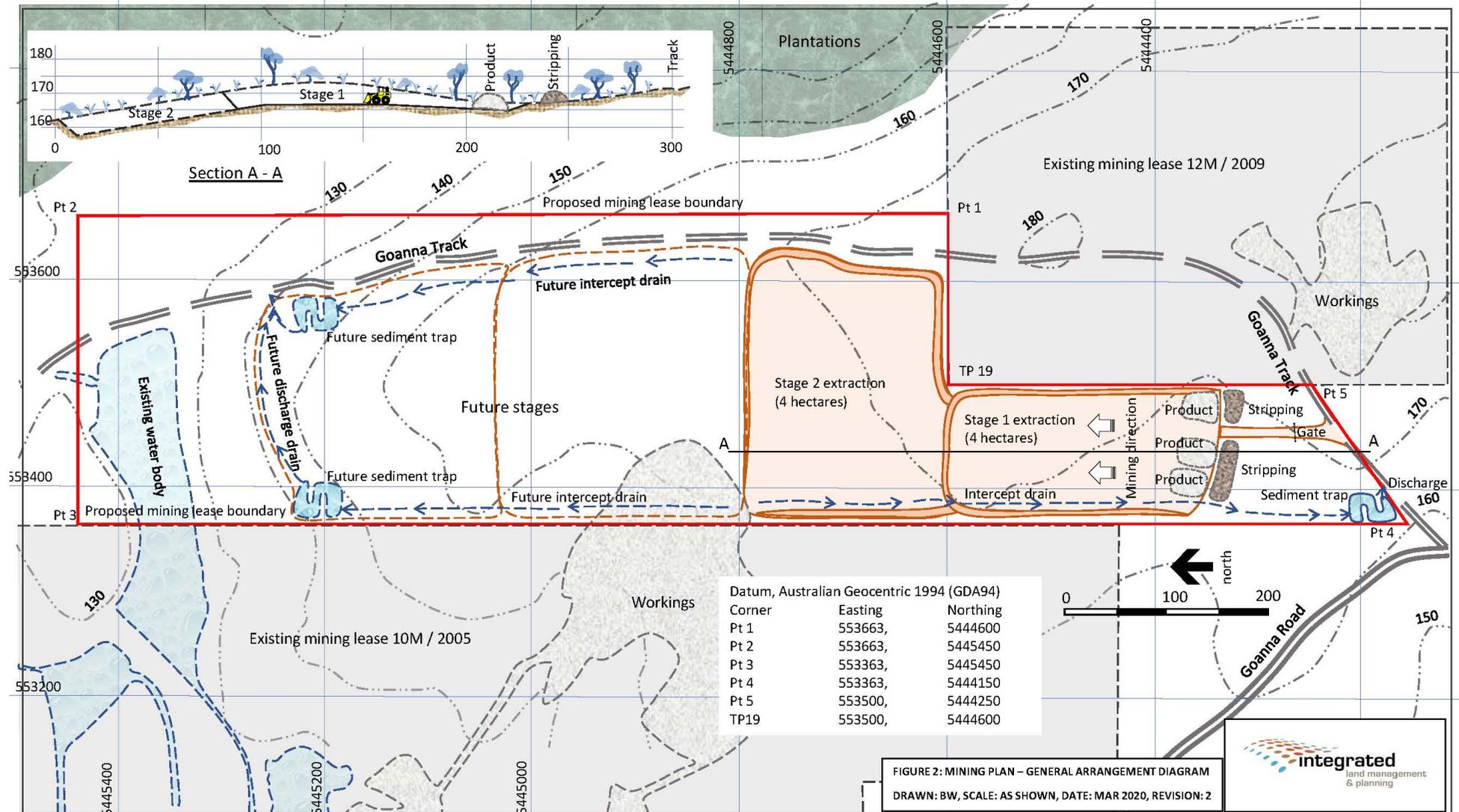


Figure 2: Site plan (Figure 2 of the EER).

4 Need for the Proposal and Alternatives

The EER has not provided a rationale for the proposal. However, it is noted that the proposed activity is located alongside several other sand extractive pits in an area with few surrounding sensitive receptors, limited threatened flora or fauna in the general area and good existing access to the resource.

5 Public and Agency Consultation

The EER was referred to the below government agencies/bodies with an interest in the proposal for comment.

- Mineral Resources Tasmania, Department of State Growth
- Sustainable Timber Tasmania

The following Divisions/areas of the Department of Primary Industries, Parks, Water and Environment also provided advice on the EER:

- Regulatory Officer, EPA Tasmania
- Water Section, EPA Tasmania
- Air Section, EPA Tasmania
- Noise Section, EPA Tasmania
- Policy and Conservation Advice Branch, Natural and Cultural Heritage
- Aboriginal Heritage Tasmania

6 Evaluation of Environmental Issues

EPA Tasmania has evaluated environmental issues considered relevant to the proposal. Details of this evaluation, along with the permit conditions required by the Board, are discussed below:

The following issues are discussed:

1. Surface water quality
2. Air quality and emissions
3. Noise emissions
4. Natural values, weed and disease management
5. Waste management and environmentally hazardous substances
6. Decommissioning and rehabilitation

General conditions

The following general conditions will be imposed on the activity:

- G1 – Access to and awareness of conditions and associated documents
- G2 – Incident response
- G3 – No changes without approval
- G4 – Change of responsibility
- G5 – Change of ownership
- G6 – Complaints register
- G7 – Quarry Code of Practice

Issue 1: Surface water quality
Description of potential impacts
Inappropriate management of stormwater has the potential to cause the movement of sediment and other contaminants, thereby impacting waterways that provide potential habitat for threatened flora and fauna species or are water sources for human and agricultural uses.
Management measures proposed in EER
Commitment 2 states that sediment traps to contain flow from a 1 in 20 year event will be constructed for each 8-hectare extractive area.
Public and agency comment
No public or agency comments were received in relation to surface water quality.
Evaluation
<p>While it is understood that any overland flow from off-site is currently intercepted by Goanna Track before reaching the site, inclusion of condition E1 will ensure appropriate measures are in place to prevent surface run-off from entering and / or leaving The Land, which has the potential to transport sediments that may cause environmental harm or nuisance. Condition E1 also requires that stormwater infrastructure is maintained regularly to ensure its effectiveness does not diminish.</p> <p>The EER states that a single sediment trap (pond) will be constructed for Stage 1 & 2 of the operation at the southern end of The Land, with a further two sediment traps to be constructed for future stages towards the northern end of The Land (see Figure 2) to capture any sediment laden stormwater on-site and direct discharge away from the existing waterbody at the northern end of The Land. This approach is supported and condition E2 sets the parameters for the design and maintenance of the sediment traps.</p> <p>In addition to the above, the Proponent will also be required to manage stormwater to prevent discharge of sediment and pollutants from The Land under condition E3.</p> <p>Undertaking progressive rehabilitation and limiting the disturbed area as detailed in Issue 6 of this EAR is also likely to contribute to minimising potential issues from stormwater and erosion.</p> <p>The above permit conditions along with the Proponent’s commitments outlined in the EER are considered adequate to manage the potential risks to surface water quality from the operation.</p>
Conclusion
<p>The proponent will be required to comply with the following conditions:</p> <p>E1 – Perimeter drains or bunds</p> <p>E2 – Design and maintenance of settling ponds</p> <p>E3 – Stormwater</p>

Issue 2: Air quality and emissions
Description of potential impacts
Air emissions in the form of dust have the potential to cause environmental nuisance or harm beyond the boundary of The Land if not appropriately managed. Dust sources from the operation include clearing of vegetation, extraction and screening of material, stockpiles, loading of trucks and during the movement of equipment and vehicles on and off-site.
Management measures proposed in EER
<p>Commitment 1 states that a 20km/hr speed limit will be applied to all internal trafficked areas and a 40km/hr speed limit will be applied to Goanna Track and Goanna Road.</p> <p>The EER also states that the proposed extractive pit is in a moderately high rainfall area (approx. 972mm per annum) and that trafficked surfaces and product stockpiles are likely to have a high moisture content which will assist suppressing dust emissions.</p> <p>In addition, the EER states that on road trucks transporting materials will either have covers over the trays or the maximum height of the load will be below the height of the tray sides.</p>
Public and agency comment
No public or agency comments were received in relation to air quality and emissions.
Evaluation
<p>The statement in the EER that the relatively high rainfall will assist in limiting the opportunity for dust emissions is supported. The commitments listed above are also supported for management of dust emissions. It is noted that the site is remote from sensitive receptors, the closest being 1.3 km to the west, and hence the opportunity for dust emissions causing environmental nuisance is considered low, when considering the other activities undertaken in the area.</p> <p>Nevertheless, to ensure the proposed management measures are implemented, condition A1 requires the Proponent to control dust emissions to the extent necessary to prevent environmental nuisance beyond the boundary of The Land. In addition, condition A2 requires dust emissions from areas of The Land used by vehicles to be controlled by dampening or other effective measures and condition A3 requires that vehicles carrying product loads must have effective measures in place to prevent escape of material, such as covering or dampening of loads.</p>
Conclusion
<p>The proponent will be required to comply with the following conditions:</p> <p>A1 – Control of dust emissions</p> <p>A2 – Dust emissions from traffic areas</p> <p>A3 – Covering of vehicles</p>

Issue 3: Noise emissions
Description of potential impacts
Noise emissions from extraction, screening and transport of material have the potential to cause environmental nuisance to sensitive receptors if not managed appropriately.
Management measures proposed in EER
No specific mitigation measures are proposed in the EER. The EER does state that speed limits imposed on access roads to minimise dust emissions will also reduce noise emissions.
Public and agency comment
No public or agency comments were received in relation to noise emissions.
Evaluation
The EER states that while noise emissions will be generated from machinery on-site and during transport of materials, the nearest sensitive receptor is located 1.3km west of The Land and that noise emissions are unlikely to cause environmental nuisance. This statement is supported and no conditions relating to noise are considered necessary.
Conclusion
No conditions specifically relating to noise are considered necessary.

Issue 4: Natural values, weed and disease management
Description of potential impacts
<p>Inappropriate clearance or disturbance of vegetation has the potential to impact on threatened flora, fauna or vegetation communities and result in the introduction and spread of weeds and diseases.</p> <p>Clearing vegetation also has the potential to impact on surface water quality through increased erosion, as dealt with in Issue 1 above.</p>
Management measures proposed in EER
<p>Commitment 3 states that cartage operations will be confined to daylight hours only.</p> <p>Commitment 4 states that a Weed and Disease Management Plan which complies with the <i>Weed and Disease Planning and Hygiene Guidelines – Preventing the spread of weeds and diseases in Tasmania</i> (DPIPWE, 2015) will be developed.</p>
Public and agency comment
<p>The Policy and Conservation Advice Branch (PCAB) has advised that the Ecological Assessment has been undertaken in accordance with the <i>DPIPWE Guidelines for Natural Values Surveys – Terrestrial Development Proposals</i> (August 2019). PCAB supports the recommendations made in both the Ecological Assessment and EER.</p> <p>No public or other agency comments were received in relation to natural values, weed and disease management.</p>
Evaluation
<p>The EER states that the existing waterbody at the northern end of The Land has potential habitat for the green and gold frog and giant freshwater crayfish, but that no significant impact is anticipated from the operation. This statement is supported. The permit conditions imposed under issue 1 and the Proponent’s commitments are considered likely to reduce any on-site stormwater from the operation reporting to the existing waterbody.</p> <p>The EER noted that the site supports potential habitat for several carnivorous marsupials, including the Tasmanian devil, and the eastern barred bandicoot. The EER states that no significant impacts are anticipated to these species and that no special management measures are required. Nevertheless, the EER adopts the recommendation of the Ecological Assessment to restrict cartage operations to daylight hours only. This management measure is supported to help mitigate any potential impacts on the Tasmanian devil and is imposed by condition OP2.</p> <p>Progressive rehabilitation during the ongoing operation of the activity, and rehabilitation on cessation will be required as detailed in Issue 6 of this EAR. These activities will support the ongoing management of biodiversity values on The Land.</p> <p>The EER states that no plant species classified or declared as weed species were detected on The Land. While there were plants susceptible to phytophthora identified and the existing waterbody is likely to hold frogs that are susceptible to chytrid disease, no evidence of either disease was detected on The Land. To ensure that The Land is kept free of weeds and diseases, conditions FFI and OPI are imposed to ensure that any machinery entering The Land has been</p>

decontaminated in accordance with the Weed and Disease Guidelines and that The Land is kept substantially free of weeds.

Conclusion

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

FFI – Machinery washdown

OPI – Weed management

OP2 – Cartage hours

Issue 5: Waste management and environmentally hazardous substances
Description of potential impacts
The inappropriate use and storage of waste and hazardous substances has the potential to cause environmental nuisance or harm through discharge to The Land or nearby waterways.
Management measures proposed in EER
The EER states that any packaging brought on-site along with spares and lubricating fluids or litter associated with workers lunches will be kept in the operator's vehicle and disposed of off-site at the end of each working day. The EER also states that a hydrocarbon spill kit will be in the operator's vehicle.
Public and agency comment
No public or agency comments were received in relation to waste management and environmentally hazardous substances.
Evaluation
The mitigation measures outlined above are supported. To ensure that hazardous materials are appropriately managed the Proponent will be required to comply with conditions H2 and H3 and spill kits will be required under condition H1 . These conditions reflect the commitments made in the EER. In the event of an incident the Proponent will be required to respond appropriately under condition G2 .
Conclusion
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

Issue 6: Decommissioning and rehabilitation
Description of potential impacts
<p>Temporary or permanent cessation of the activity has the potential to cause on-going impacts to the environment if rehabilitation is not managed appropriately.</p> <p>Potential impacts include increased erosion and transport of sediment off-site to waterways, impacts to biodiversity and uncontrolled dust emissions.</p>
Management measures proposed in EER
<p>The EER states that rehabilitation will seek to restore the native woodland community currently established on The Land.</p> <p>Section 10.2 of the EER provides details of the working area of 8 hectares required for the operation. The EER states that as Stage 2 is developed, worked out areas of stage 1 will be progressively rehabilitated and will continue as the site is developed to the north.</p> <p>The EER states that the intercept drain, and sediment trap will remain to service the rehabilitating area and access road at the southern end of The Land.</p>
Public and agency comment
<p>Mineral Resources Tasmania raised some concerns regarding the lack of detail for the revegetation process. The Proponent subsequently provided additional details regarding their proposed approach to revegetation, which satisfied MRT's concerns.</p> <p>No public or other agency comments were received in relation to decommissioning and rehabilitation.</p>
Evaluation
<p>The commitments made in section 10 of the EER regarding progressive rehabilitation and rehabilitation post closure of the pit are supported. Nevertheless, to ensure that appropriate rehabilitation works are undertaken permit conditions will be imposed.</p> <p>Rehabilitation on cessation will be supported by condition DC1 which requires surface soil to be retained for future rehabilitation and is consistent with details in the EER.</p> <p>Progressive rehabilitation is encouraged to reduce the risk of large areas of the site being left unrehabilitated should the activity cease, therefore condition DC2 is imposed to ensure that the total area disturbed at any one time for the operation is kept below 8 hectares and allows the Director to enforce progressive rehabilitation should it be deemed necessary.</p> <p>Management of temporary cessation will be stipulated under condition DC3. The Proponent will be required to notify of cessation under condition DC4 and undertake decommissioning and rehabilitation in accordance with conditions DC5 and DC6 which includes the preparation and implementation of a Decommissioning and Rehabilitation Plan (DRP).</p> <p>The standard decommissioning and rehabilitation conditions are considered appropriate to ensure the potential for environmental impacts are minimised through appropriate decommissioning and rehabilitation of the site during temporary closure or permanent cessation.</p>

Conclusion

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

DC1 – Stockpiling of surface soil

DC2 – Progressive rehabilitation

DC3 – Temporary suspension of activity

DC4 – Notification of cessation

DC5 – Rehabilitation following cessation

DC6 – DRP requirements

7 Other Issues

The following issues have been raised during the assessment process and are discussed briefly here. These are issues which are not the Board's responsibility under the EMPC Act, or issues which are more appropriately addressed by another regulatory agency.

1. Aboriginal Heritage

Aboriginal Heritage Tasmania (AHT) advised that there are no Aboriginal heritage sites recorded within or near the site and that due to review of previous reports, it is believed that the area has a low probability of Aboriginal heritage being present. AHT advised that there is no requirement for an Aboriginal heritage assessment and that they have no objections to the project proceeding.

No management measures were proposed in relation to Aboriginal Heritage in the EER. However, all Aboriginal heritage is protected under the *Aboriginal Relics Act 1975*, which specifies the requirements in the event Aboriginal Heritage is uncovered at the site. The responsibilities under this Act are detailed in condition **LO3** under Schedule 3: Information of Permit Conditions – Environmental No 10338.

8 Report Conclusions

This assessment has been based on the information provided by the proponent, Boral Construction Materials Group Ltd, in the permit application and the case for assessment (the EER).

This report incorporates specialist advice provided by EPA Tasmania scientific specialists and regulatory staff, other Divisions of DPIPWE and other government agencies.

It is concluded that:

1. the RMPS and EMPCS objectives have been duly and properly pursued in the assessment of the proposal;
2. the assessment of the proposed activity has been undertaken in accordance with the Environmental Impact Assessment Principles; and
3. the proposed activity is capable of being managed in an environmentally acceptable manner such that it is unlikely that the objectives of the *Environmental Management and Pollution Control Act 1994* (the RMPS and EMPCS objectives) would be compromised, provided that the Permit Conditions - Environmental No. 10338 appended to this report are imposed and duly complied with.

9 Report Approval

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



Wes Ford

DIRECTOR, ENVIRONMENT PROTECTION AUTHORITY

Acting under delegation from the Board of the Environment Protection Authority

Date: 19 June 2020

10 References

Barry Williams; *Tonganah Sand Extractive Pit – Tonganah – Environmental Effects Report* (dated 9 March 2020), Integrated Land Management and Planning, Lindisfarne, Tasmania (The EER).

DPIPWE; *Weed and Disease Planning and Hygiene Guidelines – Preventing the spread of weeds and diseases in Tasmania* (dated March 2015), Department of Primary Industries, Parks, Water and Environment, Hobart, Tasmania (the Weed and Disease Guidelines).

Mark Wapstra; *Ecological Assessment of Kamona Sand Extraction Site (Mining Lease 3M / 2019), Goanna Road, Kamona, Tasmania* (dated 29 October 2019), Environmental Consulting Options Tasmania, Lenah Valley, Tasmania (the Ecological Assessment).

II Appendices

Appendix I Permit Conditions – Environmental No. 10338

Appendix I – Permit Condition – Environmental No. 10338



ENVIRONMENT PROTECTION AUTHORITY

PERMIT PART B
PERMIT CONDITIONS - ENVIRONMENTAL No. 10338

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

Activity: **The operation of a sand pit and sand screening (ACTIVITY TYPE: Crushing, grinding, milling or separating into different sizes (rocks, ores or minerals))**
TONGANAH SAND EXTRACTIVE PIT, TASMAN HIGHWAY
TONGANAH TAS 7260

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: **DORSET**
Permit Application Reference: **DA 2019/93**
EPA file reference: **255653**

Date conditions approved: 19 June 2020

Signed:



DELEGATE FOR THE 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.

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Attachments

Attachment 1: The Land (modified: 16/06/2020 21:43).....	1 page
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Schedule 1: Definitions

In this Permit Part B:-

20,000 cubic metres per year of rocks, ores or minerals processed is deemed to be equivalent to 30,000 tonnes per year.

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

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.

Daylight hours means the period from one hour after sunrise to one hour before sunset.

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

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 and **Pollutant** each have the meanings ascribed to them 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.

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.

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.

Stormwater means water traversing the surface of The Land as a result of rainfall.

The Land means the land on which the activity to which this document relates may be carried out, and includes: buildings and other structures permanently fixed to the land, any part of the land covered with water, and any water covering the land. The Land falls within the area defined by:

- 1 Mining lease 3M / 2019; and
- 2 as further delineated at Attachment 1.

Weed means a declared weed as defined in the *Weed Management Act 1999*.

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 20,000 cubic metres per year of rocks, ores or minerals processed.
 - 1.2 20,000 cubic metres per year of rocks, ores or minerals extracted.

General

G1 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 on The Land, including contractors and sub-contractors, are familiar with these conditions to the extent relevant to their work.

G2 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.

G3 No changes without approval

- 1 The following changes, if they may cause or increase the emission of a pollutant which may cause material or serious environmental harm or environmental nuisance, must only take place in relation to the activity if such changes have been approved in writing by the EPA Board following its assessment of an application for a permit under the *Land Use Planning and Approvals Act 1993*, or approved in writing by the Director:
 - 1.1 a change to a process used in the course of carrying out the activity; or
 - 1.2 the construction, installation, alteration or removal of any structure or equipment used in the course of carrying out the activity; or
 - 1.3 a change in the quantity or characteristics of materials used in the course of carrying out the activity.

G4 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 succeeding him or her as the person responsible for the activity, before such cessation.

G5 Change of ownership

If the owner of The Land upon which the activity is carried out 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 Land, the person responsible must notify the Director in writing of the change or intended change of ownership.

G6 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 maintained for a period of at least 3 years.

G7 Quarry Code of Practice

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

Atmospheric**A1 Control of dust emissions**

Dust emissions from The Land must be controlled to the extent necessary to prevent environmental nuisance beyond the boundary of The Land.

A2 Dust emissions from traffic areas

Dust emissions from areas of The Land used by vehicles must be limited or controlled by dampening or by other effective measures.

A3 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 Land or travel on public roads. Effective control measures may include tarpaulins or load dampening.

Decommissioning And Rehabilitation**DC1 Stockpiling of surface soil**

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

DC2 Progressive rehabilitation

Worked out or disused sections of The Land must be rehabilitated concurrently with extractive activities on other sections of The Land. 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. The maximum disturbed area of land which may remain, at any time, without rehabilitation is eight hectares.

DC3 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:
 - 2.1 The Land must be managed and monitored by the person responsible for the activity to ensure that emissions from The Land do not cause serious environmental harm, material environmental harm or environmental nuisance; and
 - 2.2 If required by the Director a Care and Maintenance Plan for the activity must be submitted, by a date specified in writing by the Director, for approval. The person responsible must implement the approved Care and Maintenance Plan, as may be amended from time to time with written approval of the Director.
- 3 Unless otherwise approved in writing by the Director, if the activity on The Land has substantially ceased for 2 years or more, rehabilitation of The Land must be carried out in accordance with the requirements of these conditions as if the activity has permanently ceased.

DC4 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.

DC5 Rehabilitation following cessation

- 1 Following permanent cessation of the activity, and unless otherwise approved in writing by the Director, The Land 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 on-going 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, as may be amended from time to time with written approval of the Director.

DC6 DRP requirements

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 or by a date specified in writing by the Director. The DRP must be prepared in accordance with any guidelines provided by the Director.

Effluent Disposal

E1 Perimeter drains or bunds

- 1** Perimeter cut-off drains, or bunds, must be constructed at strategic locations on The Land 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 on The Land. Such measures may include provision of strategically located sediment fences, appropriately sized and maintained sediment settling ponds, vegetated swales, detention basins and other measures designed and operated in accordance with the principles of Water Sensitive Urban Design.
- 2** Drains, or bunds, must have sufficient capacity to contain run-off that could reasonably be expected to arise during a 1 in 20 year rainfall event. Maintenance activities must be undertaken regularly to ensure that this capacity does not diminish.

E2 Design and maintenance of settling ponds

- 1** Sediment settling ponds must be designed and maintained in accordance with the following requirements:
 - 1.1** ponds must be designed to successfully mitigate reasonably foreseeable sediment loss which would result from a 1 in 20 year storm event;
 - 1.2** discharge from ponds must occur via a stable spillway that is not subject to erosion;
 - 1.3** all pond walls must be stable and treated with topsoil and vegetated or otherwise treated in such a manner as to prevent erosion; and
 - 1.4** sediment settling ponds must be periodically cleaned out to ensure that the pond design capacity is maintained. Sediment removed during this cleaning must be securely deposited such that sediment will not be transported off The Land by surface run-off.

E3 Stormwater

- 1** Polluted stormwater that will be discharged from The Land 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 Land 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 Land.
- 3** All reasonable measures must be implemented to ensure that solids entrained in stormwater are retained on The Land. Such measures may include appropriately sized and maintained sediment settling ponds or detention basins.

Flora And Fauna

FF1 Machinery washdown

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

Hazardous Substances

H1 Spill kits

Spill kits appropriate for the types and volumes of materials handled on The Land must be kept in appropriate locations 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 on The Land must be:

1.1 stored within 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 Land 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 Land.

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 on The Land, all reasonable measures must be implemented to prevent unauthorised discharge, emission or deposition of pollutants:

1.1 to soils within the boundary of The Land 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 Land.

2 Reasonable measures may include spill kits, spill trays/bunds or absorbent pads, and automatic cut-offs on any pumping equipment.

Operations

OP1 Weed management

The Land must be kept substantially free of weeds to minimise the risk of weeds being spread through the transport of products from The Land.

OP2 Cartage hours

Unless otherwise approved in writing by the Director, cartage by heavy vehicles entering or leaving The Land must only be undertaken during Daylight hours.

Schedule 3: Information

Legal Obligations

LO1 EMPCA

The activity must be conducted in accordance with the requirements of the *Environmental Management and Pollution Control Act 1994* and Regulations thereunder. The conditions of this document must not be construed as an exemption from any of those requirements.

LO2 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.

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.

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;

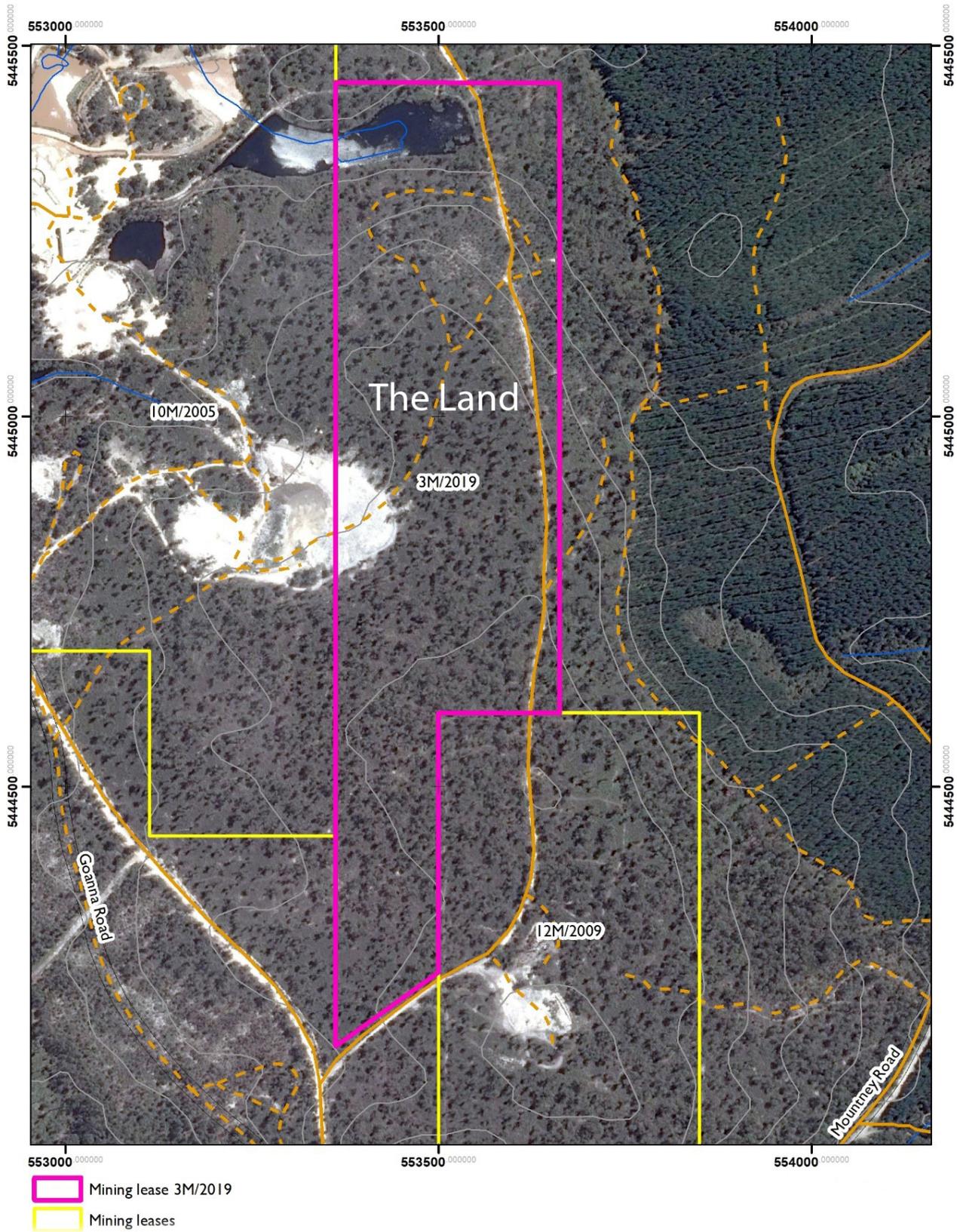
1.2 waste should be re-used or recycled to the maximum extent that is practicable; and

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).

Attachment 1: The Land



Projection: Map Grid of Australia
Zone 55 GDA94
Source: Base data DPI/PWE

