ENVIRONMENTAL ASSESSMENT REPORT

Williams’ Quarry

1356 Tea Tree Road, Campania

CA & SM Williams

Board of the Environment Protection Authority

May 2015
### Environmental Assessment Report

<table>
<thead>
<tr>
<th>Proponent</th>
<th>CA &amp; SM Williams</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proposal</td>
<td>Williams’ Quarry</td>
</tr>
<tr>
<td>Location</td>
<td>1356 Tea Tree Road, Campania</td>
</tr>
<tr>
<td>NELMS no.</td>
<td>9117</td>
</tr>
<tr>
<td>Permit application no.</td>
<td>DA 2014/136 (Southern Midlands Council)</td>
</tr>
<tr>
<td>Doc1 folder</td>
<td>EN-EM-EV-DE-242883</td>
</tr>
<tr>
<td>Doc1 no.</td>
<td>H401122</td>
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<tr>
<td>Class of Assessment</td>
<td>2B</td>
</tr>
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</table>

### Assessment process milestones

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
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<tbody>
<tr>
<td>15 August 2014</td>
<td>Notice of Intent submitted</td>
</tr>
<tr>
<td>16 September 2014</td>
<td>EER Guidelines issued</td>
</tr>
<tr>
<td>24 November 2014</td>
<td>Permit application submitted to Council</td>
</tr>
<tr>
<td>16 December 2014</td>
<td>Referral received by Board</td>
</tr>
<tr>
<td>10 January 2015</td>
<td>Start of public consultation period</td>
</tr>
<tr>
<td>8 February 2015</td>
<td>End of public consultation period</td>
</tr>
<tr>
<td>24 March 2015</td>
<td>Supplementary information submitted to Board</td>
</tr>
</tbody>
</table>
**Acronyms**

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Board</td>
<td>Board of the Environment Protection Authority</td>
</tr>
<tr>
<td>EER</td>
<td>Environmental Assessment Report</td>
</tr>
<tr>
<td>DPIPWE</td>
<td>Department of Primary Industries, Parks, Water and Environment</td>
</tr>
<tr>
<td>EIA</td>
<td>Environmental impact assessment</td>
</tr>
<tr>
<td>EMPC Act</td>
<td><em>Environmental Management and Pollution Control Act 1994</em></td>
</tr>
<tr>
<td>EMPCS</td>
<td>Environmental management and pollution control system</td>
</tr>
<tr>
<td>EPBC Act</td>
<td><em>Environment Protection and Biodiversity Conservation Act 1999 (Cth)</em></td>
</tr>
<tr>
<td>LUPA Act</td>
<td><em>Land Use Planning and Approvals Act 1993</em></td>
</tr>
<tr>
<td>MRT</td>
<td>Mineral Resources Tasmania (Department of State Growth)</td>
</tr>
<tr>
<td>PCAB</td>
<td>Policy and Conservation Assessment Branch (DPIPWE)</td>
</tr>
<tr>
<td>QCoP</td>
<td>Quarry Code of Practice</td>
</tr>
<tr>
<td>RMPS</td>
<td>Resource management and planning system</td>
</tr>
<tr>
<td>SD</td>
<td>Sustainable development</td>
</tr>
<tr>
<td>TSP Act</td>
<td><em>Threatened Species Protection Act 1995</em></td>
</tr>
</tbody>
</table>
Report summary

This report provides an environmental assessment of CA & SM Williams' proposed quarry and crushing operation.

The proposal involves the extraction of up to 10,000 cubic metres per annum of hard rock, and up to 2,500 cubic metres of that material is to be crushed. The quarry is situated on private land at 1356 Tea Tree Road, Campania, and is currently authorised to operate as a level 1 quarry (extraction only, no crushing).

This report has been prepared based on information provided by the proponent in the Environmental Effects Report (EER) and EER Supplement. Relevant government agencies and the public have been consulted and their submissions and comments considered as part of this assessment.

On 27 February 2015, the Board requested that the proponent submit supplementary information to address public, government agency (including DPIPWE) and Council comments on the EER and to meet other information requirements. Satisfactory supplementary information was submitted by the proponent on 24 March 2015.

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 proposal, site and design alternatives. Section 5 summarises the public and agency consultation process and the key issues raised in that process. The detailed evaluation of key issues is in Section 6, and other issues are evaluated in Section 7 and Appendix 1. The report conclusions are contained in Section 8.

Appendix 2 contains details of comments made and issues raised in the consultation process. Appendix 3 contains environmental permit conditions for the proposal. Attachment 2 of the permit conditions contains the table of commitments from the EER.
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1 Approvals process

A Notice of Intent in relation to the proposal was received by the Board of the Environment Protection Authority (the Board) on 15 August 2014.

An application for a permit under the *Land Use Planning and Approvals Act 1993* (LUPA Act) in relation to the proposal was submitted to Southern Midlands Council on 24 November 2014.

The proposal is defined as a ‘level 2 activity’ under clause 5(a), Schedule 2 of the *Environmental Management and Pollution Control Act 1994* (EMPC Act), being a quarry, and under clause 6(a)(ii) of Schedule 2, being a materials handling (crushing) operation. 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 16 December 2014.

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 by the Board and Southern Midlands Council on 16 September 2014.

Two drafts of the EER were submitted to the EPA for comment prior to its finalisation and acceptance on behalf of the Board. The EER was released for public comment for a 28-day period commencing on 10 January 2014. Advertisements were placed in *The Mercury* and on the EPA website. The EER was also referred at that time to relevant government agencies for comment. Three (3) public submissions were received.

On 27 February 2015, the Board requested that the proponent submit supplementary information to address public, government agency (including DPIPWE) and Council comments on the EER and to meet other information requirements. Satisfactory supplementary information was submitted by the proponent on 24 March 2015.
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 the assessment of the proposal in accordance with the Environmental Impact Assessment Principles defined in Section 74 of the EMPC Act.
3 The proposal

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

The Land to which this proposal applies is defined in Schedule 1: Definitions of the Permit Conditions - Environmental No. 9117, and encompasses the activities at 1356 Tea Tree Road (Certificate of title 155147/1), as specified on the Development Application to Southern Midlands Council (DA 2014/136, dated 24/22/2014). The Land includes the extractive activities being undertaken on mining lease 1980P/M, and the access road within the property at 1356 Tea Tree Road, for plant and vehicles to reach the quarry. Figure 2 below shows the extent of the mining lease and the access road to which this assessment and permit conditions apply.

Table 1: Summary of the proposal’s main characteristics

<table>
<thead>
<tr>
<th>Activity</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Increase in production at a Level 1 quarry, involving extraction of a</td>
<td>maximum of 10,000 cubic metres of hard rock per annum, and</td>
</tr>
<tr>
<td>maximum of 2,500 cubic metres of this extracted material per annum.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Location and planning context</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Location</td>
<td>1356 Tea Tree Road, Campania, 7026, as shown in Figure 1 below.</td>
</tr>
<tr>
<td>Land zoning</td>
<td>Rural Agriculture <em>(Southern Midlands Planning Zones 1998)</em>.</td>
</tr>
<tr>
<td>Land tenure</td>
<td>Private freehold; owned by proponents.</td>
</tr>
<tr>
<td>Mining lease</td>
<td>1980P/M, granted 17 November 2014.</td>
</tr>
<tr>
<td>Lease area</td>
<td>6 hectares.</td>
</tr>
<tr>
<td>Security deposit (MRT)</td>
<td>$5,000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Existing site</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Land Use</td>
<td>Highly modified agricultural land use - pastures are well</td>
</tr>
<tr>
<td></td>
<td>maintained and actively ploughed and fertilised. The EER states</td>
</tr>
<tr>
<td></td>
<td>that The Land contains land capability class 5 with a small</td>
</tr>
<tr>
<td></td>
<td>area of class 4 at the northern edge of the property (closest to</td>
</tr>
<tr>
<td></td>
<td>Tea Tree Road). The proposal is therefore in compliance with</td>
</tr>
<tr>
<td></td>
<td>the objectives of the State Policy on the Protection of</td>
</tr>
<tr>
<td>Topography</td>
<td>The quarry is located on the southern side of a small hillock,</td>
</tr>
<tr>
<td></td>
<td>in an elevated position above the small valley in which the</td>
</tr>
<tr>
<td></td>
<td>Tea Tree Road sits. The northern slope of this hillock is</td>
</tr>
<tr>
<td></td>
<td>relatively steep and leads down towards the Tea Tree Road.</td>
</tr>
<tr>
<td></td>
<td>The LIST states that there are no known active landslides, but</td>
</tr>
<tr>
<td></td>
<td>part of the mining lease has been identified by MRT as</td>
</tr>
<tr>
<td></td>
<td>susceptible to landslides (Low hazard band).</td>
</tr>
<tr>
<td>Geology</td>
<td>The geology of the quarry is Jurassic dolerite with a thin clay-</td>
</tr>
<tr>
<td></td>
<td>loam soil derived from in situ weathering of the bedrock.</td>
</tr>
<tr>
<td></td>
<td>Rock to the south of the quarry is Triassic sandstone. The</td>
</tr>
<tr>
<td></td>
<td>mining lease also contains tertiary sediments, and undifferen-</td>
</tr>
<tr>
<td></td>
<td>tiated Cainozoic sediments.</td>
</tr>
</tbody>
</table>

Environmental Assessment Report  CA & SM Williams – Williams’ Quarry, Campania
| **Soils** | Shallow, skeletal, rocky soils. Thin clay-loam soil derived from in situ weathering of the bedrock. Some dermosol, other not classified. Dermosols are diverse and have a moderate to strong structured B2 (subsoil) horizon and a lack of a strong texture contrast between the A and B horizons. These soils are not high in free iron (less than 5% Fe), nor are they calcareous throughout the profile. There is an increase in clay content with depth. |
| **Hydrology** | The quarry (and existing Mining Lease) occurs within the Plummers Creek catchment which flows eastward to the Coal River near Campania. There are no natural watercourses within the Mining Lease – drainage is directed to the west via constructed surface drains, dams and ponds. See Figure 3a and Figure 3b below in relation to quarry layout. |
| **Fauna** | No fauna have been recorded on site. The quarry is in a cleared paddock in a highly modified agricultural setting. |
| **Flora** | The quarry site and surrounds are pasture used for livestock grazing. Pastures are actively maintained, being ploughed and fertilised on a regular basis. |

**Local region**

| **Climate** | Mean annual rainfall at nearby Campania (Kincora) is relatively low at 494.9mm. Slightly more rain falls in the spring compared to the rest of the year. As is generally typical for southern Tasmanian, winds at nearby Campania are predominantly north, north-west to westerly throughout the year. There is a distinct peak in strong southerly and gentle south-easterly winds in the afternoon period which reflects sea breezes in summer and southerly changes in the winter-autumn period. Some of the stronger southerly winds recorded at Campania are likely to be more gentle at the quarry site, due to the quarry’s location on the northern side of the Coal River Tier, which deflects southerly winds. |
| **Surrounding land zoning, tenure and uses** | The surrounding area is predominantly a rural/farming area. The township of Campania is located approximately 3 kilometres to the north-east of the quarry. It has been widely publicised that there is interest in the property immediately to the east of the quarry being developed as a ‘Chinese Buddhist Cultural Park’. |
| **Species of conservation significance** | Sickle speargrass (*Austrostipa scabra subsp. falcata*) and Woolly new-holland daisy (*Vittadinia gracilis*) (both listed as rare under the TSP Act) and curly sedge (*Carex tasmanica*) (vulnerable under EPBC Act) are recorded as occurring on the neighbouring property, to the east of the quarry. There are records of three Tasmanian Wedge-tailed eagle (*Aquila audax subsp. fleayi*) nests within 5 kilometres of the quarry, however none are within 1 kilometre of the quarry and the EER states that the sparse surrounding vegetation is not able to support a nest. A number of weeds declared under the Weed Management Act 1999 are present within 5 kilometres of the quarry. |

**Proposed infrastructure**

| **Major equipment** | Standard quarrying equipment – bulldozer, loader, excavators, and 10 tonne truck. A crusher will be brought to the quarry as and when required through a contractual arrangement with an equipment hire company. The crusher will be track-mounted, noise shielded, mobile and of a jaw-type. |
| **Other infrastructure** | All machinery is owned and maintained by the proponent using the machinery workshop located on the same property (approved by Council as an Industrial (Limited Impact) use). Amenities for workers will be provided at the proponent’s home on site. |
Inputs

<table>
<thead>
<tr>
<th>Water</th>
<th>Water will be used for dust suppression at the quarry, on stockpiles, and on access tracks. Water will be taken from sediment settlement ponds and/or from the farm dam located at the northern end of the property.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy</td>
<td>Machinery will be powered by diesel.</td>
</tr>
<tr>
<td>Other raw materials</td>
<td>None</td>
</tr>
</tbody>
</table>

Wastes and emissions

<table>
<thead>
<tr>
<th>Liquid</th>
<th>Stormwater runoff from extraction and stockpile areas.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Atmospheric</td>
<td>Dust from internal and external traffic, materials handling and blow-off from stockpiles.</td>
</tr>
<tr>
<td>Solid</td>
<td>General refuse including food scraps, paper and packaging.</td>
</tr>
<tr>
<td>Controlled wastes</td>
<td>Wastes generated by the servicing of machinery, such as waste engine oil, oil filters, waste tyres.</td>
</tr>
<tr>
<td>Noise</td>
<td>Noise will be generated by the use of heavy machinery for extraction and crushing of rock material, and by the loading and transportation of material.</td>
</tr>
<tr>
<td>Greenhouse gases</td>
<td>Greenhouse gases will be generated by the use of diesel for powering machinery and vehicles.</td>
</tr>
</tbody>
</table>

Construction and operations

<table>
<thead>
<tr>
<th>Proposal timetable</th>
<th>Extraction at the quarry under the existing Level 1 permit has already commenced. It is noted that transport of existing quarry product has not commenced due to the need to fulfill the requirements of the Level 1 permit in relation to upgrading of access on to the public road.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Under this proposed Level 2 quarry, extraction will continue (up to 10,000 cubic metres per annum), and crushing will also be undertaken on a campaign basis for a portion of the extracted material (maximum 2,500 cubic metres per annum), over no more than 10 days per calendar year.</td>
</tr>
<tr>
<td></td>
<td>The 10 year strategy for gravel/rock extraction is to develop a second bench after the existing active face has been pushed northwards (about 10 m) and westward (about 30 m) and made about 5 m deeper.</td>
</tr>
<tr>
<td>Operating hours (ongoing)</td>
<td>Proposed operating hours are those as described in the Quarry Code of Practice (DPIWE and DIER, 1999).</td>
</tr>
<tr>
<td></td>
<td>0700 to 1900 hrs Monday to Friday</td>
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<tr>
<td></td>
<td>0800 to 1600 hrs on Saturday</td>
</tr>
<tr>
<td></td>
<td>No operations on Sunday and public holidays</td>
</tr>
<tr>
<td></td>
<td>In the EER Supplement, the proponents committed to undertaking crushing between 1000 and 1600 hours on weekdays only, in response to concerns from neighbouring residents.</td>
</tr>
</tbody>
</table>

Other key characteristics

A Level 1 planning permit for this quarry (extraction only) was granted by Southern Midlands Council in July 2014. It is noted that while extraction at the time of writing this assessment report was permitted, no transport of material is permitted from the site, due to conditions in the land use planning permit in relation to upgrade of the existing access road not yet being fulfilled.

There is also a Level 1 permit in place for an Industrial (Limited Impact) use – machinery shed.
Figure 1. Location of quarry on The Land (Source: Figure 1, EER)
Figure 2. Quarry location within mining lease, and showing access road (Source: Figure 4, EER).
Williams Quarry

Figure 6b: Quarry Layout

Note that this layout was revised slightly for the submission of the EER Supplement (see Figure 3b of this report).
Figure 3b. Revised quarry layout/water settlement pond (Source: Fig. 6g of EER Supplement).
4 Need for proposal and alternatives

The EER states that the quarry was approved as a Level 1 operation in July 2014, to enable the proponent to supply the local market, in particular agricultural enterprises which require the material for farm laneways. There has since been development of demand for finer, more consistent-sized material and so the decision was made to upgrade to Level 2 quantities and to allow crushing of some of the extracted material on site.

There are no site alternatives for the quarry as the appropriate material is on the proponent’s private property.

The quarry is fully operated by the proponent/landowner and his family and it is not expected to provide any additional employment or direct economic benefit beyond that which the proponent will receive from operating the business.

The EER states that the quarry will have low extraction rates compared to other approved nearby quarries in the area – Mangalore Quarry, Dysart Quarry, and Bridgewater (Boral). It is estimated that there will be a minimum of 25 years of supply.

During the public consultation period, one representation raised concerns regarding the need for the quarry. The representor questioned the claims that there are local markets for the quarry’s products, particularly crushed material, when nearby irrigation work and housing subdivisions are apparently close to completion and it would be expected that further gravel requirements could be met by the existing suppliers in the area. The proponent responded in the EER Supplement by stating that local clients are generally agricultural enterprises in the region, and recently there has been demand for finer, crushed, material. Generally the material is for construction purposes such as for private property road works, driveway gravel, fill for concrete slab construction, and public road works. The EER Supplement states also that to the proponent/consultant’s knowledge, much of the capacity of the larger nearby existing quarries is not being utilised for various reasons. This has not been confirmed.
5 Public and agency consultation

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

Three (3) representations were received. The main issues raised in the representations included:

- The number residences in other ownership (7) being within the 750 metre recommended attenuation distance\(^1\) for use of a crusher and the appropriateness of a quarry development in an area that has become increasingly residential;
- Concerns regarding noise associated with use of the crusher;
- Impacts on endangered fauna species;
- Risk of impacts on groundwater and risk of landslide;
- Distance of quarry from property boundary;
- Risk of vibration on structures;
- Drainage and sediment control;
- Noise and dust associated with use of the internal access road for quarry trucks which is located close to a neighbouring property;
- Lack of consultation/communication with neighbours regarding the quarry proposal and proposed activities to be undertaken on site; and
- Questioning of the need/rationale for the quarry.

The EER was referred to the Department of State Growth (Mineral Resources Tasmania) and a response received.

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

- Noise specialist, EPA Division;
- Regulatory officer, EPA Division; and

The EER Supplement prepared by the proponent provides a response to each of the relevant environmental issues raised by the public and government agencies/bodies.

Prior to the statutory public consultation period, the proponent chose not to undertake their own consultation with neighbours, preferring to rely solely on the statutory public consultation period. This was despite four representations (objecting to the development proposal) being received by Council during the Level 1 application process in 2014 and the recommendations provided in the EPA Division’s Guidelines. The consultation process directly by the proponent with nearby residents was raised as a concern in two of the public representations received at this time. The number of residences within the 750 metre recommended separation distance and the lack of consultation with all residents within this radius, either by the proponent or Council, were the main

\(^1\) Quarry Code of Practice (June 1999), Department of Primary Industries, Water and Environment, and Department of Infrastructure, Energy and Resources.
concerns raised. Council notified the three adjoining residents of the development application as required.

The proponent responded to these concerns in the EER Supplement (p36), by stating “In this case the proponent relied upon the statutory process afforded through the LUPAA for comments to be made about the type, scale and potential environmental effects of their project. The provisions of LUPAA further the objectives of the RMPS and therefore it should not be necessary for a proponent to conduct further consultative work if they choose not to, especially if the project (like this one) is of a small scale and highly unlikely to cause any environmental issues that would cause environmental harm or nuisance.”

However, following the public consultation period, the EER Supplement states that a public meeting was considered by the proponent/consultant, but given the relatively small scale of the proposal, was not deemed the most appropriate way of consulting with nearby affected residents. It was decided that a letter distributed to all residents within 1.4 km was the most effective way to seek comment and feedback. A copy of the letter was provided in the EER Supplement. 15 letters were delivered or handed to residents, and 7 responses received. Two residents exchanged a number of emails with the consultant with concerns over noise, water, and matters such as impacts on house prices. Two residents responded by phone, and three responded in person. The EER Supplement provides a table with verbal ‘indicative comments received’ (all positive/supportive) from five of the respondents. The specific concerns raised by the email exchanges have not been provided.
6 Evaluation of key issues

The key environmental issues relevant to the proposal that were identified for detailed evaluation in this report were:

- Noise;
- Dust; and
- Transport impacts and access road.

Each issue is discussed in the following subsections.

6.1 Noise

Description

Existing environment

The proposed quarry is located within a rural agricultural environment, in a wide valley dissected by Tea Tree Road, and located behind a small topographic rise which shields the quarry from visibility from Tea Tree Road. A laydown area is located to the south west of the quarry. In addition to noise from normal rural agricultural pursuits, traffic noise from Tea Tree Road, a Regional Freight Route, creates a low to moderate level of background noise at the site, and infrequent passing of trains on the rail line to the north of Tea Tree Road and sounding of the train horn at nearby uncontrolled crossings, also is a source of noise in the area.

Approval for a Level 1 quarry was granted by Southern Midlands Council in July 2014 for extraction of up to 4,999 cubic metres per annum. Extraction only, and no transport of material off site, has occurred to date.

The proponent already operates an agricultural services and machinery repair business from the property, and also lives on site.

Potential impacts

Noise emissions will originate from use of a bulldozer, loader, excavator and trucks, for ripping, excavation, and loading of rock materials onto stockpiles and into trucks. Trucks travelling along the access road at the western boundary of the property will also be a source of noise. No blasting is to occur at the quarry.

A crusher will be brought on site as required for campaign-type crushing operations over a period of 3 to 4 days per annum, to crush up to 2,500 cubic metres of the total proposed for excavation of 10,000 cubic metres per annum. The EER states that the crusher will be a track-mounted, noise-shielded, mobile jaw-type crusher.

There are 8 residences in other ownership located within the Quarry Code of Practice’s recommended separation distance for use of a crusher of 750 metres. The nearest residence (designated as House #5 in the EER, at 1220 Tea Tree Road) is located 443 metres to the north-west of the quarry pit and approximately 97 metres from the access road.

It is noted that under new draft interim planning scheme arrangements, the Southern Midlands Council have proposed to zone the property immediately to the east of the quarry as a ‘Particular Purpose Zone 3 - Buddhist Cultural Park Zone’ to facilitate the possible future development of a Buddhist cultural, learning, and tourist facility. Local publicity surrounding this proposed
development and formal public consultation on this proposed zoning has occurred; however a zoning change is not in effect and an application for this development has not been made or approved and therefore little weight can be given to the likely impacts upon such a development. It is noted that the risk of noise from the quarry impacting on such a development have been raised by Council and via a representation during the public consultation stage of this assessment.

**Proponent’s assessment of the significance of potential impacts**

The existence of the topographic ‘lip’ directly north of the quarry pit is considered by the proponents to be sufficient to shield the nearby residences from noise generated by quarry operations.

The proponent also states that the distinctive and rapid decrease in elevation between the hill which supports the quarry and the house location itself, with a prominent ridge or ‘lip’ provides extra noise attenuating effects.

The proponent’s noise assessment states that ambient noise levels (quarry not operating) at the boundary of the nearest neighbour is 39 dB(A). The assessment also estimates quarry noise (including use of crusher) at the nearest residence at approximately 440 metres distance to be 35 dB(A) with little or no wind, and 45 dB(A) with a gentle wind blowing towards the nearest residence (i.e. ‘worst case’ conditions), and the EER states that the quarry is therefore likely to meet the noise requirements of the Tasmanian *Quarry Code of Practice*. Estimates are based on noise measurements taken by the noise assessment’s author of a stationary, unshielded impact-type crusher and shifter located at another quarry. The proponent states that the crushing at this proposed quarry will be substantially quieter as the crusher to be intermittently used on site is to be with a track-mounted, noise-shielded, mobile, jaw-type crusher.

The proponent considers the crusher is likely to be the loudest noise source in a quarry. According to the EER, the crusher will be located in the quarry pit to provide the best opportunity for shielding of noise emissions.

The EER states that a low to moderate level of background noise is experienced at the proponent’s house due to traffic movements on Tea Tree Road, and due to use of the railway line which lies to the north of Tea Tree Road. The nearest residences in other ownership are located closer to Tea Tree Road than to the quarry and the EER claims that the main noise source for the nearest residences is Tea Tree Road.

**Management measures**

Pages 25 – 28 of the EER provide discussion on noise impacts and proposed management actions.

The main factors discussed in the EER which contribute to lowering of risk of creation of noise nuisance at nearby residences are as follows:

- Most noise will be generated in the quarry pit itself and deflected to the south, away from the nearest residences;
- Machinery operating in the laydown area will be shielded by the ridgeline preventing direct noise emissions reaching residences;
- Operating hours of machinery and trucks will adhere to the *Quarry Code of Practice’s* guidelines;
- Use of crusher in reduced hours;
- Maintaining topographic barrier between the quarry and residences;
- Use of crusher on a ‘campaign’ basis over 3 – 4 days per annum;
• Background noise is already experienced by nearby residences from Tea Tree Road traffic and rail movements, and from agricultural machinery used in the area (tractors and diesel machinery).

Page 8 of the EER states that no blasting will take place.

EER Commitments

The following management commitments were made in the EER in relation to the potential noise impacts:

EER Commitment 1: Operating hours are those recommended in the Quarry Code of Practice – 0700 to 1900 hours Monday to Friday, 0800 to 1600 hours on Saturday; closed on Sunday and public holidays.

EER Commitment 10: Crushing will only occur between 1000 hours and 1600 hours on operating days.

EER Commitment 12: The following measures will be applied to mitigate potential impacts of unreasonable levels of dust and noise caused to the residence at 1220 Tea Tree Road –
  • Ensure compliance with the operating hours and days for the quarry;
  • Maintain the existing Complaints Register to record and address any complaints received in relation to Access Road usage by quarry related vehicles. Provide water (via sprinklers or water cart) to dampen the road surface during dry periods with associated south-easterly to easterly winds to keep road surface dust emission levels low; and
  • Ensure trucks carrying gravel limit their speed to 40km/hr when using the Access Road.

EER Commitment 14: A Complaints Register is maintained to record and address any complaints received about the activities in or directly related to the operation of the quarry.

Public and agency comment and responses

Three representations were received during the public comment period, with all three raising issues of noise, and loss of amenity due to noise, as concerns.

Public comment provided in representations

Three representations were received in relation to the proposal, from neighbouring property owners. The following issues were raised in relation to noise impacts:

• The number of residences/sensitive uses (at least 8 – one representation pointed out a number of structures and sites on their property which they considered ‘sensitive’, but it is noted that some of these may not meet the strict definition of a ‘sensitive use’) within the recommended separation distance for crushing of 750 metres from the quarry was raised as a concern in all three representations.

• Noise from trucks travelling on the access road, particularly on the residence at 1220 Tea Tree Road (designated as House #5 in the EER, Figure 10), concerns relating to the proposed speed limit of 40 km/hr on this access road, and in regards to the large increase
in the number of trucks using this access road in comparison to what is currently being experienced.

- One representation stated that the expected increase in the number of trucks using the access road is very high in relation to the number of trucks currently using the road.

- Noise estimates provided in the noise assessment were based on measurements of a crusher used at another quarry. Concerns were raised in two of the representations that the estimates provided are not representative of either the location or the machinery to be used at the proposed quarry. Given this, the one representor suggested that the proponent undertake a ‘dummy run’ of the crusher to determine whether noise requirements can be met.

- Concerns were raised regarding operating hours and the proposed 6 days per week operation of the crusher and that there was no commitment made to inform neighbouring residents of when the quarry operator will be using the crusher on site.

- Ambiguous/non-committal language used in the EER, e.g. that the quarry was ‘likely’ to meet the requirements of the Quarry Code of Practice in relation to noise and other impacts within the recommended separation distance, rather than that it ‘will’ meet the requirements.

- Lack of discussion in the EER on a range of other related issues, such as the possibility of reflective noise impacts now and into the future (with crusher placed in quarry with benches in place), the risk of impacts from vibration at the quarry on structures, and whether screening will be used at the quarry.

**Proponent’s responses in EER Supplement**

Following the public consultation period, some EER Commitments were modified, and some additional commitments made.

EER Commitment 10 was modified to restrict use of the crusher to weekdays only, between 1000 and 1600 hours:

**EER Supplement Commitment 10**: Crushing will occur on no more than 10 days per annum (based on a calendar year), and will be restricted to 1000 hrs and 1600 hrs on normal weekdays (Monday to Friday). No crushing will occur on a Saturday, Sunday or Statewide Public Holiday.

EER Commitment 12 was modified to restrict trucks moving on the access road to 20 km/hr, rather than 40 km/hr:

**EER Supplement Commitment 12**: The following measures will be applied to mitigate potential impacts of unreasonable levels of dust and noise caused to the residence at 1220 Tea Tree Road –

- Ensure compliance with the operating hours and days for the quarry;
- Maintain the existing Complaints Register to record and address any complaints received in relation to Access Road usage by quarry related vehicles.
- Provide water (via sprinklers or water cart) to dampen the road surface during dry periods with associated south-easterly to easterly winds to keep road surface dust emission levels low;
- Cover loads with a suitable tarpaulin or dampen load; and
• Ensure trucks carrying gravel limit their speed to 20km/hr when using the Access Road.

A new commitment was made to undertake a noise survey to provide information on the use of the crusher on site:

EER Supplement Commitment 21: A noise survey will be conducted by a suitably qualified person to monitor noise levels at nearest sensitive uses when the crusher is on site which will also include at the same time the monitoring of noise levels from other plant and vehicles associated with the quarry, once the quarry is operating. The report of the survey will be provided to the Director of the EPA.

To address concerns regarding notification of use of a crusher at the site, and the frequency of use, the following new commitment was made:

EER Supplement Commitment 23: Landowners within 750 metres of the quarry will be provided at least 48 hour notice (written letter) prior to use of a crusher at the quarry.

A revised noise assessment was undertaken to provide ambient noise measurements and noise estimates for trucks on the access road, and to provide comment on the concerns relating to vibration and reflective noise. It was concluded that due to lack of blasting to occur on site, vibration was unlikely to impact nearby residences, and that any reflective noise coming from the quarry was also unlikely to impact residents located to the north of the quarry as the quarry faces to the south. The EER Supplement also confirmed that screening would not be undertaken at the quarry.

A response is also provided in relation to the number of truck movements on the access road, stating that the number of permitted vehicle movements per day will not change, and that vehicle movements associated with the quarry operations will be a maximum of 30 movements per day, but the number of days per year that maximum number of vehicles will be using the road will increase. The EER Supplement also states that it is expected that use of a 10 tonne truck will result in the need to haul approximately 1,600 loads per annum.

**Evaluation**

**General issues**

The EER Commitment 14 to maintain a complaints register is supported, and reinforced by the inclusion of standard condition G6 requiring maintenance of a complaints register, and standard condition N5, requiring any noise complaint received in relation to the activity to be reported to the Director.

**Noise from extraction and crushing**

It is considered that the potential issues relating to vibration and reflective noise effects, which were raised in public representations, have been adequately addressed in the EER Supplement. Blasting, which could create unreasonable levels of vibration, is not proposed to occur at the quarry and this has been reinforced by the inclusion of non-standard permit condition B1. Whilst the EER Supplement states that screening will not occur at the quarry, it is known that crushing equipment often has screening built into the machinery and that it is likely that some screening may occur on site. The EPA’s Noise Specialist has advised that the noise emissions from screening undertaken in this manner is considerably less than the use of the crusher itself and so is unlikely to create an unreasonable impact. The proposed restricted use of the crusher and the
relatively small proposed quantities of rock to be crushed further reduces the risk of screening causing a noise nuisance.

With regards to concerns that the noise estimates for the crusher provided in the EER were not going to be representative of the noise which will be experienced, it is generally considered acceptable when estimating potential noise impacts to use data from other sites and machines as a proxy. The new commitment made, EER Supplement Commitment 21, to undertake a noise survey once the quarry is operating, is supported. Non-standard (site-specific) condition N3 requiring a survey to be undertaken during the first crushing ‘campaign’, and which is to take into account noise from extraction, crushing, and product transport, further reinforces this commitment. Standard condition N4 regarding noise survey method is also included to support condition N3.

Despite the EER and EER Supplement stating that the proponent will be the sole operator of the quarry and will also be responsible for the transportation of material from the quarry (and therefore excavation and transportation of material is unlikely to occur simultaneously), it must be noted that the conditions of the permit relate to the operations on ‘The Land’, and permit others to operate the activity regardless of ownership. As such, measurement of noise emissions at the nearest residence must occur during a worst case scenario, which is considered to be while trucks are using the access road at the same time as the crushing equipment is operating.

Concerns regarding the times of use of the crusher at the quarry have been addressed by the proponents in the EER Supplement with the updating of EER Commitment 10, to restrict use of the crusher to weekdays only, between 1000-1600 hours. This commitment is reinforced by the inclusion of this restriction in non-standard (site-specific) condition N2 (subsection 2) in the permit.

According to the Tasmanian Quarry Code of Practice, restriction of operating hours and having appropriate separation distances are the most effective means of reducing the risk of noise impacts. Given the number of residences located at a distance less than the recommended separation distance for crushing at a quarry, it is appropriate to restrict operating hours more than what would normally be imposed for a quarry of this size.

The new commitment (EER Supplement Commitment 23), to inform all landowners within 750 metres of the quarry when the crusher will be on site, is supported.

The EER included a noise assessment which provided a worst-case estimate (crusher operating, and slight breezes in the direction of the residence) of noise levels at the nearest residence of 45 dB(A). While this noise emission level is considered a reasonable estimate for a quarry operating in a rural agricultural area, truck movements on the access road and the impacts on the nearest residence were not factored in to this estimate. To account for the inclusion of truck noise in the noise emission limit while the quarry is operating, and revised ambient noise measurements (estimating levels of between 43.6 dB(A) and 46.2 dB(A) at the nearest residence), both of which were provided in the EER Supplement, a daytime noise emission limit of 47 dB(A) is included in the permit conditions (non-standard permit condition N1). The relatively high (for a rural environment) daytime ambient noise levels are considered likely to be mainly due to the traffic movements on the Tea Tree Road. Therefore, compliance with a strict 45 dB(A) limit, originally discussed in the EER as the maximum level of noise emanating from the quarry while the crusher is in use, may be difficult, particularly once truck movements on the access road are factored in. A daytime limit of 47 dB(A) at the nearest residence, or no more than 5 dB(A) above ambient levels, is considered a suitable level to both ensure a reasonable level of protection for residents from noise impacts, while allowing the quarry to operate and transport materials on the access road without breaching permitted noise emission limits. The quarry operator should note that the 10 minute averaging period for noise measurement, as specified in permit condition N1, means that one truck movement in a 10 minute period is unlikely to cause a breach in the noise emission limit; however more frequent truck movements than this are likely to cause a non-compliance with the permit conditions.

The EER states that the maintenance of a topographic ‘lip’ between the quarry and the nearby residences will assist considerably in attenuating noise emanating from the quarry. This statement
is supported; however the EER also stated that plans were to move the quarry in a westwards direction. This raised concerns that there would eventually be a loss of this topographic barrier, which would particularly potentially impact the house at 1216 Tea Tree Road (designated as House #3 in Figure 10 of the EER; see Figure 4 below) which is at a similar elevation to the quarry and laydown area (as opposed to nearer residences which are located at a lower elevation) and currently has a line of sight from the westward edge of the proposed quarry area (see Plate 1 below). The EER Supplement addresses this by including a revised quarry layout, which can be seen in Figure 3b of this report, and which demonstrates maintenance of a soil bund around the quarry working area. Maintenance of such a bund or hard barrier, to attenuate noise experienced by this residence, should ensure that the proponent will continue to comply with the noise emission limits in permit condition N1.
Figure 4. Nearby sensitive uses and distances from quarry (Source: Figure 10 EER).

<table>
<thead>
<tr>
<th>SENSITIVE USE SITES</th>
<th>DISTANCE BETWEEN QUARRY CENTRE AND SENSITIVE SITE (m)</th>
</tr>
</thead>
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</tr>
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<td>2</td>
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<td>505.5</td>
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<tr>
<td>12</td>
<td>846.9</td>
</tr>
</tbody>
</table>

Williams Quarry

Figure 10: Sensitive Uses and Impact Assessment Zones (QCP)
Noise from transport of quarry product along the access road

The maximum noise level experienced at the nearest residence is estimated by the proponent in the EER Supplement to be 60.1 dB(A). This is considered by the EPA Division’s Noise Specialist to be a realistic estimate of noise experienced due to the passing of a 10 tonne truck. This is considerably higher than the proposed noise emission limit for the quarry and its related transportation operations (47 dB(A)) as stated in non-standard permit condition N1. Due to the standard averaging period of 10 minutes for noise emissions, and the short duration in which this noise would be experienced (less than 1 minute), it is likely that compliance with the 47 dB(A) limit is achievable, should noise emissions emanating from the quarry itself be at a reasonable level and the number of trucks passing are appropriately spaced over the course of the day (i.e. once every 10 to 15 minutes, as opposed to continuously).

The EER and EER Supplement state that a maximum of 30 truck movements per day are expected to occur due to transportation of quarry product from the site. Non-standard (site-specific) permit condition OP3 is made in this regard. The number of heavy vehicles currently using the access road was not provided by the proponent, however no heavy vehicles associated with the existing Level 1 quarry operations will have occurred due to the lack of fulfilment of the full requirements of the Level 1 permit conditions to allow transport of product off site.

The EER Supplement estimates that approximately 1,600 loads (3,200 movements) using a 10 tonne truck will be required to transport the maximum permitted extracted material (10,000 cubic metres per annum) from the site. It is estimated that the maximum level of movements (30 per day,
as per non-standard condition OP3) may occur on up to 107 days per year, or on approximately 40 per cent of weekdays.

The passing of trucks (empty and laden) at a distance of 97 metres from the nearest residence in other ownership is considered to present a considerable risk of environmental nuisance occurring at this residence. The reduction in speed from the originally proposed 40 km/hr to 20 km/hr in EER Supplement Commitment 12 is supported and is expected to reduce noise from trucks using the access road. A high level of maintenance of the access road to ensure corrugations and potholes do not occur will also reduce the risk of noise occurring due to rattling of trucks, particularly when empty.

Additionally, given the relatively short distance from the access road to the nearest residence, the lack of any topographical barrier to provide attenuation (noting that vegetation alone is not considered an effective method of noise attenuation), it is considered appropriate to further restrict the hours in which heavy vehicles associated with the quarry operation use the access road (either empty trucks travelling to the quarry, or laden trucks travelling from the quarry to the public road access point on to Tea Tree Road). Non-standard permit condition N2 (subsection 3) restricts truck use of the access road to between 0800 and 1800 hours on weekdays only. Given the relatively small quantities proposed to be extracted from this quarry, this is not expected to unreasonably affect the quarry operator’s ability to transport extracted product from the site given the additional restriction provided by non-standard condition OP3.

**Conclusions**

The proponent will be required to comply with the following standard (generic) conditions:

- **G6** Complaints register
- **N4** Noise survey method and reporting requirements
- **N5** Noise complaints

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

- **B1** No blasting on The Land
- **N1** Noise emission limits
- **N2** Operating hours
- **N3** Noise survey requirements
- **OP3** Maximum number of truck movements

The commitments provided in the EER Supplement (which consist of an updated list of commitments from the EER, and some additional commitments), are included in the permit:

- **OI3** Proponent / Applicant Commitments
6.2 Dust

**Description**

**Existing environment**

The quarry is located in an area characterised by cool winters and warm summers, with a mean annual rainfall at nearby Campania of 494 mm per annum. Mean monthly rainfall is relatively constant throughout the year, however with slight peaks in late winter and spring.

Winds are predominantly from the north, west and north-west, as is typical for this part of Tasmania. Wind roses for January and June\(^2\) show lower wind speeds and generally calmer conditions in June. Summer afternoon winds are particularly strong with southerly and south-easterly afternoon winds occurring often, in addition to westerly winds. The quarry is protected somewhat from these southerly breezes due to the ridgeline directly to the south (Coal River Tier). Summer and autumn months show a greater proportion of winds coming from the east, north-east and south-east.

**Potential impacts**

The EER identifies the following sources of dust from the quarry operation:

- Ripping of rock during dry windy conditions (summer months);
- Removal of grass cover and the stripping of topsoil (very limited, according to the EER, as the footprint will not increase significantly from its current extent and the amount of topsoil is negligible);
- Movement of rock and gravel within the quarry by machinery;
- Crushing of rock material;
- Road (gravel) use in and next to the quarry; and
- Stockpiled gravel and fines.

Additionally, the access road from the Tea Tree Road access point up to the quarry is unsealed and there is a risk of dust impacting the property immediately to the west of the access road (at 1220 Tea Tree Road) through increased heavy vehicle movements on this access road, associated with the quarry.

**Proponent’s assessment of the significance of potential impacts**

The EER states that there is no evidence that significant amounts of dust escape the quarry or access road based on an examination of vegetation at a distance of 50 metres. The EER also states that that given the low rainfall of the area, any dust from the quarry that blows onto the standing vegetation is likely to persist for some time.

In relation to the access road, the proponent states in the EER that the adjacent stand of pine trees, eucalypts, and other vegetation do not show evidence of any dust emissions from current road usage, but acknowledges that during dry periods there is a risk of dust being experienced at the nearby residence at 1220 Tea Tree Road, from trucks using the unsealed road.

Given the lack of evidence of dust persisting on nearby vegetation, the proponent states that there is little to suggest there will be significant dust generation from either the quarry or the access road.

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Management measures

The proponents state on page 24 of the EER that during periods of dry weather, the access road surface, the area near the stockpiles, and/or loads in trucks (unless covered by tarpaulins) will be dampened with water accessed from the nearby sediment ponds or an on-site water cart truck. This is reflected in EER Commitment 7.

EER Commitment 7: As a dust suppression measure, during periods of dry weather the Access Road surface, areas near the stockpiles and/or loads in trucks (unless they are covered by tarpaulins) will be dampened with water accessed from the nearby sediment ponds or on-site water truck.

EER Commitment 12: The following measures will be applied to mitigate potential impacts of unreasonable levels of dust and noise caused to the residence at 1220 Tea Tree Road –

- Ensure compliance with the operating hours and days for the quarry;
- Maintain the existing Complaints Register to record and address any complaints received in relation to Access Road usage by quarry related vehicles. Provide water (via sprinklers or water cart) to dampen the road surface during dry periods with associated south-easterly to easterly winds to keep road surface dust emission levels low; and
- Ensure trucks carrying gravel limit their speed to 40km/hr when using the Access Road.

Public and agency comment and responses

No public or agency comment was received specifically in relation to dust impacts. The EPA Division raised concerns regarding the dust created by trucks travelling on the unsealed access road.

Proponent responses in EER Supplement

EER Commitment 12 was modified to reduce the speed of trucks from 40 km/hr to 20 km/hr on the access road:

EER Supplement Commitment 12: The following measures will be applied to mitigate potential impacts of unreasonable levels of dust and noise caused to the residence at 1220 Tea Tree Road –

- Ensure compliance with the operating hours and days for the quarry;
- Maintain the existing Complaints Register to record and address any complaints received in relation to Access Road usage by quarry related vehicles.
- Provide water (via sprinklers or water cart) to dampen the road surface during dry periods with associated south-easterly to easterly winds to keep road surface dust emission levels low;
• Cover loads with a suitable tarpaulin or dampen load; and
• Ensure trucks carrying gravel limit their speed to 20km/hr when using the Access Road.

**Evaluation**

Dust generated at the quarry through extraction, crushing and loading of product, must be controlled so that it does not leave The Land in amounts that may cause environmental nuisance. The quarry working area is located a short distance from the property boundary (10 metres) and during dry periods of stronger westerly winds, the risk of dust being blown into the neighbouring property is high. Standard permit condition A1 requires dust to be controlled to prevent environmental nuisance beyond the boundary of the land, and standard permit condition A2 requires dust to be controlled from crushing and screening plant to prevent environmental nuisance.

Dust is likely to be generated by heavy vehicles using the unsealed access road. The neighbouring residence at 1220 Tea Tree Road is located approximately 97 metres to the west of the access road. Particularly during times of easterly winds, the risk of dust creating environmental nuisance for this residence is high, which is acknowledged by the proponent in the EER and led to the creation of management commitments to manage dust by dampening the access road (and other dust generation sources at the quarry) using a water truck or sprinklers during periods of easterly and south-easterly winds, as well as restricting truck speed to 20 km/hr. These commitments are supported, and reinforced by the non-standard (site-specific) permit condition A4.

EER Supplement Commitment 12 includes a commitment to cover or dampen loads. This is supported and reinforced by the inclusion of standard permit condition A3.

The environment in which this quarry is located is dry (less than 500 mm per annum of rainfall) and calm periods of little to no wind are infrequent, particularly over the warmer months. A basic assessment of the wind rose data\(^3\) shows that the following times have a strong easterly influence:

- January 9am – 20% of winds are from the east, north-east, or south-east;
- January 3pm – 24% of winds are from the east, north-east, or south-east, with predominant wind speeds of 20-30 km/hr;
- March 3pm – 25% of winds are from the east, north-east, or south-east;
- December 3pm – 25% of winds are from the east, north-east, or south-east, with predominant wind speeds of 20-30 km/hr.

It is during these times that the risk of dust being experienced by the neighbouring resident is particularly high. Continual use of a water cart/sprinkling truck during these times is likely to contribute to an increased risk of noise nuisance at this residence. Non-standard condition A4 requires the movement of water sprinkling vehicles to be included in the maximum number of vehicle movements per day associated with the quarry (as per condition OP3). The proponent may wish to consider the installation of a permanent sprinkling system on the access road to avoid the use of a water cart, and/or restricting transport of materials off site and use of the access road in adverse (dry, windy, winds from the east) conditions.

While vegetation plantings between the access road and the resident may, over the longer term, provide some level of protection from dust, until vegetation has grown sufficiently, this is likely to provide little benefit. However, it is noted that a vegetative screen is present at the boundary close to

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to the neighbouring residence at 1220 Tea Tree Road. It is anticipated that this will reduce the proportion of time this house is exposed to the risk of wind carrying dust from the south-east.

**Conclusions**

The proponent will be required to comply with the following standard (generic) conditions:

A1 Control of dust emissions
A2 Control of dust emissions from plant
A3 Covering of vehicles

The proponent will be required to comply with the following site-specific condition:

A4 Dust emissions from traffic areas
OP3 Maximum number of truck movements

The commitments provided in the EER Supplement (which consist of an updated list of commitments from the EER, and some additional commitments), are included in the permit:

OI3 Proponent / Applicant Commitments
6.3 Transport impacts and access road

Description

Existing environment

The quarry is located approximately 500 metres from Tea Tree Road. Access to the quarry is via an existing unsealed private access road, which runs close to the western boundary of the property at 1356 Tea Tree Road.

The Level 1 quarry permit, approved by Council in mid-2014, required strengthening works to the access point on to Tea Tree Road prior to cartage of quarry materials commencing. This has not yet been completed. To date, there has been no transport of quarry materials permitted from the site.

Potential impacts

Heavy vehicles originating at the quarry and travelling on the unsealed private access road can create dust and noise nuisance for nearby residents. The residence immediately to the west of the access road, at 1220 Tea Tree Road, is located approximately 97 metres from the access road at its closest point. This residence in particular may be impacted by dust and noise from passing heavy vehicles.

The proponent states that transport of quarry product off-site would be possible within the existing approval for up to 40 vehicle movements per day, and estimates that the maximum associated with the quarry would be 30 movements (15 loads) per day.

Proponent’s assessment of the significance of potential impacts

The proponent states on page 28-29 of the EER that there will be no unreasonable dust or noise impacts on nearby residents from transport of quarry product, and that any impacts can be readily mitigated. The EER states that the number of approved vehicle movements on the access road is not proposed to change, however the number of days per year in which there will be movements will increase, as a result of the quantities of product associated with a Level 2 quarry.

Management measures

A Traffic Impact Assessment (TIA) was provided in Appendix 7 of the EER.

The following management commitments are made in the EER:

**EER Commitment 11:** Trucks will avoid entering and leaving the quarry in the period 20 minutes either side of the school bus collection and drop-off time, as advised by the school bus operator.

**EER Commitment 12:** The following measures will be applied to mitigate potential impacts of unreasonable levels of dust and noise caused to the residence at 1220 Tea Tree Road –

- Ensure compliance with the operating hours and days for the quarry;
- Maintain the existing Complaints Register to record and address any complaints received in relation to Access Road usage by quarry related vehicles. Provide water (via sprinklers or water cart) to dampen the road surface during
dry periods with associated south-easterly to easterly winds to keep road surface dust emission levels low; and

- Ensure trucks carrying gravel limit their speed to 40km/hr when using the Access Road.

EER Commitment 13: The works associated with the approved Level 1 Activity in relation to road strengthening have not yet been completed, but should be as part of the Level 2 Activity.

Public and agency comment and responses

Three representations were received in relation to the proposal. One representation raised the following concerns in relation to traffic and transport:

- Transportation of product out of quarry operating hours;
- The noise assessment undertaken did not include noise from quarry trucks travelling along the private access road at 40 km/hr or accessing/leaving the property; and
- The representor states that the number of trucks currently permitted by existing Level 1 permits has never been witnessed by the representor, so the estimate in the EER that there will be up to 30 movements per day associated with quarry operations represents a large increase in truck traffic on the private access road compared to what is currently occurring.

Council also raised concerns during the comment period. Council had specifically requested information for actual (as opposed to a permitted maximum) truck and vehicle movements that have been occurring from the property, yet this was not provided in the EER. Council required the proponent to submit in the EER Supplement, data reflecting existing traffic movements and proposed traffic movements, broken down into heavy and light vehicles.

The Department of State Growth (Roads) were consulted during the development of guidelines for the quarry proposal in regards to traffic and transport requirements. Feedback was provided to the EPA Division that the requirements previously provided as part of the Level 1 quarry application in mid-2014 still applied, and that there were no further specific requirements.

Proponent’s responses – EER Supplement

The EER Supplement addresses the representor’s concern regarding transportation of product by reiterating that the proponent already has a permit (relating to the existing machinery business, and the Level 1 quarry once required road access works are complete) allowing up to 40 vehicle movements per day, and that the quarry will be operated within the hours stated. A new management commitment is made in the EER Supplement:

EER Supplement Commitment 22: Traffic movements onto Tea Tree Road will be managed to not exceed 40 per day for all activities occurring on the property.

The proponent has also committed to undertaking a noise survey to monitor noise at nearest residences, which will include monitoring of noise levels from vehicles associated with the quarry.

EER Supplement Commitment 21: A noise survey will be conducted by a suitably qualified person to monitor noise levels at nearest sensitive uses when the crusher is on site which will also include at the same time the monitoring of noise levels from other plant and vehicles associated with the quarry, once the quarry is operating. The report of the survey will be provided to the Director of the EPA.
Appendix 6 of the EER Supplement provided an updated noise assessment which estimated the noise impacts of heavy vehicles travelling on the private access road to the quarry.

EER Commitment 12 was modified in the EER Supplement regarding the speed of trucks on the access road, reducing speeds from 40 km/hr to 20 km/hr:

**EER Supplement Commitment 12:** The following measures will be applied to mitigate potential impacts of unreasonable levels of dust and noise caused to the residence at 1220 Tea Tree Road –

- Ensure compliance with the operating hours and days for the quarry;
- Maintain the existing Complaints Register to record and address any complaints received in relation to Access Road usage by quarry related vehicles.
- Provide water (via sprinklers or water cart) to dampen the road surface during dry periods with associated south-easterly to easterly winds to keep road surface dust emission levels low;
- Cover loads with a suitable tarpaulin or dampen load; and
- Ensure trucks carrying gravel limit their speed to 20km/hr when using the Access Road.

In regards to the provision of data showing actual vehicle movements to and from the property, as requested by Council, the EER Supplement did not provide this information.

**Evaluation**

The existing Level 1 permit includes requirements from the Department of State Growth (Roads), which relate to strengthening of the pavement at the access point onto Tea Tree Road, upgrade of access to current construction standards and sealing at the access point to the property boundary, and a requirement for a permit under the *Roads and Jetties Act 1935*. These requirements have not yet been fully met. The EER Supplement states that works are estimated to be completed by April 30, 2015. Cartage of material from the Level 1 quarry is not permitted until these works are completed.

In regards to the representor’s concerns about times of operation of quarry vehicles, the proponent will be restricted to operating vehicles associated with quarry operations (including the loading of product, and transportation of product offsite) to the hours of 0800 to 1800 on weekdays only (site-specific permit condition N2 (3)). The restriction of transport to these hours will not unreasonably impact on the quarry operator’s ability to transport permitted maximum quantities of materials from the site, but will assist in the protection of amenity for the nearby residents, in particular the nearest residence at 1220 Tea Tree Road. Additionally, site-specific condition N1 provides specific limits to noise emissions from the activity (which includes loading and transportation of product offsite) which must be complied with at all times.

The proponent’s commitment to undertake a noise survey (EER Supplement Commitment 21) is supported by site-specific permit condition N3 requiring a survey to be undertaken, and standard condition N4 (in relation to survey method and reporting requirements). Permit condition N3 specifically requires the survey to include quarry vehicle transport noise in the assessment. This assessment will provide data to inform the Director whether environmental harm is occurring or is likely to occur.
Appendix 6 of the EER Supplement provided an updated noise assessment which estimated the noise impacts of heavy vehicles travelling on the private access road to the quarry. Some aspects of the report are not considered entirely accurate. The report states that the nearest house is 111 metres from the access road; yet aerial photograph measurements show this distance to be approximately 97 metres. The report also states that the residence is 200 metres from Tea Tree Road, when measurements would indicate this house is 140 metres from Tea Tree Road. Additionally, assumptions that empty trucks are less noisy than fully laden trucks are not able to be supported. Despite this, maximum noise levels of 60.1 dB(A) are considered by the EPA Division’s Noise Specialist to be a reasonable estimate of the noise levels to be experienced at the nearest neighbouring residence from a 10 tonne truck passing on the access road. As noise emission limits are taken over a 10 minute averaging interval and a passing truck is likely to take much less time than this, it is considered unlikely that the noise emission limits provided in permit condition N1 will be breached, as long as the more continuous/ongoing noise concurrently being emitted from other quarry activities, and the frequency of trucks passing, is kept at minimal levels.

This will be confirmed by noise survey as required by permit condition N3.

EER Commitment 12 was modified in the EER Supplement to reduce speed of trucks on the access road from 40 km/hr to 20 km/hr. This speed reduction is supported and is likely to reduce the risk of noise and dust nuisance occurring. EER Commitment 12 also states that a complaints register is to be maintained. Standard permit condition G6 regarding a complaints register, and standard condition N5 regarding noise complaints, are provided in this regard.

There are currently no heavy vehicle movements on the access road associated with the existing Level 1 quarry due to the requirements of the Level 1 permit in relation to strengthening of the access point at Tea Tree Road not yet being fulfilled. Data regarding use of the access road by heavy vehicles associated with other activities on the property were not provided by the proponent. The representation indicated that based on the representer’s observations, use of the access road is currently very minimal, and in the absence of any further information from the proponent, it is assumed that the use of the access road by heavy vehicles as a result of the proposed quarry will substantially increase. The EER Supplement states that a maximum of 30 truck movements per day (15 laden, and 15 empty truck loads) are required to transport quarry product from the site. Based on use of a 10 tonne truck, the proponent estimates that up to 1,600 loads of material will be transported per annum, and if cartage is to occur on 200 days per year, this will require 8 loads per day (or 16 vehicle movements). They also state that it is unlikely that there would be more than 3 truckloads per hour leaving the quarry as the operation is to be run by one person/truck only. Non-standard permit condition OP3 is made to restrict the number of heavy vehicle movements to a maximum of 30 movements per day, as proposed in the EER and EER Supplement.

Issues relating to noise and dust from the access road are further covered in more detailed in Section 6.1 and Section 6.2 of this report. There is a reasonable risk that trucks moving on the access road, particularly at potentially greatly increased frequency, may cause nuisance at the residence at 1220 Tea Tree Road. This residence is situated approximately 97 metres from the access road and there is little in the way of topographic or vegetative barriers between the road and the residence. The maintenance of the condition of the access road, to ensure corrugations and potholes do not occur on the road which would contribute to noise impacts, is a key factor in the management of nuisance due to truck movements. Additionally, ensuring the access road is kept damp during times of use by quarry vehicles and during adverse weather conditions is considered a suitable method for ensuring dust does not leave the boundary of The Land and contribute to dust nuisance for the nearest neighbour. This is supported by non-standard permit condition A4.
**Conclusions**

The proponent will be required to comply with the following standard (generic) conditions:

- **G6** Complaints register
- **N4** Noise survey method and reporting requirements
- **N5** Noise complaints

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

- **N1** Noise emission limits
- **N2** Operating hours
- **N3** Noise survey requirements
- **OP3** Maximum number of truck movements
- **A4** Dust emissions from traffic areas

The commitments provided in the EER Supplement (which consist of an updated list of commitments from the EER, and some additional commitments), are included in the permit:

- **OI3** Proponent / Applicant Commitments
7 Other issues

In addition to the key issues, the following environmental issues are considered relevant to the proposal and have been evaluated in Appendix 1.

1. Flora and fauna
2. Weed and disease management
3. Stormwater and drainage management
4. Waste management
5. Dangerous goods and environmentally hazardous materials
6. Aboriginal and European cultural heritage
7. Sustainability and climate change
8. Fire risk
9. Rehabilitation
8 Report conclusions

This assessment has been based upon the information provided by the proponent in the permit application, EER, EER Supplement and in correspondence and discussion between the EPA Division and the proponent and the proponent’s representatives.

This assessment has incorporated specialist advice provided by EPA Division scientific specialists and regulatory staff, other Divisions of DPIPWE and other government agencies.

This assessment has taken into account issues raised in public submissions.

It is concluded that:

1. the RMPS and EMPCS objectives have been duly and properly pursued in the assessment of the proposal; and

2. the assessment of the proposal has been undertaken in accordance with the Environmental Impact Assessment Principles.

It is concluded that the proposal is capable of being managed in an environmentally acceptable manner such that it is unlikely that the RMPS and EMPCS objectives would be compromised, provided that the Permit Conditions - Environmental No. 9117 appended to this report are imposed and duly complied with, including commitments made by the proponent in the EER and EER Supplement.

Given the number of sensitive uses within the standard recommended separation distance for a quarry with crushing, it is considered that future increases in production rates at this quarry may not be appropriate.
<table>
<thead>
<tr>
<th>Report approval</th>
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<tbody>
<tr>
<td>Environmental Assessment Report and conclusions, including permit conditions, adopted:</td>
</tr>
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</table>

![Signature]

Warren Jones  
Chair  
Board of the Environment Protection Authority

Meeting date: 5 May 2015
9 References


## 10 Appendices

<table>
<thead>
<tr>
<th>Appendix</th>
<th>Title</th>
</tr>
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<tbody>
<tr>
<td>Appendix 1</td>
<td>Assessment of other issues</td>
</tr>
<tr>
<td>Appendix 2</td>
<td>Summary of public and agency submissions</td>
</tr>
<tr>
<td>Appendix 3</td>
<td>Permit conditions – Environmental</td>
</tr>
</tbody>
</table>
## Assessment of other issues

### ISSUE 1: FLORA AND FAUNA

**Description of potential impacts**

Clearing of native vegetation to increase extraction areas can result in a loss of native flora and fauna habitat.

**Management measures proposed in EER**

No management measures are proposed in the EER as the quarry is already in a cleared agricultural area with no flora or fauna species of conservation significance identified on or in the vicinity of the quarry.

**Public and agency comment**

One public representation expressed concerns that the potential impacts on threatened fauna, in particular on the Wedge-tailed eagle and Tasmanian devil, were not adequately addressed, given that both species are regularly seen in the area. PCAB confirmed that there is unlikely to be significant impact on flora and fauna due to the location of the proposed quarry in an established agricultural area.

**Evaluation**

The EER Supplement states that nearby recorded locations of the Tasmanian devil are roadkill records, close to the access point on to Tea Tree Road. Given the proposed daytime operation of the quarry, when devil activity is low, the proponent considers the risk to any devils to be very low. The EER stated that any nearby native vegetation (to the south of the quarry) that may have been suitable for eagle activity was burned in 2013 bushfires which affected much of the Coal River Tier. No impact on flora or fauna of conservation significance is expected given the highly modified nature of the environment at, and surrounding, the quarry area. No native vegetation which may provide denning, foraging, or nesting opportunity for threatened species is to be impacted due to the quarry proposal.

**Conclusion**

No permit conditions relating to protection of flora or fauna will be required.
## ISSUE 2: WEED AND DISEASE MANAGEMENT

### Description of potential impacts

Quarries can contribute to the spread of weeds and diseases such as *Phytophthora cinnamomi*, due to the transportation of weed and disease-bearing material (mud, soils) on machinery and vehicles to and from the quarry, as well as spreading weeds from the quarry itself via transportation and use of quarry products off site.

A number of declared weeds (*Weed Management Act 1999*) are present in the area and two declared weeds were detected within the mining lease (*Marrubium vulgare* or horehound, and *Cirsium arvense* or Californian thistle).

*Phytophthora cinnamomi* has not been detected on site.

### Management measures proposed in EER

EER Commitment 4 states: *A Weed Management Plan is implemented at the quarry operation.*

Appendix 4 of the EER contains a Weed and Pathogen Management Plan which provides a description of the relevant weeds, management recommendations (including spraying) and recommended preventative strategies (such as provision of washdown facilities for vehicles and ongoing monitoring).

### Public and agency comment

The EPA Division’s Regulatory Officer required more specific information in relation to weed management, such as proposed spraying regimes, and details regarding washdown.

### Evaluation

The EER Supplement states that the provision of a spraying program is not possible until more knowledge of the weeds occurring onsite is known and that this information will be continually updated, and will therefore direct any weed spraying regime, which would be undertaken directly by the quarry operator.

The proponent has existing obligations under the *Weed Management Act 1999* to manage and contain the spread of declared weeds due to quarry operations, relating to the operational quarry area as well as the entire mining lease and the wider property owned by the proponent. The Weed Management Plan provided in the EER outlines general management measures but does not provide specific plans for management of weeds in terms of an appropriately-timed spraying/removal program at this site. The proponent should refer to the appropriate Statutory Weed Management Plans for specific management actions and timings. Standard condition OP1 is included in the permit in regards to weed management, in particular relating to transport of products off-site.

Given the dry climatic conditions of the area and the lack of susceptible vegetation species on site, the risk of occurrence of *Phytophthora cinnamomi* is considered low.

The EER Supplement indicates that vehicle washdown “will likely occur in the pit adjacent to the sediment pond which is fully surrounded by drainage to the sediment pond” (p20). Standard condition OP2 requires the proponent to wash down vehicles in accordance with the relevant guidelines.

### Conclusion

The proponent will be required to comply with the following standard (generic) conditions:

**OP1**  Weed management

**OP2**  Washdown Guidelines

The relevant EER commitment is included in the permit:

**OI3**  Proponent / Applicant Commitments
ISSUE 3: STORMWATER AND DRAINAGE MANAGEMENT

Description of potential impacts
Waters leaving the quarry can be contaminated with sediments and other pollutants such as oils and fuels.

Management measures proposed in EER

EER Commitment 5 states: The three sediment ponds are managed to control sediment/water flow from the quarry and laydown area – two near the quarry and one further down the property near its northern boundary with Tea Tree Road.

EER Commitment 6 states: Sediment trapped by the two small ponds near the quarry are to be cleaned out either on a 2 yearly basis or when the ponds have lost 15% storage volume.

The EER states that the fractured dolerite geology of the quarry enables rainfall to drain rapidly through the quarry floor, and that it is only through periods of sustained or heavy rainfall that any drainage from the quarry occurs. There is a series of three settlement ponds in place to the west of the quarry, eventually draining to a channel in the roadside drain along the access road. The access road is drained by a spoon drain system and then into a dam at the northern end of the property, with overflow directed to a roadside drain on Tea Tree Road. This drain in turn flows into Plummers Creek.

A cut-off drain is in place around the laydown area.

Public and agency comment
One representor raised concerns about the drainage of sediment-laden water from the quarry towards drains on Tea Tree Road.

Evaluation

The EPA Division required clarification on proposed water management for the quarry to be submitted as part of the EER Supplement. The EER Supplement provided a revised water management plan (and revised EER Commitment 5) which included the use of one sediment settlement pond (as opposed to the three small ponds originally proposed) which will be large enough to contain water from a 1 in 20 year 24 hour rainfall event. The EER Supplement also stated that the large, existing farm dam to the north of the quarry will not be used to capture waters from the quarry working area.

EER Supplement Commitment 5 states: The sediment pond (Figure 6g of the EER Supplement) will be enlarged to 0.95 ML and managed to control sediment/water flow from the quarry. The pond will be enlarged to the stated capacity within 3 months of the Level 2 approval of the quarry. The quarry void will be managed to retain and treat for sediment removal 0.1 ML of water within the void. Total water capture and treatment capacity for the Level 2 activity area will be 0.96 ML.

The proposal to construct one large sediment settlement pond to capture waters from the quarry is supported and is reinforced by the standard conditions E1, E2 and E3 relating to drainage and stormwater management. However, the proposal to use the quarry pit floor as part of the water settlement strategy is not supported, as it will contribute to waterlogging making machinery operations difficult, increase sediment movement around the site and off-site as vehicles move around, and may contribute to spread of Phytophthora cinnamomi, if the pathogen is brought on site. Non-standard condition E4 is therefore included in the permit, which specifically requires all surface waters to drain away from working areas (including the quarry pit) towards the settlement pond.

Neither the EER nor EER Supplement specifies where water from the sediment settlement pond(s) will drain. It is assumed that excess waters will flow downhill in a westerly direction, which will eventually meet the access road. Standard permit condition E2 requires the proponent to ensure that stormwater coming off The Land is not carrying pollutants such as sediment, fuel or oils. (Details regarding use of fuels and oils on site are provided in Issue no. 5). As the quarry is in an area of relatively low rainfall (approximately 500 mm per annum), drainage of excessive water from the area is considered likely to be limited for much of the time.
## Conclusion

The proponent will be required to comply with the following standard (generic) conditions:

**E1** Perimeter drains  
**E2** Stormwater  
**E3** Maintenance of settling ponds  

The proponent will be required to comply with the following non-standard (site-specific) condition:

**E4** Drainage from working areas  

The relevant EER commitments are included in the permit:

**OI3** Proponent / Applicant Commitments
### ISSUE 4: WASTE MANAGEMENT

#### Description of potential impacts

The accumulation of rubbish, disused plant, waste oil or other waste materials should not be allowed to occur within the quarry. Inappropriate management, storage and disposal of waste material can result in the pollution of soil, surface waters and groundwater.

#### Management measures proposed in EER

- **EER Commitment 8 states:** *Waste generated by the servicing of machinery is disposed of in accordance with best practice principles.*
- **EER Commitment 9 states:** *Waste generated by workers from general refuse (e.g. lunch wrappers) at the quarry is removed each day to the waste bins at the existing dwelling.*

The EER states that the activity will not produce any rock-based solid wastes, as all of the materials extracted will be sold for various end uses. The servicing of machinery may generate solid waste (e.g. oil filters, worn tyres) however machinery is removed from the quarry and serviced at the existing workshop on the property rather than on-site in the quarry. Waste generated by the servicing of machinery is disposed of in accordance with best practice principles.

Waste generated by workers from general refuse (e.g. lunch wrappers) at the quarry is removed each day to the waste bins at the existing dwelling. No waste bins are provided at the quarry for general refuse.

#### Public and agency comment

No public or agency comments were received specifically relating to waste management.

#### Evaluation

The commitments made in the EER are considered adequate. The proponent should note the obligations under legislation in relation to the management of controlled wastes (including waste tyres and waste oil/fuel filters).

#### Conclusion

The following information has also been included in the permit:

- **OI1** Waste management hierarchy
- **OI3** Proponent / Applicant Commitments
### ISSUE 5: DANGEROUS GOODS AND ENVIRONMENTALLY HAZARDOUS MATERIALS

#### Description of potential impacts

Inappropriate handling and storage of dangerous goods and environmentally hazardous materials such as fuels and oils at the quarry can increase the risk of pollution to air, water and soil.

#### Management measures proposed in EER

| EER Commitment 15 states: There is no permanent store in the quarry for fuels, oils, lubricants or any other dangerous good. |
| EER Commitment 16 states: Fuel and oil containers are stored at the existing workshop facility adjacent to the existing residential dwelling. |
| EER Commitment 17 states: When in the quarry, fuel and oil containers are stored at least 10 m away from any drain or sediment pond and are bunded (moveable bunds) to a capacity at least 1.5 times the volume of the container. |
| EER Commitment 18 states: One hydrocarbon spill kit is stored at the quarry to use in the event of a spillage. |

The EER also states that besides fuels and oils, weed chemical sprays are the only chemicals likely to be used in the quarry area. These chemicals are to be managed in accordance with the manufacturer’s directions.

No blasting is proposed at the quarry; therefore there will be no need for storage or use of explosives.

#### Public and agency comment

No public or agency comments were received specifically relating to dangerous goods.

#### Evaluation

The commitments made in the EER are considered adequate and are reinforced by standard permit conditions relating to storage and handling of hazardous materials, and the requirement to keep spill kits.

#### Conclusion

The proponent will be required to comply with the following standard (generic) conditions:

- **H1** Storage and handling of hazardous materials
- **H2** Spill kits

The following information in relation to legal obligations has also been included in the permit:

- **LO2** Storage and handling of Dangerous Goods, Explosives and dangerous substances
- **OI3** Proponent / Applicant Commitments

The relevant EER commitments are included in the permit:
### ISSUE 6: ABORIGINAL AND EUROPEAN CULTURAL HERITAGE

<table>
<thead>
<tr>
<th>Description of potential impacts</th>
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<tbody>
<tr>
<td>Ground disturbance during extractive processes in areas of cultural significance can increase the risk of destruction of potentially important artefacts and cultural heritage.</td>
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<tr>
<th>Management measures proposed in EER</th>
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<tr>
<td>EER Commitment 19 states: <em>An Unanticipated Discovery Plan will be on hand during ground disturbing works to aid the quarry operator in meeting the requirements under the Act should Aboriginal heritage be uncovered.</em></td>
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<tr>
<td>The EER also states that the quarry and mining lease is not listed on the Tasmanian Heritage Register or Tasmanian Historic Places Inventory (maintained by Heritage Tasmania).</td>
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<thead>
<tr>
<th>Public and agency comment</th>
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<tr>
<td>No public or agency comments were received specifically relating to impacts on cultural heritage. Aboriginal Heritage Tasmania advised that due to the high level of disturbance of the land at this location, the likelihood of encountering Aboriginal heritage was considered low. It was noted, however, that there have been a number of sites found within the Coal River Valley region as part of the South East Irrigation Scheme. As such, this area is considered a rich area for Aboriginal heritage. In this instance, Aboriginal Heritage Tasmania determined from reviewing past reports that the proposed works will not impact Aboriginal heritage.</td>
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<th>Evaluation</th>
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<td>The highly modified agricultural nature of the landscape at this location means that the risk of destroying undiscovered Aboriginal or European cultural heritage is considered to be very low. The EER Commitment to keep the Unanticipated Discovery Plan on hand while working on site is supported. The proponent should be aware of the obligations to stop work and notify the relevant authority should an unanticipated discovery of potentially significant Aboriginal and European heritage be uncovered.</td>
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<th>Conclusion</th>
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</table>
| The following information in relation to legal obligations has been included in the permit:  
**LO3** Aboriginal relics requirements  
The relevant EER commitment is included in the permit:  
**O13** Proponent / Applicant Commitments |
**ISSUE 7: SUSTAINABILITY AND CLIMATE CHANGE**

**Description of potential impacts**
Use of machinery powered by fossil fuels such as diesel will contribute greenhouse gas emissions to the atmosphere.
The use of water for dampening stockpiles, roads and loaded trucks may impact negatively on water resources, particularly in a relatively dry area such as the one in which the quarry is located.

**Management measures proposed in EER**
The EER states that the machinery to be used in the quarrying operations will be well maintained to ensure optimal efficiency in oil and fuel consumption.
The EER also states that use of water from the farm dam for dampening roads and truck loads, or by use of a supplementary water cart, will ensure mains water will not be used for these purposes. Mains water can be made available to the property at times of very low or no water availability from the existing sediment ponds and dam.

**Public and agency comment**
No public or agency comments were received specifically relating to sustainability and climate change.

**Evaluation**
The management actions proposed in relations to greenhouse gas emissions and sustainability are considered adequate.

**Conclusion**
No permit conditions required.
### ISSUE 8: FIRE RISK

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<th>Description of potential impacts</th>
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<tr>
<td>The use of machinery at the quarry which may create sparks can increase the risk of fire, particularly in hot, dry, windy weather. Fire originating from offsite may damage equipment and cause dangerous substances and chemicals to be released into waterways.</td>
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<tr>
<th>Management measures proposed in EER</th>
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<tr>
<td>No management measures in relation to fire are proposed in the EER. The EER states that much of the vegetation directly to the south of the quarry was burnt in a bushfire in 2013.</td>
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<table>
<thead>
<tr>
<th>Public and agency comment</th>
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<tbody>
<tr>
<td>No public or agency comments were received specifically relating to fire risk.</td>
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<th>Evaluation</th>
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<tr>
<td>The proponent should consider limiting the use of heavy machinery which may create sparks in high fire danger conditions. Council may have further requirements in this regard.</td>
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<tr>
<th>Conclusion</th>
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<tbody>
<tr>
<td>No permit conditions required.</td>
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### ISSUE 9: REHABILITATION

**Description of potential impacts**

Inadequate rehabilitation of extractive areas can increase the risk of ongoing erosion and soil instability and can increase the burden of total site rehabilitation once works have finished at the site. Inappropriately rehabilitated extractive areas can also create a visual amenity problem for the local area and can introduce and spread weeds through the use of incorrect vegetation for rehabilitation.

**Management measures proposed in EER**

The EER states (page 8) that “the quarry will be rehabilitated progressively throughout its operation to appropriately contoured slopes and pasture established for livestock grazing.”

Sediments cleaned from sediment ponds will be mixed with stockpiled top soil for progressive rehabilitation of disused quarry areas (p24 EER).

Part E of the EER further outlines specific actions that the quarry operator will undertake for rehabilitation.

EER Commitment 20 states: ‘Progressive rehabilitation’ will occur in those areas that have been quarried and are no longer needed or used for the operation of the quarry.

An objective of the Weed Management Plan (Appendix 4) is also to manage weeds to ensure rehabilitation works are not compromised by weed growth.

**Public and agency comment**

No public or agency comments were received specifically relating to rehabilitation. One representor raised concerns over risk of landslide, and movement and loss of groundwater.

**Evaluation**

Minimisation of disturbed areas decreases the risk of land disturbance such as soil erosion. The EER commitment is supported and the standard conditions in relation to temporary and final cessation of works, and rehabilitation requirements, are considered adequate in managing rehabilitation of the site.

The proponent responded in the EER Supplement to the representor’s concerns relating to landslide and groundwater by stating that the dolerite geology is stable and at less risk of erosion than sedimentary sequences. The EER Supplement also states that the thin soils on site will be removed and put aside for rehabilitation works and maintained with a grass cover to prevent dust. The proponents state that the quarry is not in a proclaimed landslip area, and the nearest groundwater access is 1.2 km to the north west with the likelihood of increase groundwater use occurring being very low due to the recent irrigation projects in the area. The quarry will not add to or remove water from any aquifers if they are in the area, with the only water impacted being surface waters, which will drain from the quarry. The responses provided in the EER Supplement are considered adequate.

**Conclusion**

The proponent will be required to comply with the following standard (generic) conditions:

- **DC1** Stockpiling of surface soil
- **DC2** Progressive rehabilitation
- **DC3** Temporary suspension of activity
- **DC4** Notification of cessation
- **DC5** Rehabilitation on cessation

The relevant EER commitment is included in the permit:

- **OI3** Proponent / Applicant Commitments
Appendix 2  Summary of public and agency submissions

CA and SM Williams – Quarry, 1356 Tea Tree Road, Campania
Summary of public representations, agency, and Council comments

In the following tables, EER means the *Environmental Effects and Planning Report, Williams’ Quarry, Rekuna*, prepared by Van Diemen Consulting (undated; submitted 12 December 2014).

The column entitled “Further information required” provides guidance on how to address the concerns raised in the public representations and others provided by relevant government agencies and Council. A Supplementary document to the EER (referred to as the ‘EER Supplement’ in the table) and any revised management commitments made, was requested for submission to the EPA Division, based on the information required in this document.

A. Public representations

<table>
<thead>
<tr>
<th>Rep #</th>
<th>Issue</th>
<th>Comment made in representation</th>
<th>Further information required</th>
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<tbody>
<tr>
<td></td>
<td><strong>Environmental</strong></td>
<td>• Representation notes that a nearby quarry between Richmond and Campania operates with no houses within 750 metres.</td>
<td>The EPA notes that the 750 metres is a recommended attenuation distance and is not a strict buffer or mandated separation distance. The recommended attenuation distance is a trigger for further investigation and possibly the provision of more stringent conditions than what would normally apply to a quarry of this size. The EER Supplement must more thoroughly address the options and alternatives to the quarry at this location, and the rationale/need for the quarry.</td>
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<tr>
<td>1</td>
<td>Number of residences within 750 metres of quarry</td>
<td>• 10 houses are within the ‘buffer zone’ [recommended attenuation distance] of 750 m for crushing and the quarry would greatly impact negatively on property owners’ health and general lifestyle.</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>• A more suitable location should be found where there would be minimal to no impact on neighbouring properties.</td>
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<tr>
<td>Rep #</td>
<td>Issue</td>
<td>Comment made in representation</td>
<td>Further information required</td>
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</table>
| 1    | Noise               | • Concerns regarding 6 days per week operation.  
• Concerns regarding use of a crusher with sound output of 90 dBA and possibly above – representor indicates they would require notification in writing in advance of planned days/times of use of crusher.  
• Page 27 of the EER states that all noise levels are “likely” to meet the requirements of the Quarry Code of Practice. Would be preferred if noise requirements “will” meet the Quarry Code of Practice.  
• Suggest noise monitoring of a “dummy” run of crusher at operator’s expense to determine whether noise requirements will be met. | Provide further discussion on the following potential management actions and any proposed new commitments, which may alleviate some representor concerns:  
• Reduction in proposed quarry operating and transport hours (it is noted that page 27 of the EER already states that crushing will take place between 10am and 4pm);  
• Notification of neighbours within 750 metres of the quarry prior to use of a crusher at the quarry; and  
• Monitoring of noise levels at nearest sensitive uses when the crusher is on site, and including monitoring of noise levels from other plant and vehicles associated with the quarry, once the quarry is operating and providing the report detailing the monitoring report to the Director of the EPA. |
<p>| 1    | Endangered species  | Two endangered species can be found on and around representor’s property and quarry property on a regular basis – Wedge-tailed eagle, and Tasmanian devil. Potential impacts on these species have not been addressed adequately. | It is noted that comment is provided on page 23 of the EER in relation to the possibility of Wedge-tailed eagle habitat within 500 m or 1000 m. Brief comment should be provided in the EER Supplement regarding potential for impacts on the Tasmanian devil. |</p>
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<tr>
<td>2</td>
<td>Possible impacts beyond the 750 metre ‘buffer’ zone</td>
<td>Representor raises concerns regarding the risk of impacts such as landslide, and movement and loss of groundwater.</td>
<td>Provide a brief statement in the EER Supplement addressing these concerns regarding risks to groundwater from mining and/or landslide.</td>
</tr>
</tbody>
</table>
| 2    | Distance of quarry from property boundary                            | Quarry is located 10 metres from the property boundary. There are 8 sensitive uses on the representor’s property alone within 750 metres of the quarry. A map is provided, displaying the following sensitive uses and distances from the quarry:  
- Ancestral master burial site  
- Approved site for 4 Heavenly Deva statues  
- Approved site for 2 Stone Lion statues  
- 2 Existing storage sheds  
- Dwelling  
- Multipurpose room  
- Worship centre | The proponents should note that there may be more than one sensitive use on each neighbouring property and address appropriately as required in the EER Supplement.                                                                                                                                                                                                 |
<p>| 2    | Vibration                                                            | Concerns regarding possible impacts of vibration on future structures to be located within the proposed Tasmanian Buddhist Cultural Park.                                                                                                                                                                                                                           | The potential risk of vibration affecting structures should be addressed in the EER Supplement.                                                                                                                                                                                                         |
| 3    | Establishment of a new quarry within the recommended separation distance | Concerns regarding establishment of a quarry with a crusher within the recommended separation distance of 750 metres, affecting 8 residences.                                                                                                                                                                                                             | Requirements provided in comments above.                                                                                               |</p>
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<tr>
<td>3</td>
<td>Drainage/ sediment control</td>
<td>Representor notes concerns in relation to offsite sediment pollution which were made clear during the public consultation process for a recent development application on a neighbouring property. Concerns were particularly in relation to roadside drains on Tea Tree Road and impacts during heavy rain events. Representor states that the runoff of water from the proponents’ dam into roadside drains is substantial during heavy rain and questions whether the water from the quarry will result in flooding of adjoining properties or Tea Tree Road.</td>
<td>Provide a basic water balance for the quarry in the EER Supplement, taking into account rainfall, high rainfall events (e.g. 1 in 20 year over 24 hour events), runoff, and capacity of the three proposed settlement ponds to capture stormwater flowing from the quarry and quarry working/laydown areas. Estimates of residence times in settlement ponds should be provided. Provide clarification for what happens to water once it leaves the third and final settlement pond – is it intended that water will drain towards and be captured by the farm dam further to the north on the property, or will water drain elsewhere? If the farm dam is part of the overall quarry water management system, provide a statement on how this dam will be managed to ensure it can retain waters running from the quarry, particularly during high rainfall events, without sediment-laden waters running off-site.</td>
</tr>
<tr>
<td>3</td>
<td>Adherence to operating hours</td>
<td>Representor notes the commitment to operate within the Quarry Code of Practice's recommended hours, but that the proponents’ gate is nearly always open 24 hours and that this commitment cannot be and has not been adhered to unless the gate is locked outside of operating hours.</td>
<td>Discuss in the EER Supplement options to reduce planned operating and quarry product transport hours to alleviate representor concerns. The EER Supplement should address the concerns regarding the use of the quarry outside permitted operating hours and propose mitigation actions in the form of commitments.</td>
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<tr>
<td>Rep #</td>
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</table>
| 3    | Noise | - In regards to background noise and the location of many nearby residences close to Tea Tree Road and subsequent traffic noise, the representor states that the type of noise from vehicles travelling at 100 km/hr is quite different to that of a truck and trailer suddenly braking with associated noise of brakes and the truck and linkage rattling in the early morning. Representer states that adherence to 40 km/hr speed limit on access road will not necessarily lessen impacts of trucks braking and going up and down incline, as well as when trucks exit the property.  
- Additionally, the testing and report provided in the EER is not based on the actual crusher to be used, but another crusher in an entirely different quarry environment. No guarantee is provided that the same crusher type will be hired and may have different noise levels to those stated in the report.  
- No mention of any reflective noise effects now and in the future (with benches in place etc.) from placing the crusher in the quarry.  
- There is no statement provided confirming that screening will not take place.  
- There is no commitment that crushing will not occur on a Saturday.  
- There is no commitment by the proponent that advance notice of crushing times will be provided to nearby residents.  
- The statement that the quarry “is likely to meet the noise requirements of the Tasmanian Quarry Code of Practice” does not confirm that noise levels will meet the standards which guarantee that residents within the 750 m SRAD will not be greatly affected by noise pollution and the representor states that the | Updates required to noise assessment to be provided in the EER Supplement:  
**Issue – inclusion of trucks in noise assessment**  
The EER states that general quarry operations and use of the crusher should result in noise levels at the nearest sensitive use in other ownership (i.e. house #5), under unfavourable conditions (wind towards residence), being 45 dB(A). This level is considered a reasonable potential daytime noise limit for the quarry and its operations as well as for local residents. However, estimated noise levels from the quarry operations should be updated in the EER Supplement to include noise from laden and empty trucks associated with the quarry moving along the access road. Confirmation should be provided in the EER Supplement that the proposed 45 dB(A) limit at the nearest sensitive use in other ownership (in this case, house #5) can be complied with. If not, the estimated noise levels at this location should be provided.  
Details of the truck capacity, the estimated number of truck movements per hour, and on an annual basis, based on maximum extraction levels and maximum of 30 truck movements per day (and including taking into account expansion/swelling of extracted material once loaded onto trucks), should be provided in the EER Supplement.  
**Issue – future quarry works**  
House #3 located to the north west of the quarry at a distance of approximately 654 metres appears to have less available natural topographical barrier between the |
application should not be approved by Council without confirmed evidence that it will conform to the recommendations of the Quarry Code of Practice.

| quarry and the residence, as the land naturally slopes down towards the drainage line to the north west. Figure 6d of the EER indicates that the quarry is likely to expand outwards to the north and the west. As the quarry moves west, it would appear that the natural topographical barrier between the quarry and House #3 will be reduced or removed. This, in effect, could result in direct line of sight between the quarry and House #3 which may substantially increase the noise impacts at this residence, particularly given the elevation of this residence in relation to the quarry. It is considered that other residences are likely to remain protected by the topographical barrier which will reduce noise levels. The EER Supplement should address whether the topographical barriers will continue to be maintained (either through maintaining natural barriers or by constructing barriers), particularly as the quarry expands westwards and towards the north west, as indicated in Figure 6d of the EER.

Other issues
- Discuss crushing/mining methodology and in particular, use of screening with crushing.
- Provide a statement in response to concerns relating to reflective noise effects from works in the quarry.
- Discuss in the EER Supplement potential mitigation options, including:
  - Sealing of the access road;
  - Limiting speed of trucks on the access road to substantially less than the proposed 40 km/hr;
  - Reduction in proposed quarry operating and transport hours (it is noted that page 27 of the EER already states that crushing will take place between 10am and 4pm);
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<tr>
<td>3</td>
<td>Traffic – trucks on access road</td>
<td>A large number of trucks or machinery traffic to the level permitted at the property has never been witnessed by the representor but the current application states that there will be 15 trucks entering and exiting the property (30 movements) [per day]. This is a large increase from current actual usage</td>
</tr>
<tr>
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<td>Confirm current number of heavy vehicles (for past year) and compare to estimated number of heavy vehicles that will be proposed to be using the access track. See above for requirements in relation to estimation of noise impacts from quarry trucks moving on the access road. Provide details of the estimated number of days over the course of a year (based on maximum permitted extraction levels and taking into account swelling/expansion factors of extracted material) that it is estimated this level of heavy traffic movement will be occurring.</td>
</tr>
</tbody>
</table>

- Notification of neighbours within 750 metres of the quarry prior to use of a crusher at the quarry; and
- Monitoring of noise levels at nearest sensitive uses when the crusher is on site, and including monitoring of noise levels from other plant and vehicles associated with the quarry, once the quarry is operating and providing the report to the Director of the EPA.
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<tbody>
<tr>
<td>1</td>
<td>Inappropriate location for a level 2 quarry on a small rural lot adjacent to existing rural residential land use.</td>
<td>Area has become increasingly residential in recent years; representors feel that development of a level 2 quarry in the area is inappropriate.</td>
<td>See Table C for Council comment and request.</td>
</tr>
<tr>
<td></td>
<td><strong>NB: ‘small rural lot’ in the context of a quarry on a parcel of land incapable of containing a 750m radius of the quarry operations area or mining lease.</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Existence and expansion of a quarry near a proposed Buddhist Cultural Centre</td>
<td>Representor indicates that the existence of the quarry and use of crusher is not in compliance with traditional Buddhist principles in relation to peace and tranquillity.</td>
<td>See Table C for Council comment and request.</td>
</tr>
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<td>Rep #</td>
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<tr>
<td>3</td>
<td>Notification of neighbouring owners</td>
<td>Only the three adjoining residents were informed by Council of the development application and the representor feels that all owners within the 750 metre separation distance should have been formally advised. No discussion was undertaken by the proponents with any of these affected neighbours.</td>
<td>Provide a discussion regarding the engagement with nearby residents and property owners undertaken in accordance with the EPA Board’s “Guidance on Community Engagement” (March, 2013).</td>
</tr>
<tr>
<td>3</td>
<td>Concerns regarding restrictions on future land use</td>
<td>Unclear as to how future possible land uses near the quarry would be restricted/affected by the quarry’s existence.</td>
<td>See Table C for comment and information request.</td>
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**General**

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<th>Rep #</th>
<th>Issue</th>
<th>Comment made in representation</th>
<th>Further information required</th>
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<tr>
<td>1</td>
<td>Lack of direct consultation with neighbours by proponent</td>
<td>Representors feel Council should enforce consultation with residents within 750 metre of the quarry.</td>
<td>Provide a discussion regarding the engagement with nearby residents and property owners undertaken in accordance with the EPA Board’s “Guidance on Community Engagement” (March, 2013).</td>
</tr>
<tr>
<td>1</td>
<td>Existing level 1 quarry</td>
<td>Representors do not believe that the level 1 quarry has actually been established as the permit was never fulfilled (road works not completed). For a period of 4 weeks there was signage saying “Williams Quarry opening soon” and then changed to “Williams Quarry open”. Question is raised as to how quarry can be open when aspects of original level 1 quarry permit were not met, and whether they will fulfil aspects of level 2 permit, if issued.</td>
<td>Provide details of plans for the timing of commencement and completion of works required under the level 1 quarry permit, particularly in relation to road strengthening and application for a permit under the <em>Roads and Jetties Act 1935</em>, which will then allow cartage of product from the property.</td>
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<td>Rep #</td>
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<tr>
<td>1</td>
<td>Impact on property price and impacts on possible future development</td>
<td>While supportive of development to assist the local economy, the representor also states that it will likely not be possible to progress with the proposed Tasmanian Buddhist Cultural Park on the property immediately adjacent to the quarry, and therefore expresses an objection to the further expansion of the quarry. The representor provides information regarding the level of interest in the Tasmanian Buddhist Cultural Park from both within Tasmania and from overseas, and is waiting on final zoning decisions from Council before any further investment can occur. Representor expresses an interest in further discussion on the proposal.</td>
<td>No further information required.</td>
</tr>
<tr>
<td>2</td>
<td>Economic development</td>
<td>Provide a discussion regarding the engagement with nearby residents and property owners undertaken in accordance with the EPA Board’s “Guidance on Community Engagement” (March, 2013).</td>
<td></td>
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<tr>
<td>3</td>
<td>Non-adherence to current permit requirements</td>
<td>Representor notes that the quarry has been advertised via signage at the front of the property; however required road works have not been undertaken. The representor states that both Level 1 and Level 2 applications would have no signage in relation to the quarry, yet signage has been observed at the property entrance indicating the quarry was “soon to be opened” and then was changed to “open”. Notes the use of the words “should be” in management commitments despite the requirement for unambiguous statements as management commitments.</td>
<td>Provide management commitments that are clear and unambiguous. References to the operation of the Level 1 quarry which are not representative of the present situation at the quarry, particularly in terms of transport of material from the quarry, should be clarified and further discussed.</td>
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<td>Rep #</td>
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<tr>
<td>3</td>
<td>Lack of consultation and provision of clear information to neighbours by proponent</td>
<td>Wants consultation undertaken by Council and proponent in relation to current and future restrictions on land use for properties within the 750 metre SRAD.</td>
<td>Provide a discussion regarding the engagement with nearby residents and property owners undertaken in accordance with the EPA Board’s “Guidance on Community Engagement” (March, 2013).</td>
</tr>
<tr>
<td>3</td>
<td>Rationale/need for the quarry</td>
<td>No business plan was provided to substantiate claims given in the EER regarding expansion of local markets, particularly for crushed material. No evidence is provided that there is local or other demand for product or size of product, and there is no financial viability information provided for either the Level 1 or the Level 2 quarry. Representor questions the need for the quarry given that nearby irrigation project work and housing subdivisions has been completed or are almost complete, and it would be anticipated that any further gravel requirements would be fulfilled by current contracted suppliers.</td>
<td>The EER Supplement must more thoroughly address the options and alternatives to the quarry at this location, and the rationale/need for the quarry, particularly given that the EER states that there are already much larger approved quarries operating in the district (page 8 of EER) – Mangalore Quarry, Dysart Quarry, Bridgewater.</td>
</tr>
<tr>
<td>3</td>
<td>Questions regarding motivation behind Level 1 quarry application being followed rapidly by Level 2 application</td>
<td>Representor notes that the measurement of noise levels were taken less than a month after Council’s decision to allow the Level 1 quarry in 2014, and questions whether it has not always been the proponent’s intention to operate a Level 2 quarry. Representor also questions if the Level 2 quarry is approved, then what more can residents expect in terms of expansion of the quarry, allowing blasting, etc.</td>
<td>No further information required.</td>
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<td>3</td>
<td>Complaints</td>
<td>Regarding the comment in the EER that no previous noise complaints have been received, the Representor states that the proponents’ neighbours tolerate many incidences without complaining as they feel that it gets them nowhere anyway.</td>
<td>Provide evidence of engagement with nearby residents and property owners.</td>
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## B. Referral agency comments

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| **Dept. of Primary Industries, Parks, Water and the Environment (DPIPWE)**  
Resource Management and Conservation Division  
Policy and Conservation Assessment Branch | Part D – Flora and Fauna | The proposal is considered unlikely to have a significant impact on natural values. | Nil |
| **Dept. of State Growth**  
Mineral Resources Tasmania (MRT) | Misc. | The key issues in the Guidelines have been addressed. Commitments 2, 3, 5, 6 and 20 are effectively conditions of the mining lease. They provide no additional commitment than what is already required for the mining lease to remain compliant with the *Mineral Resources Development Act 1995*. | Nil |
| EPA – Regulatory officer | Page 9 of Appendix 4 – Weed Management Plan | No schedule for weed spraying is proposed. | Provide a weed management / spraying schedule as part of the Weed Management Plan. |
| EPA – Regulatory officer | Page 9-10 of Appendix 4 – Weed Management Plan | Vehicle wash down areas are not specified on maps/plans. | Include proposed vehicle wash down area, including details of drainage from wash down, on maps and plans for the quarry. Specify where drainage from wash down will report. |
## C. Southern Midlands Council comments

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<th>Comment and further information request.</th>
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| Traffic impact                             | Council specifically requested information for the actual truck and vehicle movements numbers from the Applicant in the Request for Further Information dated 9th December 2014. The Applicant did not include this information in the TIA or EER and instead verbally informed Council Officers that, given the past approvals for a maximum of 40 vmpd, it was therefore not necessary to address this matter in the new TIA or EER.  
Past Council approvals were on the understanding that vmpd were intermittent. Given the nature of the existing workshop business and given level 1 quarries generally do not run full-time (i.e. only operate on demand) and would very rarely meet the maximum 40 vmpd, Given this has again been raised by the representor it is important that Council as Planning Authority understand (and can make an actual comparison) between existing traffic movements and proposed traffic movements. Particular consideration should be given to the increased frequency of heavy laden vehicles. The figures must include a breakdown of existing heavy vehicles and light vehicles. |
| Concerns regarding restrictions on future land use | Council request that the Applicant must provide a statement on intended legislative methods or measures to prevent any encroachment of neighbouring development or sensitive land uses that may fetter the quarry operation within 750m of the quarry operations area. The statement should specifically address sensitive uses as the context requires and/or as defined by the Planning scheme State Template as:  
“Sensitive Use – means a residential use or a use involving the presence of people for extended periods except in the course of their employment, such as in a caravan park, childcare centre, dwelling, hospital or school”                                                                                                                                                                                                 |
| Buddhist Cultural Centre                    | Council request the provision of a statement on the impact of the quarry on the peace and tranquillity of a Buddhist Cultural Centre. Such a statement should be prepared in discussion with the landowners Holy Tantra Esoteric Buddhism Inc.                                                                                                                                                                                                                                   |
| Conflict with other surrounding land uses  | Council advise that Objective 2.2 (a) (xi) of the Southern Midlands Planning Scheme 1998 is “to minimise the potential environmental and land use conflicts between different land use activities”. The representations have raised concern that the proposal will impact on the amenity and day to day use of their land. Given the number of dwellings within 750m of the quarry operations area the Applicant shall provide a statement or statements of any likely or foreseeable restrictions on neighbouring land use and development and any restrictions on day to day use of land.  
The statement shall give particular regard to the setback standards of the Southern Midlands Planning Scheme. For example, will this quarry restrict the development or use of neighbouring land up to the current 10m boundary setbacks and will adjoining land owners (in particular) need to factor in the impact of the quarry prior to any new development or day to day rural residential land use? |
Appendix 3 Permit Conditions - Environmental
PERMIT PART B
PERMIT CONDITIONS - ENVIRONMENTAL No. 9117

Issued under the Environmental Management and Pollution Control Act 1994

Applicant:  C A & S M WILLIAMS  
ABN 33 389 865 480  
1356 TEA TREE RD  
TEA TREE TAS 7107  

Activity:  The operation of a quarry (ACTIVITY TYPE: Crushing, grinding, milling or separating into different sizes (rocks, ores or minerals))  
1356 TEA TREE RD  
TEA TREE TAS 7107

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:  SOUTHERN MIDLANDS  
Permit Application Reference:  2014/136  
EPA file reference:  242883

Date conditions approved:  8 MAY 2015

Signed:  
CHAIRPERSON, BOARD OF THE ENVIRONMENT PROTECTION AUTHORITY
DEFINITIONS

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

ENVIRONMENTAL CONDITIONS

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

INFORMATION

Attention is drawn to Schedule 3, which contains important additional information.
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CHAIRPERSON, BOARD OF THE ENVIRONMENT PROTECTION AUTHORITY

08 MAY 2015
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Attachments

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Attachment 2: Mining lease and access road (modified: 15/04/2015 14:39)................................................. 1 page
Attachment 3: Summary of management commitments (modified: 15/04/2015 14:39)........... 2 pages
Schedule I: Definitions

In this Permit Part B:-

Aboriginal Relic has the meaning described in section 2(3) of the Aboriginal Relics 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.

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

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.

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 Department of Primary Industries, Water and Environment and the Department of Infrastructure, Energy and Resources in June 1999, and includes any subsequent versions of 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. 1356 Tea Tree Road, Tea Tree, certificate of title 155147/1, as further delineated on Attachment 1 of these conditions; and
2. Mining lease 1980 P/M, as further delineated on Attachment 2 of these conditions; and
3. includes the access road, as further delineated on Attachment 2 of these conditions.

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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 (annual fees are derived from these figures):
      1.1 2,500 cubic metres per year of rocks, ores or minerals processed.
      1.2 10,000 cubic metres per year of hard rock 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 ceases or intends to cease to be responsible for the activity, he or she must notify the Director in writing of the full particulars of any person succeeding him or her as the person responsible for the activity.

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.

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G6  Complaints register
   1  A public complaints register must be maintained and made available for inspection by an Authorized Officer upon request. 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 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  Control of dust emissions from plant
   1  Dust produced by the operation of all crushing and screening plant must be controlled by the use of one or more of the following methods to the extent necessary to prevent environmental nuisance:
      1.1 the installation of fixed water sprays at all fixed crushers and at all points where crushed material changes direction due to belt transfer;
      1.2 the installation of dust extraction equipment at all fixed crushers and at all points where crushed material changes direction due to belt transfer, and the incorporation of such equipment with all vibrating screens;
      1.3 the enclosure of the crushing and screening plant and the treatment of atmospheric emissions by dust extraction equipment; and
      1.4 any other method that has been approved in writing by the Director.

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 and load dampening.

A4  Dust emissions from traffic areas
   1  Roads and other areas on The Land subject to vehicular traffic must be dampened to ensure dust emitted from vehicle movements does not cause environmental nuisance beyond the boundary of Land.
2 Should a water cart or other similar vehicle be utilised for dampening traffic areas (which include the access road as shown at Attachment 2 of these conditions), use of that vehicle is to be counted in the limit of number of vehicle movements using the access road as per Condition OP3 of these conditions.

**Blasting**

**B1** No blasting on The Land
Blasting must not be carried out on The Land at any time.

**Decommissioning And Rehabilitation**

**DC1** Stockpiling of surface soil
Prior to commencement of extractive activities on The Land, the surface soils on any area to be disturbed must be removed and stockpiled for later use in the rehabilitation of The Land. Topsoil must be kept separate from other overburden and protected from erosion and weed infestation.

**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 one (1) hectare.

**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 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:

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*Chairperson, Board of the Environment Protection Authority*

*08 May 2015*
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.

**Effluent Disposal**

**E1 Perimeter drains**

1 Perimeter cut-off drains 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 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 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 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.

**E3 Maintenance of settling ponds**

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.

**E4 Drainage from working areas**

All water must be directed away from the quarry working areas, including the quarry pit, and any stockpile areas, so that water does not collect in or on working areas. All surface waters must be directed to settlement ponds.

**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 located within impervious bunded areas, spill trays or other containment systems; and

   1.2 managed to prevent unauthorised discharge, emission or deposition of pollutants:

[Signature]

CHAIRPERSON, BOARD OF THE ENVIRONMENT PROTECTION AUTHORITY

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1.2.1 to soils within the boundary of The Land in a manner that is likely to cause serious environmental harm;
1.2.2 to groundwater;
1.2.3 to waterways; or
1.2.4 beyond the boundary of The Land.

H2 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 split environmentally hazardous materials.

Noise Control

N1 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 47 dB(A) between 0700 hours and 1900 hours (Day time); and
   1.2 40 dB(A) between 1900 hours and 2200 hours (Evening time); and
   1.3 35 dB(A) between 2200 hours and 0700 hours (Night time).
2 Where the combined level of noise from the activity and the normal ambient noise exceeds the noise levels stated above, this condition will not be considered to be breached unless the noise emissions from the activity are audible and exceed the ambient noise levels 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.

N2 Operating hours
1 Unless otherwise approved in writing by the Director, activities associated with the extraction of rock, gravel, sand, clay or minerals, and loading of product, must not be undertaken outside the hours of 0700 hours to 1900 hours on weekdays and 0800 hours to 1600 hours on Saturdays.
2 Unless otherwise approved in writing by the Director, screening and/or crushing of extracted materials on The Land must not be undertaken outside the hours of 1000 to 1600 hours on weekdays.
3 Unless otherwise approved in writing by the Director, the operation of heavy vehicles associated with the quarry on the access road (as delineated at Attachment 2) must not be undertaken outside the hours of 0800 hours to 1800 hours on weekdays.
4 Notwithstanding the above paragraphs, activities must not be carried out on public holidays that are observed Statewide (Easter Tuesday excepted).

N3 Noise survey requirements
1 Unless otherwise approved in writing by the Director, a noise survey must be carried out while extraction, and crushing, and product transport activities are being undertaken on The Land:
   1.1 during the first instance of crushing; and
1.2 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
1.3 at any other such time as required by the Director.

2 A report containing the noise survey results must be submitted to the Director within 30 days of the survey taking place.

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_e) and L_t, L_{10}, L_{10}, L_{50} and L_{90} 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.

N5 Noise complaints

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

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 Washdown Guidelines

Prior to entering the land, machinery must be washed in accordance with the DP:WE (2004) \textit{Tasmanian Washdown Guidelines for Weed and Disease Control, Machinery, Vehicles & Equipment}, Edition 1, or any subsequent revisions of that document.

\textit{Chairperson, Board of the Environment Protection Authority}

\textit{08 May 2015}
OP3  Maximum number of truck movements
Unless otherwise approved in writing by the Director, no more than 30 heavy vehicle
movements associated with the quarry operations (and including use of water carts) between
the quarry and the access to Tea Tree Road are to occur on any one day.
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 The Aboriginal Relics Act 1975, provides legislative protection to Aboriginal heritage sites in Tasmania regardless of site type, condition, size or land tenure. Section 14(1) of the Act states that; Except as otherwise provided in this Act, no person shall, otherwise than in accordance with the terms of a permit granted by the Minister on the recommendation of the Director of National Parks and Wildlife:
   1.1 destroy, damage, deface, conceal or otherwise interfere with a relic;
   1.2 make a copy or replica of a carving or engraving that is a relic by rubbing, tracing, casting or other means that involve direct contact with the carving or engraving;
   1.3 remove a relic from the place where it is found or abandoned;
   1.4 sell or offer or expose for sale, exchange, or otherwise dispose of a relic or any other object that so nearly resembles a relic as to be likely to deceive or be capable of being mistaken for a relic;
   1.5 take a relic, or permit a relic to be taken, out of this State; or
   1.6 cause an excavation to be made or any other work to be carried out on Crown land for the purpose of searching for a relic.

2 If a relic is suspected and/or identified during works then works must cease immediately and the Tasmanian Aboriginal Land and Sea Council and the Aboriginal Heritage Tasmania be contacted for advice before work can continue. In the event that damage to an Aboriginal heritage site is unavoidable a permit under section 14 of the Aboriginal Relics Act 1975 must be applied for. The Minister may refuse an application for a permit, where the characteristics of the relics are considered to warrant their preservation.

3 Anyone finding an Aboriginal relic is required under section 10 of the Act to report that finding as soon as practicable to the Director of National Parks and Wildlife or an authorized officer under the Aboriginal Relics Act 1975. It is sufficient to report the finding of a relic to Aboriginal Heritage Tasmania to fulfil the requirements of section 10 of the Act.
Other Information

O11 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.

O12 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).

O13 Proponent / Applicant Commitments
The person responsible for the activity has a general environmental duty to conduct the activity in accordance with the commitments contained in Attachment 3.
ATTACHMENT 1

Land title, mining lease boundary, and quarry footprint.

Source: Figure 1 of Environmental Effects and Planning Report, Williams' Quarry, Rekuna, prepared by Van Diemen Consulting and submitted to the EPA Division on 12 December 2014.
ATTACHMENT 2

Mining lease and access road

Source: Figure 4 of Environmental Effects and Planning Report, Williams' Quarry, Rekuna, prepared by Van Diemen Consulting and submitted to the EPA Division on 12 December 2014.
## ATTACHMENT 3

**Summary of management commitments**

*Source: Modified from Table 2 of Environmental Effects Report Supplement, Williams' Quarry, Rekuna, prepared by Van Diemen Consulting and submitted on 24/03/2015.*

<table>
<thead>
<tr>
<th>Number</th>
<th>Commitment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Operating hours are those recommended in the <em>Quarry Code of Practice</em> – 0700 to 1900 hrs Monday to Friday, 0800 to 1600 hrs on Saturday; closed on Sunday and public holidays.</td>
</tr>
<tr>
<td>2</td>
<td>The entire operation including car parking area, laydown area and active quarry face are contained within the Mining Lease boundary.</td>
</tr>
<tr>
<td>3</td>
<td>A 10m setback on the side boundary has been established along the eastern side of the Mining Lease within which no quarrying will occur.</td>
</tr>
<tr>
<td>4</td>
<td>A Weed Management Plan is implemented at the quarry operation.</td>
</tr>
<tr>
<td>5</td>
<td>The sediment pond (Figure 6g of the EER Supplement) will be enlarged to 0.95ML and managed to control sediment/water flow from the quarry. The pond will be enlarged to the stated capacity within 3 months of the Level 2 approval of the quarry. The quarry void will be managed to retain and treat for sediment removal 0.1ML of water within the void. Total water capture and treatment capacity for the Level 2 activity area will be 0.96ML.</td>
</tr>
<tr>
<td>6</td>
<td>Sediment trapped by the two small ponds near the quarry are to be cleaned out either on a 2 yearly basis or when the ponds have lost 15% storage volume.</td>
</tr>
<tr>
<td>7</td>
<td>As a dust suppression measure, during periods of dry weather the Access Road surface, areas near the stockpiles and/or loads in trucks (unless they are covered by tarpaulins) will be dampened with water accessed from the nearby sediment ponds or on-site water cart truck.</td>
</tr>
<tr>
<td>8</td>
<td>Waste generated by the servicing of machinery is disposed of in accordance with best practice principles.</td>
</tr>
<tr>
<td>9</td>
<td>Waste generated by workers from general refuse (eg lunch wrappers) at the quarry is removed each day to the waste bins at the existing dwelling.</td>
</tr>
<tr>
<td>10</td>
<td>Crushing will occur on no more than 10 days per annum (based on a calendar year), and will be restricted to 1000 hrs and 1600 hrs on normal weekdays (Monday to Friday). No crushing will occur on a Saturday, Sunday or Statewide Public Holiday.</td>
</tr>
<tr>
<td>11</td>
<td>Trucks will avoid entering and leaving the quarry in the period 20 minutes either side of the school bus collection and drop-off time, as advised by the school bus operator.</td>
</tr>
<tr>
<td>12</td>
<td>The following measures will be applied to mitigate potential impacts of unreasonable levels of dust and noise caused to the residence at 1220 Tea Tree Road –</td>
</tr>
</tbody>
</table>
- Ensure compliance with the operating hours and days for the quarry;
- Maintain the existing Complaints Register to record and address any complaints received in relation to Access Road usage by quarry related vehicles.
- Provide water (via sprinklers or water cart) to dampen the road surface during dry periods with associated south-easterly to easterly winds to keep road surface dust emission levels low;
- Cover loads with a suitable tarpaulin or dampen load; and
- Ensure trucks carrying gravel limit their speed to 20km/hr when using the Access Road.

| 13 | The works associated with the approved Level 1 Activity in relation to road strengthening have not yet been completed, but should be as part of the Level 2 Activity. |
| 14 | A Complaints Register is maintained to record and address any complaints received about the activities in or directly related to the operation of the quarry. |
| 15 | There is no permanent store in the quarry for fuels, oils, lubricants or any other dangerous good. |
| 16 | Fuel and oil containers are stored at the existing workshop facility adjacent to the existing residential dwelling. |
| 17 | When in the quarry, fuel and oil containers are stored at least 10 m from any drain or sediment pond and are bunded (moveable bunds) to a capacity at least 1.5 times the volume of the container. |
| 18 | One hydrocarbon spill kit is stored at the quarry to use in the event of a spillage. |
| 19 | An Unanticipated Discovery Plan (Attachment 2 to these Guidelines) will be on hand during ground disturbing works to aid the quarry operator in meeting the requirements under the Act should Aboriginal heritage be uncovered. |
| 20 | 'Progressive rehabilitation' will occur in those areas that have been quarried and are no longer needed or used for the operation of the quarry. |
| 21 | A noise survey will be conducted by a suitably qualified person to monitor noise levels at nearest sensitive uses when the crusher is on site which will also include at the same time the monitoring of noise levels from other plant and vehicles associated with the quarry, once the quarry is operating. The report of the survey will be provided to the Director of the EPA. |
| 22 | Traffic movements onto Tea Tree Road will be managed to not exceed 40 per day for all activities occurring on the property. |
| 23 | Landowners within 750 metres of the quarry will be provided at least 48 hour notice (written letter) prior to use of a crusher at the quarry. |