ENVIRONMENTAL ASSESSMENT REPORT

Pillings Road Quarry

Increase in production limit, with crushing

Pillings Road, Cairns Bay

DL & KL Gordon

Board of the Environment Protection Authority

March 2018

ENVIRONMENT PROTECTION AUTHORITY

Environmental Assessment Report	
Proponent	D L & K L Gordon
Proposal	Pillings Quarry expansion and increase in production
Location	Pillings Road, Cairns Bay
NELMS no.	PCE 9722
Permit application no.	DA-145-2017 (Huon Valley Council)
Electronic Folder No.	EN-EM-EV-DE-252638
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Class of Assessment	2A

Assessment process milestones	
26 May 2017	Permit application submitted to Council
14 June 2017	Application referral received by Board
14 July 2017	EER Guidelines issued
2 January 2018	EER accepted by Board
17 January 2018	Start of public consultation period
31 January 2018	End of public consultation period

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	*Environmental Management and Pollution Control Act 1994*
EMPCS	Environmental management and pollution control system
EPBC Act	*Environment Protection and Biodiversity Conservation Act 1999* (Cth)
LUPA Act	*Land Use Planning and Approvals Act 1993*
NCA	*Nature Conservation Act 2002*
QCP	*Quarry Code of Practice 2017*
RMPS	Resource management and planning system
SD	Sustainable development
TSPA	*Threatened Species Protection Act 1995*

Report summary

This report provides an environmental assessment of DL & KL Gordon's proposal to increase the approved annual production limit of Pillings Road Quarry.

The proposal involves increasing extraction and handling, including crushing, of dolerite and gravel at the existing Pillings Road Quarry to a maximum of 20,000 cubic metres (34,000 tonnes) per annum, with expansion of the open area to the east and west. The quarry is located at Cairns Bay, near Geeveston in southern Tasmania.

This report has been prepared based on information provided by the proponent in the permit application and Environmental Effects Report (EER). Relevant government agencies and the public were consulted and relevant submissions 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 and the key issues raised in that 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 1 details matters raised by the public and referral agencies during the consultation process. Appendix 2 contains the environmental permit conditions.

The environmental conditions in Appendix 2 are a new set of operating conditions for the entire, intensified activity that, if Huon Valley Council approves the activity, will supersede the existing Level 2 permit conditions, in conjunction with any conditions issued by Council, as part of a new Level 2 permit.

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1 Approval process

An application for a permit for the proposal under the *Land Use Planning and Approvals Act 1993* (LUPA Act) was submitted to Huon Valley Council on 26 May 2017.

The proposal is defined as a 'level 2 activity' under clauses 5(a) and 6(a)(ii) of schedule 2 of the *Environmental Management and Pollution Control Act 1994* (EMPC Act), being extraction of rock or gravel producing 5000 cubic metres or more per year, and materials handling in the form of crushing and screening of more than 1000 cubic metres per year of rock, ore or minerals. 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 by the Board on 14 June 2017.

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).

A draft of the EER was submitted to EPA Tasmania for review against the guidelines prior to finalisation. The EER was released for public inspection for a 14-day period commencing on 17 January 2018. An advertisement was placed in *The Mercury* and a notice was placed on the EPA website. The EER was also referred to relevant government agencies for comment. Two 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 in particular to use its best endeavours to further the RMPS and EMPCS objectives.

The Board must undertake assessment of 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 proposal seeks to intensify an existing Level 2 permitted quarry[1] located within a property at the western end of Pillings Road, adjacent to the junction with Scotts Road, Geeveston (see Figure 1) within an existing mining lease and an additional new adjoining lease, yet to be finalised.

Approval is sought to extract and process a maximum of 20,000 cubic metres of dolerite and gravel per annum, expanding the existing quarry footprint to a maximum open area of 2 hectares, creating a new over-burden stockpile on the site's eastern boundary,. After exhausting the east and western expansion blocks (Figure 2), any further extraction will be achieved by lowering the existing quarry floor.

A dozer will be used to rip the source rock from benches and floor, and an excavator with a ripper to rip source rock from faces. Raw product will then be crushed and screened. A wheel loader will be used to load trucks for transport offsite. Blasting is not proposed.

The main characteristics of the proposal are summarised in Table 1. A detailed description of the proposal is provided in Section 2 of the EER.

Table 1: Summary of the proposal's main characteristics

Activity	
Extraction, crushing and screening of up to 20,000 cubic metres per annum of rock.	
Location and planning context	
Location	CT 166690/2, Pillings Road, Cairns Bay, as shown in Figure 1
Land zoning	Rural Resource under *Huon Valley Interim Planning Scheme 2015*
Land tenure	Private freehold
Mining leases	1505 P/M and 2039 P/M (conjoined)
Total lease area	5.6 hectares
Bond	Current: $7,700, New total bond required: $9,900
Existing site	
Land Use	Existing quarry (mining lease issued in 1992)
Topography	Quarry is located to the north of Pillings Road, with the access from Scotts Road. Pillings Road is above the quarry floor, with a steep batter several metres high separating the two. Pillings Road itself is close to the crest of the hill at that point. The land slopes downhill to the north away from the quarry, and slightly downhill to the east.
Geology	Jurassic dolerite, with nearby Permian sediments

[1] Although the EER states the existing quarry is currently a Level 1 activity, in fact it is approved as a Level 2 activity to excavate 5,000 cubic metres per annum with screening, but without crushing.

Hydrology	A small ephemeral waterway runs east-west through a shallow valley below the quarry site, through the northern corner of the mining lease boundary, intercepted by an existing farm dam downstream.
Natural Values	A vegetation community listed as threatened under the *Nature Conservation Act 2002*, *Eucalyptus ovata* forest and woodland (DOV), is mapped on the northern boundary of the mining lease outside the proposed quarry footprint. There are no records of threatened flora species within 500m of the quarry site. There are records of the eastern barred bandicoot and Tasmanian devil within 500m of the site. A raptor nest has been recorded approximately 1km to the northeast of the quarry, but there is no direct line of sight from the quarry to the nest.
Local region	
Climate	Rainfall is approximately 881mm per annum (Geeveston). Wind direction is predominantly northwesterly with westerlies sub-dominant.
Surrounding land zoning, tenure and uses	The surrounding land is private freehold, zoned Significant Agriculture to the south of the quarry site, and Rural Resource in all other directions. The land is used for agriculture and rural living, with tracts of bushland remaining. There is a long-established quarry nearby to the west of Scotts Road which has recently ceased operations.
Proposed infrastructure	
Major equipment	Bulldozer, excavator with a ripper, wheel loader, crusher/screener (mobile), trucks.
Other infrastructure	Temporary self-contained chemical toilets as needed.
Inputs	
Water	No onsite water supply needed.
Energy	Diesel use for mobile plant. No onsite energy supply needed.
Wastes and emissions	
Liquid	Stormwater runoff from extraction and stockpile areas.
Atmospheric	Dust from internal and external traffic, and blow-off from stockpiles.
Solid	General refuse including food scraps, paper and packaging. General inert wastes such as metal waste to be collected periodically.
Controlled wastes	Waste engine oil; contaminated soil. Portable chemical toilets to be used when multiple personnel are onsite during operations will generate sanitary waste.
Noise	From crushing and screening equipment, excavator and bulldozer on site, and vehicles on site and going to and from the site.
Greenhouse gases	The proposal will result in a localised increase in emissions during extraction work resulting from operation of diesel and petro-fuelled equipment and transport. This has not been quantified in the EER.

Construction, operation and rehabilitation	
Proposal timetable	It is anticipated that the quarry as proposed will operate for approximately another 10 years if at maximum production.
Operating hours	0700 to 1900 hours Monday to Friday 0800 to 1600 hours Saturday

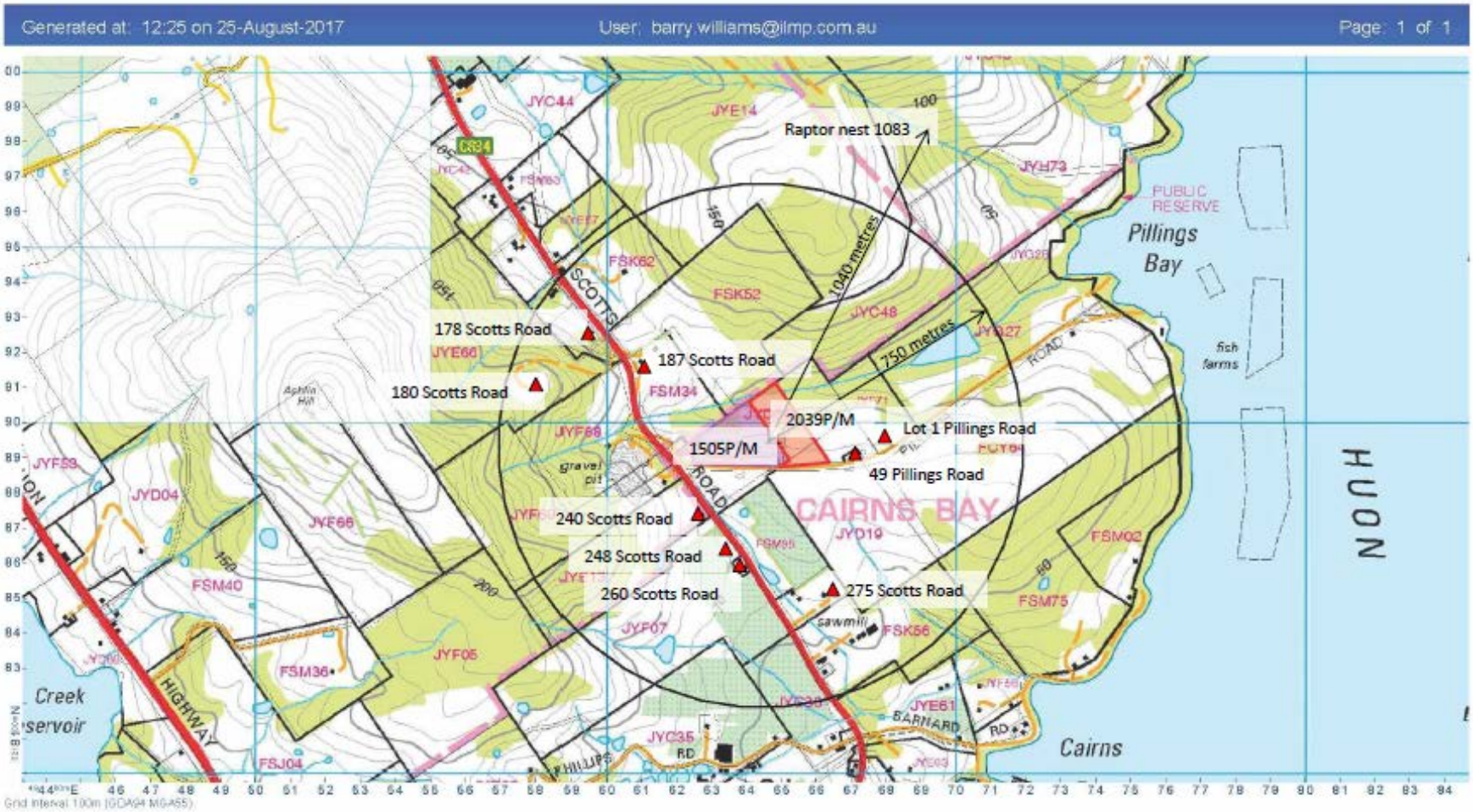


FIGURE 2: LOCALITY PLAN (EXTRACT FROM 1:25000 SERIES WATERLOO 4821)

Figure 1: Locality plan showing quarry location and nearest residences (Figure 2 in EER)

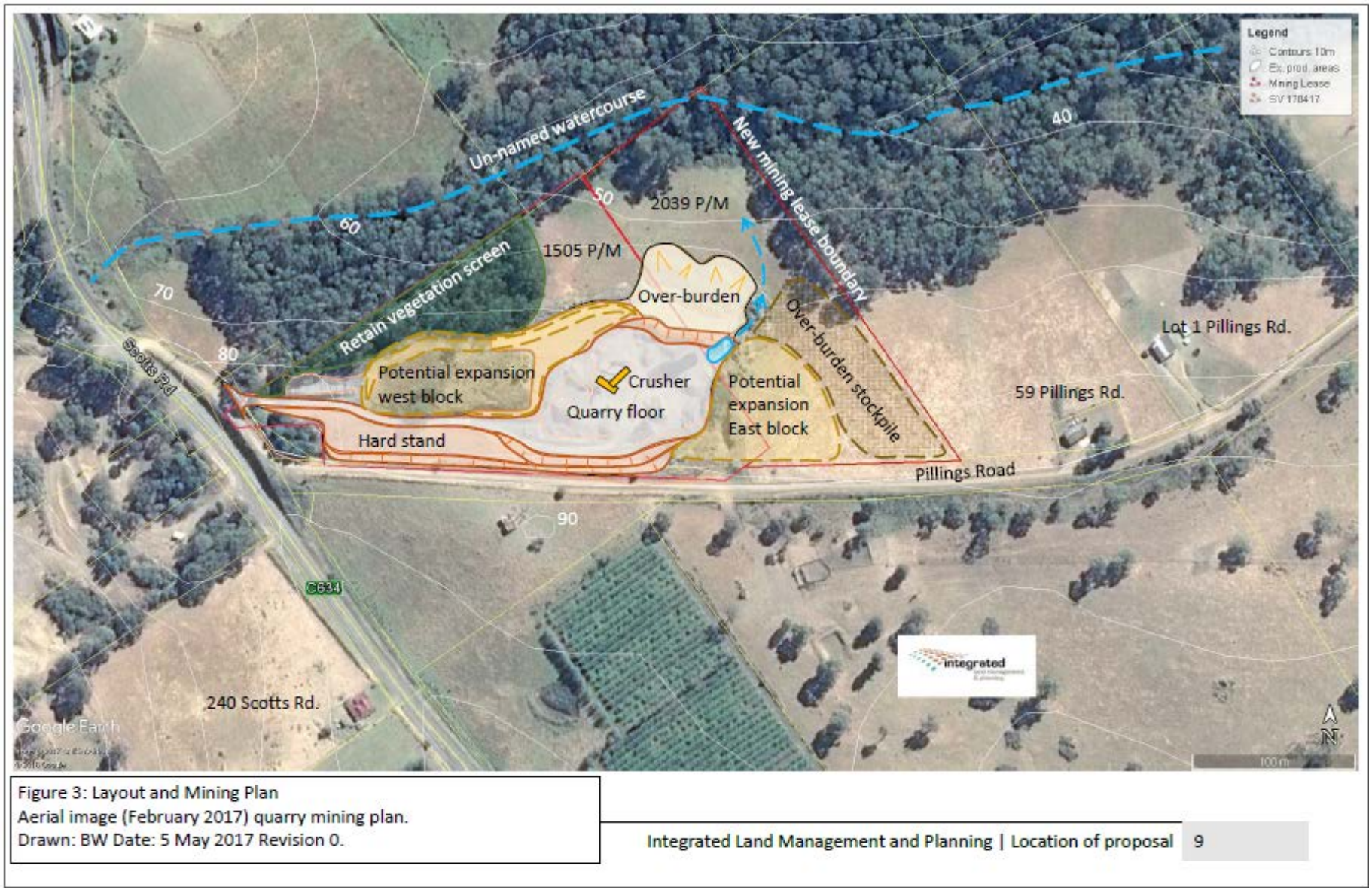


Figure 2: Layout and mining plan (Figure 3 in EER)

4 Need for the proposal and alternatives

According to the EER, the proposal seeks to intensify extraction at an existing quarry due to increased local demand for road construction and maintenance materials, partly due to the recent closure of a neighbouring quarry. If the quarry production did not increase, more product would potentially have to be imported into the area from further afield. The quarry does not require expensive drilling and blasting techniques to extract product, and so is relatively economically sustainable. The EER does not state whether any other sites have been considered by the proponent.

5 Public and agency consultation

A summary of the public representations and government agency/body submissions is contained in Appendix 1 of this report.

Two public representations were received. The main issues raised in the representations included:

- Inadequacy of rationale for proposal;
- Noise emissions and operation hours;
- Dust emissions; and
- Water pollution.

The EER was referred to a number of government agencies/bodies with an interest in the proposal. Responses were received from the following:

- Mineral Resources Tasmania, Department of State Growth; and
- Industry Strategy, Planning & Coordination, Department of State Growth.

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

- Regulator, EPA Tasmania;
- Noise specialist, EPA Tasmania;
- Water specialist, EPA Tasmania; and
- Policy and Conservation Advice Branch, Natural and Cultural Heritage Division.

The proponent has also undertaken a public consultation process, involving contacting the closest neighbours located on Pillings Road to discuss the proposal.

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 Director, are discussed below.

General conditions

The following general conditions will be imposed on the activity to enable regulation of regulatory limits and general management of the quarry:

Q1 Regulatory Limits
G1 Access to and awareness of conditions and associated documents
G2 Incident response
G3 No changes without approval
G4 Change of ownership
G5 Quarry Code of Practice

Issue 1: Natural Values, including weed management

Description of potential impacts

According to the EER, the proposed quarry expansion will impact two areas of vegetation:

a) Regenerated scrub on the surface of old overburden stockpiles on top of the proposed western block expansion;
b) Exotic pasture on the proposed footprint for overburden stockpiles and eastern block expansion footprints.

These areas are mapped under TASVEG 3.0 as containing agricultural land (FAG). The EER states proposed works will not encroach into the areas mapped as containing a threatened vegetation community (DOV), which includes all woody vegetation adjacent to and within the site to the northwest and northeast.

Truck movements resulting from the proposal have the potential to result in roadkill of native fauna.

There are records of several declared weed species within 500 metres of the quarry site, and the EER notes that a population of Spanish heath has been recently observed on the verge of Scotts Road in close proximity to the junction with Pillings Road. The proposal has the potential to increase the spread of weeds within and from the site.

Management measures proposed in EER

The development area will be restricted as depicted in the layout and mining plan (see Figure 2 above) to avoid any physical impact on significant natural values. The EER includes the following commitments:

Commitment 1 - Implement a preventative weed management plan to minimise the occurrence of weeds presenting on the quarry site.

Commitment 2 – Undertake works in accordance with the *Weed and Disease Planning and Hygiene Guidelines* (DPIPWE 2015).

Public and agency comment

The Policy and Conservation Advice Branch, DPIPWE (PCAB) commented that the information provided in the EER on the wedge-tailed eagle nest indicates that the nest is not within line of sight of the quarry operations and therefore it is unlikely that the proposal will impact upon it.

PCAB also queried whether traffic from the proposal will increase traffic movement by 10% and whether mitigation measures are required. PCAB recommended that further information be provided describing changes in traffic movements to determine if roadkill mitigation measures are appropriate.

One representor raised concerns about dust levels which may be generated by the proposal and the impact of such dust on surrounding vegetation.

Evaluation

In regard to the potential for the proposal to result in roadkill of native wildlife, the length of private access within the land to be used by trucks entering and exiting via Scotts Road is approximately 200 metres. Trucks travelling this relatively short distance would be very unlikely to reach any substantial speed due to both the gravel nature of the road and the need to navigate the junction with Scotts Road very slowly.

There is also potential for roadkill on Scotts Road. However, additional information provided by the proponent demonstrates that, although production is proposed to increase fourfold above existing levels, and therefore result in greater numbers of trucks entering and leaving the quarry, the actual impact on overall traffic levels on Scotts Road is in the order of 3% above existing levels. This is well below the threshold of 10% increase specified as requiring mitigation in the *Survey Guidelines and Management Advice for Development Proposals that may impact on the Tasmanian Devil* (DPIPWE).

Mitigation measures for roadkill generally take the form of restriction of cartage hours to daylight. With the exception of mid-winter, the proposed operational hours of the quarry are in any case generally within daylight hours. There does not appear to be sufficient justification in this instance to impose such a restriction.

The proposal does not necessarily result in significantly increased dust levels, and dust arising from the intensified activity is not likely to measurably affect vegetation compared to the existing situation.

It is appropriate to contain works to the area shown in the proposed Layout and Mining Plan (Figure 2) to avoid encroachment into the vegetation mapped as DOV (condition **FF1**).

The proposed commitments are appropriate to minimise the introduction and spread of weeds and soil-borne diseases. Condition **FF2** is imposed to ensure appropriate washdown procedures, and condition **OP1** to minimise the presence of weeds on the land.

Conclusion

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

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

FF2 Washdown Guidelines

OP1 Weed management

Issue 2: Surface water quality

Description of potential impacts

The existing approved maximum disturbance area is 1 hectare. The intensifying activity will result in a maximum disturbed area of 2 hectares, creating exposed surfaces that could be vulnerable to erosion and sediment loss during rainfall events. In addition, the quarry has the potential to result in contamination of surface water from pollutants such as oils.

The quarry floor drains to an existing sediment retention basin, with smaller sediment traps at minor discharge points between overburden stockpiles (Figure 2 above).

Management measures proposed in EER

The EER states the main sediment trap is capable of accommodating a 1 in 20 year rainfall event for the expanded quarry, and will be cleaned of sediment on an annual basis. Calculations have been provided to show that this is adequate to maintain capacity.

If a hydrocarbon spill occurs which cannot be contained within the quarry floor, runoff will go to the sediment trap, where spill can be recovered from the water surface using a hydrocarbon boom.

Public and agency comment

Both public representations raised concerns that increasing the quarry size will result in:

- a greater volume of water needing to be captured and treated; and

- greater potential for polluted water to leave the site in the form of both sediment and hydrocarbons.

Evaluation

While the proposal does result in a greater disturbed area than the existing quarry, the degree of increase is manageable by implementing standard sediment and pollutant capture measures. The proposed onsite management of surface water is generally consistent with the acceptable standards of the *Quarry Code of Practice* (EPA Tasmania, May 2017) (QCP) in regard to drainage and erosion control.

Limiting the surface water quantity to be managed is an important consideration and will require maintenance of appropriately located perimeter drains (required by condition **SW1**).

Conditions **SW2** and **SW3** require maintenance of suitably sized sediment pond(s) to contain 1 in 20 year rainfall events, and implementation of other measures as needed to ensure polluted water is not discharged.

The application of these conditions in conjunction with existing site measures is considered adequate to minimise the discharge of sediment or other pollutants from the site.

Conclusion

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

SW1 Perimeter drains

SW2 Design and maintenance of settling ponds

SW3 Stormwater

Issue 3: Air emissions
Description of potential impacts
The dolerite rock exposed within the quarry is highly weathered, and the fractured dolerite is embedded in a clay matrix which generally retains moisture, reducing the degree of dust produced during ripping operations. As the clay material dries in stockpiles, more dust may be emitted during crushing and screening. Clay tracked onto the quarry floor may also dry and result in dust emissions as vehicles move around the site. The proposed new eastern overburden stockpile is to be located adjacent to the eastern property boundary (which coincides with the proposed additional new mining lease boundary), beyond which the nearest sensitive receiver is approximately 80m to the east. Therefore there is potential for some visible dust to cross this boundary.
Management measures proposed in EER
Commitment 3 – Introduce dust suppression techniques if dust emissions are visibly crossing the mining lease boundaries.
Public and agency comment
Both public representations raised concerns that an increase in production and open area would result in increased dust emissions, affecting neighbourhood amenity and vegetation.
Evaluation
Given the close proximity of the nearest sensitive receivers, and the potential for dust nuisance, the proponent has an obligation to minimise the opportunity for dust to cross property boundaries as per the acceptable standards of the QCP. There are multiple mitigation measures which can be utilised by operators to reduce dust emissions, including watering, covering or seeding stockpiles and exposed surfaces, watering or covering truck loads, or ceasing work in high wind conditions. Condition **A1** is imposed requiring coverage of vehicles transporting excavated materials, and Condition **A2** requiring containment of dust such that it does not result in an environmental nuisance beyond site boundaries.
Conclusion
The proponent will be required to comply with the following permit conditions: **A1** Covering of vehicles **A2** Control of dust emissions

Issue 4: Noise emissions

Description of potential impacts

Noise emissions from the activity have the potential to cause environmental nuisance. The EER includes a technical noise assessment undertaken for the proposal (Appendix 1 of EER), which considers measured noise emissions from use of existing equipment at nearest sensitive receivers. The proposal does not require additional equipment to that already used, but rather simply increased quantities of production overall. Therefore noise impacts beyond existing levels are likely to be in terms of duration rather than volume.

The assessment concludes that existing quarry operations meet the daytime criterion of 45dB(A) (10 minute Leq) for acceptable noise levels as per the QCP at all nearby residences, except for the dwelling located at 187 Scotts Road, northwest of the quarry site, where noise levels were measured to be 47dB(A). Existing noise levels at 59 Pillings Road, the nearest existing sensitive receiver to the site at 80m from the eastern edge of the proposed expanded footprint, are at the upper limit of acceptable criterion.

The greatest contributor to noise was identified as the crusher rock chute, which was clearly perceived at both 187 Scotts Road and 180 Scotts Road (located further to the northwest).

Management measures proposed in EER

The EER presents the recommendations of the quarry noise assessment appended to the EER, which are as follows:

a) Modify the crusher rock chute by lining with a material such as rubber, or remove the chute;
b) Locate the mobile crushing plant as far west as possible on the quarry floor, i.e. as close to the raised areas as possible, to maximise screening to residences;
c) Maintain the height of the existing bund to the north and west of the raised area;
d) Where practicable, place removed overburden and topsoil above the northeastern side of the pit to create screening between the quarry floor and residences to the east;
e) Restrict operation hours to 7am-7pm.

The EER states that the proponent will seek to implement these measures.

Commitment 5 – The steel chute on the primary crusher will be modified with a rubber cushion on the surface to reduce noise generated when loading.

Public and agency comment

Both public representations raised concerns regarding:

- existing noise levels being at or above acceptable thresholds;

- whether the submitted noise assessment is adequate, as measurements were not taken when the bulldozer was operating;

- the noise produced by trucks from the quarry entering Scotts Road and the likely increase in volume of such trucks;

- the potential for longer operating hours; and

- the potential inadequacy of proposed mitigation measures.

Evaluation

EPA Tasmania's noise specialist has reviewed the submitted noise assessment and considers it to be adequate. Although the noise of the bulldozer was not measured onsite, its contribution has been included in noise level predictions.

The QCP specifies a minimum distance of 750m from an extractive activity with crushing (and without blasting) to the nearest sensitive receiver. The nearest existing sensitive receiver to the quarry's proposed expanded footprint is approximately 80m.

As the noise levels measured from operation of the quarry with use of the crusher is above the acceptable daytime limit of 45dB(A) at one residence, and at this limit at two other residences, mitigation measures must be implemented in order to reduce noise levels. The proposal will also result in more loaded trucks departing the quarry, which may further contribute to increased noise levels at certain times.

The proposed lining of the rock chute, if practicable, and other proposed mitigation measures relating to placement of equipment, creating overburden mounds and restricting operating hours, are appropriate and supported.

EPA Tasmania's noise specialist comments as follows:

Given the surrounding land use, it is considered appropriate that the noise from the quarry should be limited to 45 dB(A) at the surrounding residences during the daytime. It is noted that this level is currently being exceeded by 2 dB(A) at one nearby residence. However, it is considered that there are sufficient options for noise reduction, including modification to equipment and the provision of screening by earth mounds, to ensure compliance with the daytime limit. Additional detail on mitigation was provided in the NVC noise report.

The current permit for the quarry does not contain any operational hour limitations. Proposed operating hours are within those recommended as acceptable in the QCP. It is necessary to impose a condition defining operating hours to clarify the scope of the approved proposal and prevent noise nuisance during evening and night periods. (**N1**).

Rather than specifying which mitigation measures should be taken, a condition is imposed which specifies the permitted overall noise levels as measured at sensitive receivers (**N2**), to ensure that, if the proposed mitigation measures are inadequate, further measures are implemented. Noise surveying and reporting requirements are also specified to facilitate regulation of this issue (**N3** and **N4**).

A permit condition prohibiting blasting unless approved in writing by the Director (**B1**) is appropriate to ensure clarity in regulation.

Conclusion

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

N1 Operating hours

N2 Noise emission limits

N3 Noise survey requirements

N4 Noise survey method and reporting requirements

B1 No blasting without approval

Issue 5: Waste and hazardous substances
Description of potential impacts
Operation of the quarry has the potential to produce small amounts of waste such as litter. Portable toilets may be used onsite; if so, these will be regularly emptied at a connected sewerage dump point offsite. The quarry will not require any permanent storage of hazardous substances. Fuel for mobile equipment will be contained within vehicle mounted tanks. Spillage of any oil or fuel has the potential to result in contamination of soil and water if not adequately contained.
Management measures proposed in EER
The EER states that the quantity of fuel stored onsite at any given time will be limited, and that a hydrocarbon spill clean-up kit will be available onsite for immediate deployment if a fuel spill occurs. Commitment 4 – Waste including food waste, lubricating tubes and other spares and packaging will be collected in the machine operator's ute and disposed of off-site at an approved disposal facility at the end of each operating day.
Public and agency comment
Both public representations raised concerns regarding the potential for hydrocarbons to be spilt and result in water pollution.
Evaluation
The proposed management measures are adequate to ensure that typical waste is collected from the site and appropriately disposed of, in accordance with the QCP. Given that no hazardous substances are proposed to be stored on site overnight, there are unlikely to be any impacts from such substances, provided that the management measures canvassed in the EER and permit conditions are complied with. Permit conditions **H1** and **H2** are necessary in order to ensure appropriate management of hazardous substances, including the temporary storage of fuel.
Conclusion
The proponent will be required to comply with the following permit conditions: **H1** Storage and handling of hazardous materials **H2** Handling of hazardous materials – mobile

Issue 6: Decommissioning and rehabilitation

Description of potential impacts

Rehabilitation is necessary to ensure long term stability of the site, prevent sedimentation and erosion, provide native flora and fauna habitat, and minimise the potential for establishment of invasive flora species. The EER proposes a maximum area of disturbance at any one time (open area) of 2 hectares, which is adequate to accommodate the proposed expansion blocks in addition to the existing quarry floor. Progressive rehabilitation is not proposed until such time as further excavation of the existing quarry floor is undertaken, after extending the quarry footprint. The EER states that, in these circumstances, a substantial bench will be retained and rehabilitated with woody eucalypt forest species along the current southern edge of the quarry where there is an existing high cut. The proposed rehabilitation objective for the quarry site is to restore it to an exotic grass grazing community, similar to that surrounding it.

Management measures proposed in EER

Decommission/full rehabilitation is proposed once there is no longer a market for the material or the deposit is exhausted. Specified steps in the EER include demobilisation of equipment, stabilisation of quarry faces, allowing natural recruitment from surrounding grassland, retaining the sediment trap and controlling weeds during revegetation.

Public and agency comment

One public representation raised concerns regarding the feasibility of ultimately rehabilitating the site to grazing land, and EPA Tasmania's ability to regulate this, and refers to the now-closed quarry site nearby on the other side of Scotts Road.

Evaluation

The proposed rehabilitation methodology is generally consistent with the principles and suggested measures in the QCP. However, it is important to note that the quarry floor must be rehabilitated as well as benches, and that reseeding may be required.

To ensure that decommissioning and rehabilitation are considered during planning for site closure, condition **DC1** (notification of cessation) is required. To ensure appropriate treatment of surface soil and implementation of progressive rehabilitation, permitting a maximum open area of 2 hectares, conditions **DC2** and **DC3** are required. Condition **DC4** will require rehabilitation on cessation of the activity, and condition **DC5** will ensure the land is appropriately managed on temporary suspension of the activity.

Conclusion

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

DC1 Notification of cessation

DC2 Stockpiling of surface soil

DC3 Progressive rehabilitation

DC4 Rehabilitation on cessation

DC5 Temporary suspension of activity

7 Other issues

The following issues were addressed in the EER, but are not within the Board's responsibility for assessment under the EMPC Act.

Issue 1: Transport impacts

While the impact of traffic resulting from the activity, where on or just departing from the land, on noise levels, air emissions, and natural values (e.g. roadkill) is within the scope of the Board's assessment under the EMPC Act, the issue of increased traffic in regard to network capacity and functionality is within the scope of Huon Valley Council's assessment under the *Huon Valley Interim Planning Scheme 2015.* Safety and functionality of intersections with State roads is also within the purview of the Department of Stage Growth through other state legislation. Any permit conditions in relation to these matters would be applied by Huon Valley Council in its planning permit.

Issue 2: Historic and Aboriginal Heritage

Historic heritage is within the scope of Huon Valley Council's assessment under the *Huon Valley Interim Planning Scheme 2015*, and within the purview of Heritage Tasmania under the *Historic Cultural Heritage Act 1995.* There are no listed historic sites or precincts in the vicinity of the proposal.

Aboriginal heritage is within the purview of Aboriginal Heritage Tasmania (AHT) under the *Aboriginal Heritage Act 1975.* A desktop review by AHT found that no on-ground survey was required. Works for the purpose of the quarry must abide by the provisions of the *Aboriginal Heritage Act 1975*, and AHT has requested that the proponent ensure that an Unanticipated Discovery Plan is utilised in the course of such activities.

8 Report conclusions

This assessment has been based on the information provided by the proponent, DL & KL Gordon, in the permit application to Huon Valley Council (DA-145/2017) 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, and has considered 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;
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. 9722 appended to this report are imposed and duly complied with.

The environmental conditions appended to this report are a new set of operating conditions for the entire, intensified activity that will supersede the existing permit.

9 Report approval

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

Martin Read
DEPUTY DIRECTOR, EPA TASMANIA
Acting under delegation from the Board of the Environment Protection Authority

10 References

Barry Williams; *Pillings Road Quarry – Upgrade Environmental Effects Report* (dated 22 December 2017), Integrated Land Management and Planning, Rose Bay, Tasmania.

11 Appendices

Appendix 1 Summary of public and agency submissions

Appendix 2 Permit conditions

Appendix 1 Summary of public and agency submissions

In the following table, EER means the *Pillings Road Quarry Upgrade Environmental Effects Report,* Barry Williams, Integrated Land Management and Planning, 22 December 2017.

TABLE 1: MATTERS RAISED DURING THE PUBLIC CONSULTATION PERIOD – ADDITIONAL INFORMATION NOT REQUIRED

Representation No./ Agency	EER section no.	EER Page no.	Comments and issues	EPA Comments
Policy and Conservation Advice Branch, DPIPWE	Part C, Section 1	15-16	The information provided on the eagle nest indicates that it is not within line of sight of the quarry operations and therefore it is unlikely that the proposal will impact upon the nest.	No comment.
Policy and Conservation Advice Branch, DPIPWE	Part C, Section 8	22	Previous advice from PCAB included a recommendation to implement roadkill mitigation measures (in accordance with the Tasmanian Devil Survey Guidelines and Management Advice for Development Proposals) if traffic movements increased by more than 10%. It is unclear if traffic has increased by 10% and whether mitigation measures are required. PCAB recommends that further information be provided describing changes in traffic movements to determine if roadkill mitigation measures are appropriate.	Further information on this point was sought from the applicant prior to close of advertising. The applicant has provided sufficient information to demonstrate that, although traffic from the quarry itself will increase substantially from existing levels, the overall impact on the traffic numbers on the nearest public road, which is a short distance from the quarry exit point, is approximately 3%.
Rep No. 1	Part B, Section 4	11-12	That the rationale given for upgrading the quarry in regard to minimising traffic impact by avoiding increased production elsewhere is flawed as the quarry on the other side of Scotts Road closed over 12 months ago, and therefore demand would already be satisfied elsewhere. Increased profit for the proponent is not a valid justification for the upgrade from a neighbouring landowner's perspective due to increased noise, dust, traffic movements and potential polluting run-off into watercourses.	The EER does not state whether any other sites were considered by the proponent. However, the proposal is for intensification of an existing quarry rather than creation of a new one, and the proposal is considered able to comply with the QCP.
Rep No. 1	Part E	25	Representor was not contacted by the proponent; properties owned by representor do not front onto Pillings Road, but include two dwellings within 240m of the quarry and land that adjoins the quarry site.	It is noted that the representor is not challenging the facts as stated in the EER.
Rep No. 1	Part C, Section 7	20-22	The noise assessment in the EER was based on noise measurements made without the bulldozer operating. Current noise levels during quarry	There is sufficient detail in the EER for the purpose of the Board's assessment. See

Representation No./ Agency	EER section no.	EER Page no.	Comments and issues	EPA Comments
	Appendix 1		operation (measured at 47dBA in noise assessment) are obtrusive to residents at 187 Scotts Road.	discussion in Section 6 of Environmental Assessment Report.
Rep No. 1	Part C, Section 7 Appendix 1	20-22	Noise assessment has not considered increase in traffic noise from heavily laden trucks accelerating from standstill from the intersection of Pillings Road and Scotts Road onto Scotts Road.	The proposal will result in more vehicles at the time of intensified campaigns. Noise limits apply to the whole activity. Once vehicles enter public roads, transport noise is outside the scope of the Board's assessment.
Rep No. 1	Part C, Section 7 Appendix 1	20-22	Representor is not confident that EPA Tasmania will be able to adequately monitor the operation should equipment with greater engine power or sound power level than those listed in the noise assessment be used.	EPA Tasmania has staff dedicated to regulating activities, with consistent allocation of staff to specific activities to ensure continuity. Activities are inspected at pre-determined intervals based on the activity's risk profile. Inspections are also carried out as follow-up for any complaints received, if warranted.
Rep No. 1	Part C, Section 7 Appendix 1	20-22	The commitment made to reduce noise by lining the crusher chute with rubber may not be effective in reducing noise, and will rapidly wear out and require monitoring.	Commitments considered to be essential to mitigation are incorporated into permit conditions determined by the Board. These conditions are then incorporated into any planning permit issued by Council. Conditions give a clear legal basis for regulation of an activity.
Rep No. 1	Part C, Section 7 Appendix 1	20-22	Representor is not confident that EPA Tasmania will inspect the site frequently enough to ensure quarry arrangements and chute modification requirements are complied with over the life of the quarry.	Activities regulated by the EPA are inspected at pre-determined intervals based on the activity's risk profile. However, an inspection is likely to be carried out as follow-up for any complaints received, if warranted.
Rep No. 1	Part C, Section 4	19-20	More dust will be produced than currently with greater extraction volumes. Representor does not have confidence in EPA Tasmania's ability to monitor and enforce dust suppression measures over the life of the quarry.	See discussion in Section 6 of Environmental Assessment Report and comments above re regulation. Greater extraction rates should not necessarily result in a

Representation No./ Agency	EER section no.	EER Page no.	Comments and issues	EPA Comments
				commensurate increase in dust emissions, provided adequate controls are in place.
Rep No. 1	Part C, Section 2	17-19	A larger quarry will discharge a greater volume of water. The representor is not confident that EPA Tasmania will be able to ensure that the committed measures are in place over the life of the quarry or that quarry waste, oils, fuels and chemicals will not make their way into the waterway.	See discussion in Section 6 of Environmental Assessment Report and comments above re regulation. This issue should be able to be managed by sediment retention.
Rep No. 1	-	-	The proposal reduces the potential for Council to rezone the area surrounding the quarry to allow future subdivision.	This is not a matter for assessment by the Board.
Rep No. 1	-	-	The proposed increased production would result in increased noise, dust and traffic, reducing the desirability and value of surrounding properties.	There is sufficient detail in the EER for the purpose of the Board's assessment. The impact of a proposal on property values is not a matter for assessment by the Board.
Rep No. 1	Part C, Section 16	24	Rehabilitation of the site to grazing land does not appear to be feasible given size of proposed operation. Scotts Road quarry site nearby does not appear to have been successfully rehabilitated and impacts visual amenity. Representor does not have confidence that EPA Tasmania will be able to ensure appropriate rehabilitation of the site.	It is noted that Scotts Road quarry site is still under regulation by EPA Tasmania, and is not yet considered full rehabilitated.
Rep No. 1	Part C, Section 8	22	The proposal will result in significant increases in truck numbers entering Scotts Road from Pillings Road, which may impact road safety as Scotts Road has a 100kph speed limit and vehicles approaching the Pillings Road turnoff from the south come over a blind crest 50m from the junction. The representor is not confident that the proponent's commitment to installing a concealed entrance sign on the southern approach to the junction will be sufficient to reduce the increased risk of traffic accidents arising from the proposal.	This is not a matter for assessment by the Board. It is for consideration by Council and the Department of State Growth.
Rep No. 1	Part B, Section 3	7-9	The supplied information is not sufficient to determine how close the quarry activity will come to the	Figure 3 of the EER – Layout and Mining Plan, shows the proposed

Representation No./ Agency	EER section no.	EER Page no.	Comments and issues	EPA Comments
			common boundary between the quarry site and 187 Scotts Road. This information is requested by the representor.	footprint of the expanded quarry floor. The 'potential expansion west block' is the closest to the common boundary with 187 Scotts Road (adjacent property to the northwest). While Figure 3 does not include measurements, the overlay of the expansion plan onto aerial imagery is sufficient to demonstrate that the expansion will come to within approximately 20m of this boundary.
Rep No. 1	-	-	Further details are requested by the representor as to: a) The distance a quarry similar to the current sized Pillings Road quarry is required to set back from a boundary; b) The distance a quarry the size of the proposed upgraded Pillings Road quarry is required to set back from a boundary.	This issue is not within the scope of the Board's assessment.
Rep. No 2	Part B, Section 4	11-12	The rationale suggests that Pillings Road quarry is the only option for supplying gravel in the Geeveston area. Quarries in more isolated locations with fewer houses and less busy roads would be preferable.	Noted.
Rep. No 2	-	-	The proposed increase in production is fourfold of current levels; this degree of increase will have associated noise, dust, waterway pollution, increase in traffic volume, visual impact and extended hours of operation, having a significant effect on properties in close proximity to the quarry and on the Scotts Road/Cairns Bay environment in general.	The matters of potential environmental impact are assessed by the Board. Traffic safety and visual impact are not matters for assessment by the Board.
Rep. No 2	Part C, Section 7 Appendix 1	20-22	Proposed hours of operation are to increase from 7am-5pm weekdays and 7am-12pm Saturdays to 7am-7pm weekdays and 8am-4pm Saturdays. Given existing sound pressure levels as measured at nearby houses (including 47dBA at 187 Scotts Road), the representor feels that the proposed increased hours of operation are not acceptable. Will EPA Tasmania or Mineral	See discussion in Section 6 of Environmental Assessment Report. EPA Tasmania has staff dedicated to regulating activities, including conditions imposed by the Board. Greater extraction rates does not necessarily

Representation No./ Agency	EER section no.	EER Page no.	Comments and issues	EPA Comments
			Resources Tasmania be responsible for monitoring the proposed lining of the rock chute? What would happen if machinery or equipment are changed or upgraded and become noisier?	result in a commensurate increase in emissions.
Rep. No 2	Part C, Section 2	17-19	Increase production will potentially have greater impact on the adjoining waterway, including through increased sediment production and hydrocarbon spills.	See discussion in Section 6 of Environmental Assessment Report. Greater extraction rates does not necessarily result in a commensurate increase in emissions.
Rep. No 2	Part C, Section 4	19-20	A fourfold increase in production will result in a fourfold increase in dust and therefore in impact on local vegetation and the locality.	See discussion in Section 6 of Environmental Assessment Report. Greater extraction rates does not necessarily result in a commensurate increase in emissions.
Rep. No 2	Part C, Section 8	22	The proposal will result in an increase in slow and heavy vehicles entering Scotts Road, resulting in safety issues.	This is a matter for consideration by Council and the Department of State Growth.
Rep. No 2	Part E	25	Representor was not contacted by the proponent; suggests current lifestyles of local residents deemed of no importance to the application.	It is noted that the representor is not challenging the facts as stated in the EER.

Appendix 2 Permit conditions

[Insert proposed permit conditions/EPN/environmental licence as printed from NELMS, including all attachments.]

PERMIT PART B
PERMIT CONDITIONS - ENVIRONMENTAL No. 9722

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

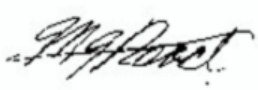
Activity: **The operation of a quarry (ACTIVITY TYPE: Crushing, grinding, milling or separating into different sizes (rocks, ores or minerals))**
PILLINGS ROAD PIT, SCOTTS ROAD
GEEVESTON TAS 7116

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: **HUON VALLEY**
Permit Application Reference: **DA-145/2017**
EPA file reference: **252638**

Date conditions approved: 9 March 2018

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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Schedule 1: Definitions

In this Permit Part B:-

20,000 cubic metres per year is considered to be equivalent to 34,000 tonnes per year.

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.

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 person authorised in writing by the Director to exercise a power or function on the Director's behalf.

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.

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.

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.

Tasmanian 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.

TASVEG 3.0 means the digital map of Tasmania's vegetation produced by the Department of Primary Industries, Parks, Water and Environment, current at the time of issuing this document.

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 Certificate of Title 166690/2, Property ID 3375879

Washdown 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.

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

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 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.

G5 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 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.

A2 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.

Blasting

B1 No blasting without approval
Blasting must not be carried out on The Land without the prior written approval of the Director.

Decommissioning And Rehabilitation

DC1 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.

DC2 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.

DC3 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 2 hectares.

DC4 Rehabilitation on cessation

1 Unless otherwise approved in writing by the Director, rehabilitation upon permanent cessation of the activity must be undertaken in accordance with relevant provisions of the *Quarry Code of Practice* and in accordance with the following:

1.1 rehabilitation earthworks must be substantially completed within 12 months of cessation of the activity; and

1.2 rehabilitated areas must be monitored and maintained for a period of at least three years after rehabilitation works have been substantially completed, after which time the person responsible for the activity may apply in writing to the Director for a written statement that rehabilitation has been successfully completed.

DC5 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.

Flora And Fauna

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

1 The interface between the quarry footprint and the DOV community as mapped under TASVEG 3.0, where the quarry footprint is approved to encroach within 20 metres of that vegetation, must be delineated with a fence or similar method approved in writing by the Director;

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 (including sedimentation) to the DOV community.

FF2 Washdown Guidelines

Prior to entering the land, machinery must be washed in accordance with the Washdown Guidelines, or any subsequent revisions of that document.

Hazardous Substances

H1 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.

H2 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.

Noise Control

N1 Operating hours

1 Unless otherwise approved by the Director, activities associated with the extraction of rock, gravel, sand, clay or minerals, and loading of product, and screening/crushing must not be undertaken outside the hours of 0700 hours to 1900 hours on weekdays and 0800 hours to 1600 hours on Saturdays.

2 Notwithstanding the above paragraph, activities must not be carried out on public holidays that are observed Statewide (Easter Tuesday excepted).

N2 Noise emission limits

1 Noise emissions from the activity when measured 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 measured level of 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 the noise level of the activity exceeds the noise level of all other noise sources 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 Measured noise levels must be adjusted for tonality, impulsiveness, modulation and low frequency in accordance with the Tasmanian Noise Measurement Procedures Manual.

5 All methods of measurement must be in accordance with the Tasmanian Noise Measurement Procedures Manual.

6 Noise mitigation measures must be implemented prior to any further quarrying activity being undertaken to the extent necessary to reduce emissions to within the above limits.

N3 Noise survey requirements

1 Unless otherwise approved by the Director, a noise survey must be carried out:

1.1 within six (6) months of any change to the activity which is likely to substantially alter the character or increase the volume of noise emitted from The Land; and

1.2 at such other times as may reasonably be required by the Director by notice in writing.

N4 Noise survey method and reporting requirements

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;

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 approved by the Director;

3.5 one-third octave spectra over suitably representative periods of not less than 1 minute; and

3.6 narrow-band spectra over suitably representative periods of not less than 1 minute.

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 Land, 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 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.

Stormwater Management

SW1 Perimeter Drains

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.

SW2 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.

SW3 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.

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 Change of responsibility

If the person responsible for the activity ceases to be responsible for the activity, they must notify the Director in accordance with Section 45 of the EMPCA.

Other Information

OI1 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).