

# ENVIRONMENTAL ASSESSMENT REPORT

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## Long Hill Quarry Expansion

*Dan Rd, Elizabeth Town*

Hazell Bros. Group Pty Ltd

Board of the Environment Protection Authority

July 2016



<b>Environmental Assessment Report</b>	
Proponent	Hazell Bros. Group Pty Ltd
Proposal	Long Hill Quarry Expansion
Location	Dan Rd, off Bass Highway, near Elizabeth Town
NELMS no.	9310
Permit application no.	PA\16\0133
Folder	EN-EM-EV-DE-244873
Document.	H550083
Class of Assessment	2B

<b>Assessment process milestones</b>	
5/8/15	Notice of Intent lodged
30/9/15	DPEMP Guidelines issued
15/2/16	Permit application submitted to Council
10/3/16	Application received by Board
19/3/16	Start of public consultation period
20/4/16	End of public consultation period

<b>Acronyms</b>	
Board	Board of the Environment Protection Authority
EER	Development Proposal and Environmental Management Plan
DPIPWE	Department of Primary Industries, Parks, Water and Environment
EIA	Environmental impact assessment
EMPC Act	Environmental Management and Pollution Control Act 1994
EMPCS	Environmental management and pollution control system
EPBC Act	Environment Protection and Biodiversity Conservation Act 1999 (Cth)
LUPA Act	Land Use Planning and Approvals Act 1993
QCP	Quarry Code of Practice, DPIPWE, June 1999
RMPS	Resource management and planning system
SD	Sustainable development

## Report summary

This report provides an environmental assessment of Hazell Bros. Group Pty Ltd's proposed Long Hill Quarry Expansion.

The proposal involves an increase in production of crushed rock product from 100,000m<sup>3</sup> to 200,000m<sup>3</sup> per year at the existing Long Hill Quarry, Dan Rd, Elizabeth Town. Dolerite rock is extracted using blasting and is crushed and screened onsite to produce 'blue metal' aggregate.

This report has been prepared based on information provided by the proponent in the Development Proposal and Environmental Management Plan (DPEMP). Relevant government agencies and the public have been consulted and their submissions and comments considered as part of this assessment.

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

Appendix 1 contains the environmental permit conditions for the proposal. Attachment 3 of the permit conditions contains the table of commitments from the DPEMP. The environmental permit conditions in Appendix 1 are a new set of operating conditions for the entire, intensified activity that will supersede the existing permit conditions.

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## 1 Approval process

A Notice of Intent in relation to the proposal was received by the Board of the Environment Protection Authority (the Board) on 5 August 2015.

An application for a permit under the *Land Use Planning and Approvals Act 1993* (LUPA Act) in relation to the proposal was submitted to Meander Valley Council on 15 February 2016.

The proposal is defined as a 'level 2 activity' under clauses 5(a) and 6(a)(ii) schedule 2 of the *Environmental Management and Pollution Control Act 1994* (EMPC Act), being a quarry and materials handling activity producing 200,000m<sup>3</sup> of rock product per year. 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 10 March 2016.

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

The Board required that information to support the proposal be provided in the form of Development Proposal and Environmental Management Plan (DPEMP).

Several drafts of the DPEMP were submitted to the Department for comment prior to its finalisation and acceptance on behalf of the Board. The final DPEMP was submitted to Council with the permit application. The DPEMP was released for public inspection for a 28-day period commencing on 19 March 2016. An advertisement was placed in *The Examiner* newspaper and a notice was placed on the EPA website. The DPEMP was also referred at this time to relevant government agencies for comment. No public submissions were received.

## 2 SD objectives and EIA principles

The proposal must be considered by the Director 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 Director 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 quarry is located between Sassafras and Elizabeth Town to the west of the Bass Highway (Figure 1). The quarry produces aggregates for concrete batch plants operated by Hazell Brothers.

It is intended to rehabilitate the existing pit by conversion into a water storage impoundment and to open new extraction areas further along the ridge to the NNW (Stage 3 and 4 extraction areas on Figure 2). The existing rock crushing and product stockpile area will be retained for their current use.

The new stage 3 and 4 pits will be a maximum of 3.5ha and 3.4 ha in area respectively. It is estimated the maximum depth of the pits will be 40m after 24 years at maximum production. The throat of the pit will be towards the SSE and the quarry wall extends along the northern boundary of the site.

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

**Table 1: Summary of the proposal’s main characteristics**

<b>Activity</b>	
Extraction, crushing and screening of a maximum of 200,000m <sup>3</sup> of rock product (based on bulk extraction of 320,000 tonnes of rock).	
<b>Location and planning context</b>	
<b>Location</b>	Dan Rd, off Bass Highway, Elizabeth Town (Fig 1).
<b>Land zoning</b>	Rural Resource.
<b>Land tenure</b>	Crown Land – Permanent Timber Production Zone.
<b>Mining lease</b>	7M/2009.
<b>Lease area</b>	73 ha. Includes the Dan Rd corridor from the Bass Highway.
<b>Bond</b>	\$152,000.
<b>Existing site</b>	
<b>Land Use</b>	Formerly timber production. Existing quarry permit granted 5 May 2010.
<b>Topography</b>	The site is located on a ridgeline running NNW with parallel ridges running to the north and south. These ridges rise to 350m R.L. and are located between the Mersey River plain to the west at R.L. 50m and the Rubicon River plain to the east at R.L. 160m. The proposed new extraction area is on the shoulder of a high point of the ridge, however, as the face is towards the SSE the pit is effectively screened from the north and northwest. The surrounding ridges screen the quarry from the surrounding plains.
<b>Geology</b>	Dolerite.
<b>Soils</b>	The DPEMP reports minimal overburden with solid source rock outcropping. Soils, where present, are described as skeletal.
<b>Hydrology</b>	Drainage from both valleys flanking the site discharges to Stags Creek to the east. There is virtually no upslope catchment. Watercourses are located 350m distant from the quarry footprint.
<b>Fauna</b>	Within the range of the Tasmanian devil, spotted-tailed quoll and wedge-tailed eagle.

<b>Flora</b>	The Ecological Survey included as Appendix 2 to the DPEMP reports that no threatened vegetation communities or threatened species are present. Vegetation consists of regrowth <i>Eucllyptus amygdalina/obliqua</i> forest types.
<b>Local region</b>	
<b>Climate</b>	Not discussed.
<b>Surrounding land zoning, tenure and uses</b>	The Long Hill Conservation Area runs adjacent to the site along the south western edge and encompasses the ridgeline to the west from the crest to the Mersey River valley floor. The Permanent Timber Production Zone surrounds the land in all other directions. The nearest residences are reported in section 6.4.3 of the DPEMP as being located at least 1.88km from the crusher and 1.87km from blasting sites.
<b>Species of conservation significance</b>	4 wedge-tailed eagle ( <i>Aquila audax fleayi</i> ) nests are recorded within 1.5km of the mining lease boundaries (Appendix 4 of the DPEMP). 3 nests are located to the south west from 700 to 920m from the site boundary. These have been actively used over more than 20 years of activity recording. A further nest to the north west 780m distant from the site boundary is reported as old and disused.
<b>Proposed infrastructure</b>	
<b>Major equipment</b>	Existing primary and secondary crusher circuit. Drill rig, 2 loaders, dump truck, excavator and portable screener.
<b>Other infrastructure</b>	20,000L self banded 'Transtank' for onsite fuel storage. The existing extraction pit is to be converted to a 2 ML water storage reservoir for on-site use.
<b>Inputs</b>	
<b>Water</b>	Water will be available on site from the proposed water storage impoundment. If necessary additional water will be purchased and trucked in.
<b>Energy</b>	The crusher circuits will be electrically powered. Diesel will be stored on site.
<b>Other raw materials</b>	None.
<b>Wastes and emissions</b>	
<b>Liquid</b>	Stormwater runoff from extraction and stockpile areas.
<b>Atmospheric</b>	Dust from traffic, blow-off from stockpiles and from blasting.
<b>Solid</b>	General waste. Waste scrap and equipment.
<b>Controlled wastes</b>	Waste oils.
<b>Noise</b>	Reported that blasting will be an average of once per month. On site machinery including excavation, trucking and crushing and screening. Transport of products from the site.
<b>Greenhouse gases</b>	It is estimated in section 6.9 of the DPEMP that total fuel consumption for mobile equipment on site will be 246.6kL/year. For fixed equipment the existing fuel usage is estimated at 710.5kL/year. This is to be replaced by 6,859,500kW/hr of electricity usage per year. On this basis it is estimated that there will be a drop in greenhouse gas generation as a result of the proposal from 2,573 t CO <sub>2</sub> -e per year to 1,495 t CO <sub>2</sub> -e per year.

Construction and operations	
Proposal timetable	The quarry is already in operation. The timelines for commencement of extraction in stage 3 are not reported.
Operating hours (ongoing)	0600 to 1900 hours Monday to Friday 0600 to 1800 hours Saturday

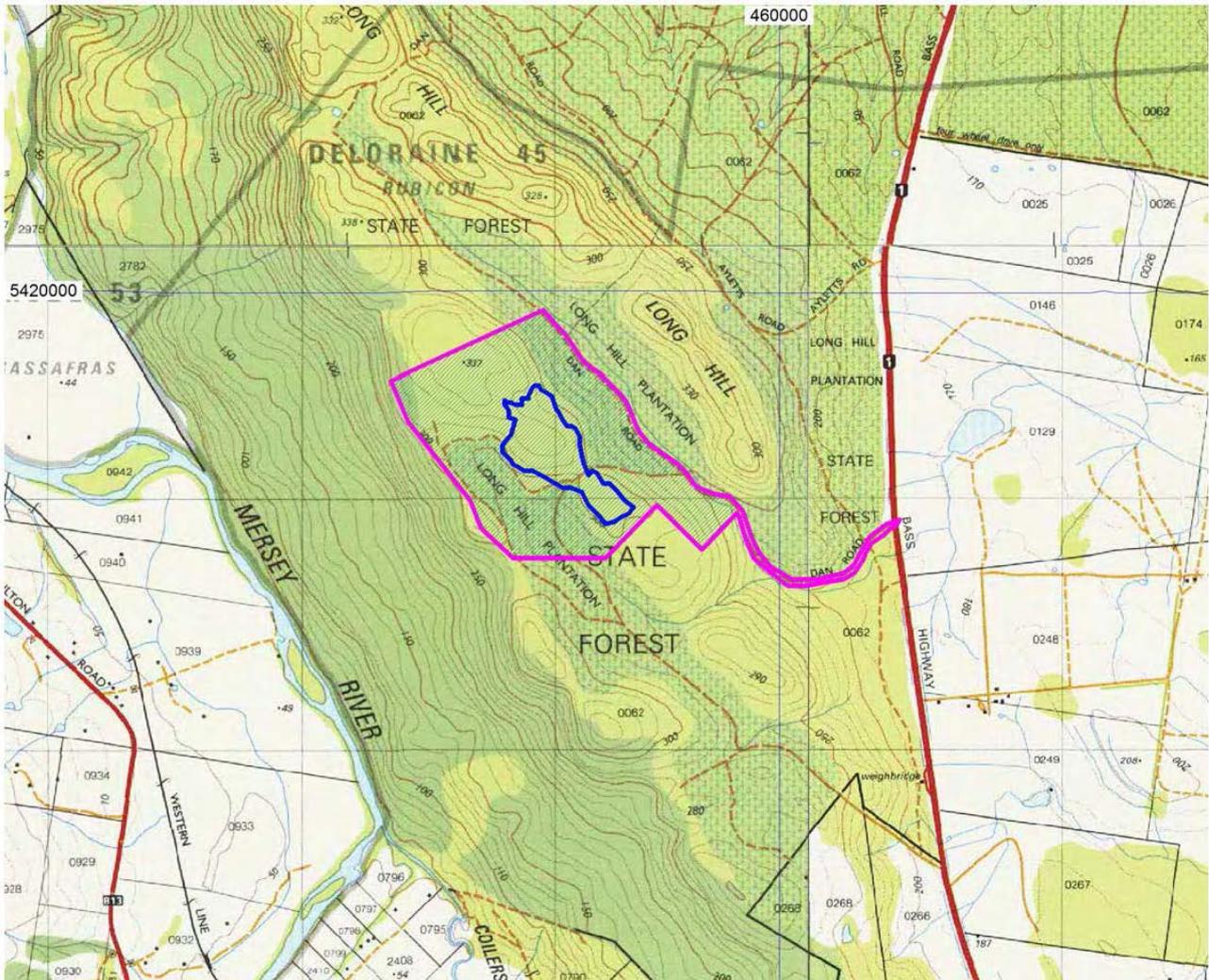


Figure 1: Site (purple outline) with existing quarry footprint (blue outline) (From Figure 2 of the DPEMP)

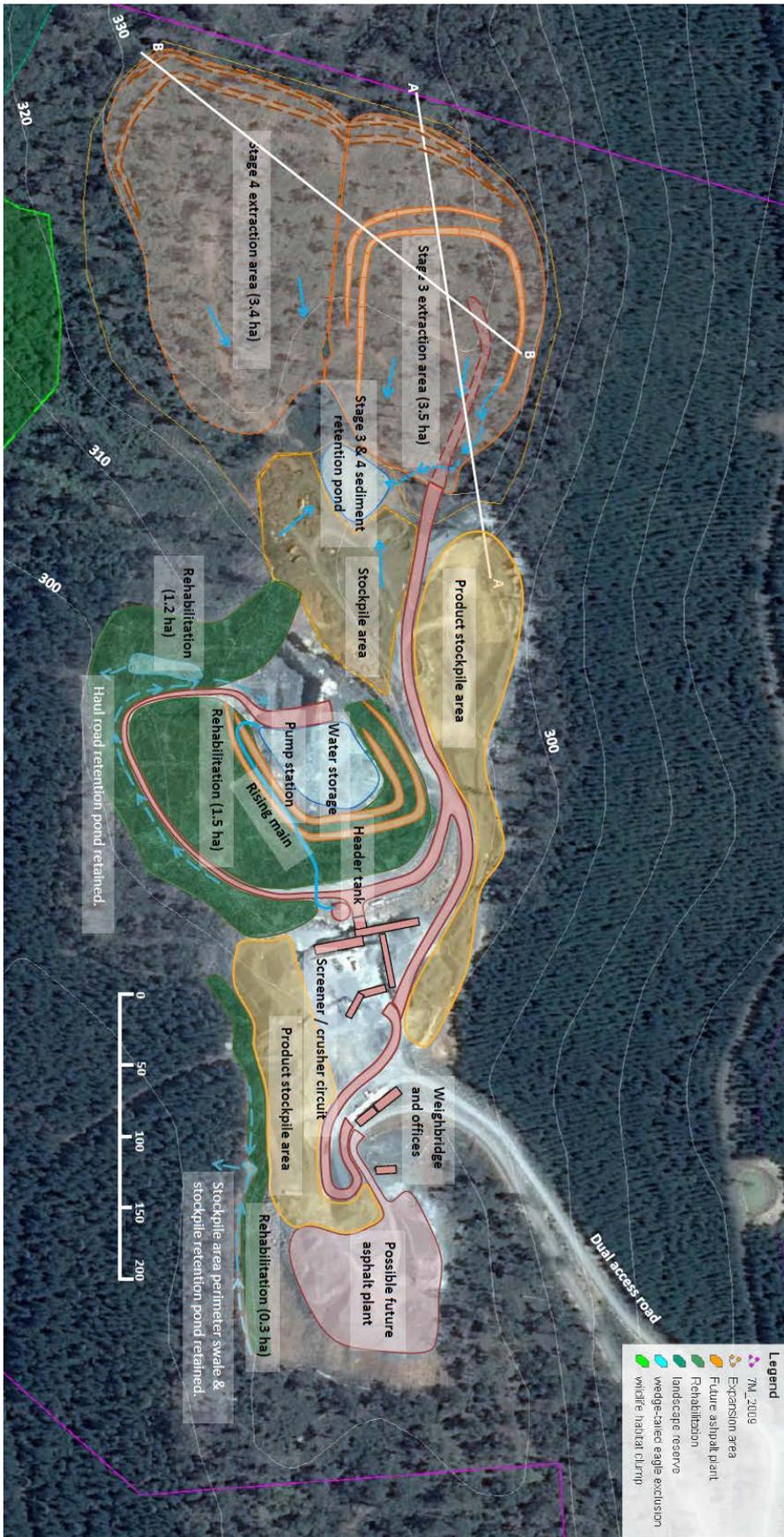


Figure 2: Existing and proposed site layout (From Figure 5 of the DPEMP)

## 4 Need for the proposal and alternatives

Project alternatives are discussed in section 3 of the DPEMP. The DPEMP states that market demand will outstrip current supply within 12 months. The extra demand could be serviced by Hazell Brothers by trucking aggregate from its Leslie Vale quarry. This however would be uncompetitive with alternative sources in the north of the State. Buying additional aggregate for concrete from other suppliers would increase costs and risks associated with multiple material sources.

The alternative discussed in the DPEMP to expanding the extraction footprint was to continue to extract the current pit. This would result in higher faces and create issues with the haul road impinging on pit operations.

## 5 Public and agency consultation

A summary of government agency/body submissions is provided below.

No public representations were received.

The DPEMP was referred to the following agencies for comments:

- Meander Valley Council
- Policy and Conservation Advice Branch, DPIPW (PCAB)
- Aboriginal Heritage Tasmania (AHT)
- Parks and Wildlife Service
- Mineral Resources Tasmania (MRT)
- Department of State Growth
- Forestry Tasmania

The following comments were received:

- PCAB – During guideline drafting PCAB agreed with the conclusions of both the Wedge-tailed Eagle Management Plan (later included as appendix 4 of the DPEMP) and the Ecological Assessment presented with the Notice of Intent (later included as appendix 2 of the DPEMP). PCAB stated they had no further comment in relation to the DPEMP.
- AHT – The likelihood of Aboriginal heritage being present was regarded as low.
- MRT – The presence of Spanish Heath (*Erica lusitanica*) on site means the quarry has the potential to become a vector for dispersal of this declared weed.
- The State Road Division, DSG - Agreed with the finding of the Traffic Impact Assessment.

No other comment was received

In addition the EPA Division noise specialist and the regulatory officer were consulted throughout the assessment process.

## 6 Evaluation of environmental issues

The environmental issues considered relevant to the proposal have been evaluated by the EPA Division. Details of this evaluation, along with the permit conditions required by the Director, are discussed below.

<b>Issue 1: Stormwater management</b>
<b>Description of potential impacts</b>
<p>Stormwater management is discussed in section 6.2 of the DPEMP.</p> <p>The quarry is expanding in production rate and footprint size. Uncontrolled runoff could result in erosion and sediment discharge from the site, and may impact upon waterways if not appropriately managed.</p> <p>The DPEMP reports that the State and Commonwealth listed threatened species, the central north burrowing crayfish (<i>Engaeus granulatus</i>) has been reported in the stream that drains the southern side of the site. The stream is located at least 350m from the site footprint.</p>
<b>Management measures proposed in DPEMP</b>
<p>The following commitments are made in the DPEMP:</p> <p><b>Commitment 2</b> – An existing sediment retention pond will contain runoff from proposed extraction areas.</p> <p><b>Commitment 3</b> – Ponds and perimeter drains to be cleaned out when capacity reduced by half or annually.</p> <p>It is noted that the existing extractive pit is to be converted to a water reservoir with storage capacity of 2 ML. The DPEMP states that runoff from extractive areas will ultimately report to the reservoir.</p>
<b>Public and agency comment</b>
None
<b>Evaluation</b>
<p>The DPEMP notes some natural mitigating factors with regards to potential impacts from stormwater drainage. These are the quarry location on a ridge saddle and the significant distance from the quarry footprint to the nearest defined watercourse.</p> <p>Existing stormwater infrastructure includes a wide swale type drain downslope and south west of the stockpile and crushing/screening area, and an existing sediment pond downslope of the proposed extraction area. Drainage from the extraction area is to be captured in the reservoir for use in wetting surfaces and maintaining moisture levels in product.</p> <p>The size and intensity of the proposed quarry operation is significant. This will result in a greater extent of erodible surfaces, including areas to be rehabilitated early in that process, and greater levels of large vehicle movements and stockpile access. General site use intensification enhances the potential for sediment movement.</p>

<p>Nevertheless it is agreed that the natural location of the quarry will significantly mitigate the potential for sediment loss. It is also considered that the drainage plan is appropriate and makes good use of the existing site. Sediment settling pond calculations are provided in Appendix 1 of the DPEMP. These show that there is sufficient storage capacity within the described structures for a 1 in 20 year rainfall intensity event. The methodology used is considered appropriate. Standard conditions <b>E1</b>, <b>E2</b> and <b>E3</b> are imposed, requiring cut off drains, prevention of the emission of pollutants and appropriate design and maintenance of sediment settling ponds. Given the scale of the operation it is considered appropriate that the operations area be restricted to the proposed quarry footprint used for drainage design and pond calculations. Thus specific condition <b>OP3</b> is imposed.</p> <p>General condition <b>G6</b> requiring compliance with the <i>Quarry Code of Practice, June 1999</i> (CQP) is relevant as the Code does include general recommendations regarding site works and drainage. Condition <b>G7</b> requires that the development of an environmental management plan within 5 years and review of that plan every 5 years thereafter. This ensures there is an opportunity to determine compliance with the imposed conditions and their ongoing relevance.</p>
<p><b>Conclusion</b></p>
<p>The proponent is required to comply with <b>G6</b>, <b>G7</b>, <b>E1</b>, <b>E2</b> and <b>E3</b>, and with specific condition <b>OP3</b>.</p> <p>In addition, as detailed in information clause <b>IO3</b> the proponent has a general environmental duty to comply with commitment numbers <b>2</b> and <b>3</b>.</p>

<p><b>Issue 2: Noise including blasting</b></p>
<p><b>Description of potential impacts</b></p>
<p>Noise is discussed in Section 6.4 of the DPEMP.</p> <p>The nearest residences are located greater than 1.8 km distant from either crushing or blasting operations. The site is effectively topographically screened from nearby residences, and is surrounded by forests. The nearest residence in relation to crushing operations is across the Bass Highway. The DPEMP concludes that these factors mitigate the potential for a noise nuisance.</p>
<p><b>Management measures proposed in DPEMP</b></p>
<p>The following commitments are made in the DPEMP:</p> <p><b>Commitment 4</b> – Blasting will occur once per month.</p> <p>Proposed operating hours are 6am to 7pm weekdays and 6am to 6pm Saturdays.</p>
<p><b>Public and agency comment</b></p>
<p>The EPA Division noise specialist did not consider the imposition of noise limits to be merited given the distance of the site from residences and topography.</p>
<p><b>Evaluation</b></p>
<p>The DPEMP notes that the distances to nearby residences are significantly greater than those recommended in the QCP for noise attenuation. It concludes that the potential for activities on site to cause a noise nuisance, given the mitigating factors of topography, vegetation and surrounding land use, is unlikely. These conclusions are agreed with.</p> <p>Standard conditions <b>B1</b> and <b>B2</b> with respect to blasting are imposed to ensure that blast size is not excessive and that blasting times are restricted to reasonable daylight hours. Specific condition <b>OP1</b> imposes the proposed operating hours and extends limits to public holidays further limiting the potential for environmental nuisance.</p>
<p><b>Conclusion</b></p>
<p>The proponent is required to comply with standard conditions <b>B1</b> and <b>B2</b>, and with specific</p>

condition **OP1**.

In addition, as detailed in information clause **IO3** the proponent has a general environmental duty to comply with commitment **4**.

### Issue 3: Dust emissions

#### Description of potential impacts

Dust impacts are discussed in section 6.1 of the DPEMP.

Extraction, crushing and haulage on site and to and from the site along Dan Rd all have the potential to generate dust. The potential exists for the generation of a visible dust plume however the distances to nearby residences are substantial.

Dust may be entrained by vehicle movements to and from the site or emitted from transported loads.

#### Management measures proposed in DPEMP

The following commitment is made in the DPEMP:

**Commitment 1** – Dust suppression measures to be implemented to minimise on site expose and visible dust plumes.

Measures discussed in the DPEMP include:

- Short material drop distances.
- Slow on site vehicle speeds.
- Good site drainage reducing mud formation.
- Watering of roads and stockpiles in dray windy conditions.
- Dampening and covering of loads.

#### Public and agency comment

None

#### Evaluation

The DPEMP notes that there is a scarcity of water on site for the crushing process and wetting of surfaces. It is concluded that the construction of a reservoir will provide ample on site water. From Appendix 1 of the DPEMP it is noted that the catchment area of the reservoir is potentially 13.6 ha. This is not a large catchment area. It is stated in the DPEMP that, if necessary, water will be purchased and trucked in, as currently occurs.

It is considered that the potential for dust from the site to directly impact nearby residences is remote. The greatest potential for dust to cause an environmental nuisance would likely result from entrainment of dust along the access road to the site and the generation of dust from this road surface and transported loads. Standard dust control measures are considered merited to ensure significant deposition of dust off-site by wind or vehicle movements does not occur. The measures listed above are appropriate and such measures are required by standard conditions **A1, A2 and A3**.

#### Conclusion

The proponent is required to comply with standard conditions **A1, A2 and A3**.

In addition, as detailed in information clause **IO3** the proponent has a general environmental duty to comply with commitment **1**.

<b>Issue 4: Flora, Fauna and Weeds</b>
<b>Description of potential impacts</b>
<p>Biodiversity and natural values are discussed in section 6.7 of the DPEMP.</p> <p>The proposal requires clearance of land in the proposed extraction areas. It is reported that these areas have been heavily disturbed as a result of previous timber harvesting operations. An ecological assessment of this footprint was completed and is included as Appendix 2 of the DPEMP. No listed flora species were found. Careful managed of the site in relation to weeds and plant hygiene was recommended. A Weed Management Plan is included as Appendix 3 of the DPEMP.</p> <p>There are known wedge-tailed eagle nests in the vicinity of the site. The proposed operations are moving away from recently active nests (located 700m and further from the south west site boundary) and towards a nest to the north (located 780m from the northern site boundary). A nest monitoring program was undertaken. A wedge-tailed eagle management plan was prepared and is included as Appendix 4 to the DPEMP. It was concluded that the northern nest is abandoned and that the proposed works were unlikely to affect the behaviour of eagles.</p>
<b>Management measures proposed in DPEMP</b>
<p>The following commitments are made in the DPEMP:</p> <p><b>Commitment 7</b> – Will continue to apply existing weed management plan.</p> <p><b>Commitment 8</b> – Where current weed and disease hygiene guideline recommendations disagree with the existing plan works will comply with the guidelines.</p> <p><b>Commitment 9</b> – Surveillance of wedge-tailed eagle nests to continue until end of 2015/16 breeding season.</p>
<b>Public and agency comment</b>
<p>PCAB were satisfied with the conclusions of the ecological assessment and the eagle management plan.</p> <p>MRT raised concerns about the potential for spread of the declared weed, Spanish Health.</p> <p>The EPA Division regulatory officer noted that the existing weed management plan does not comply with the Tasmanian <i>Weed and Disease Planning and Hygiene Guidelines 2015</i>.</p>
<b>Evaluation</b>
<p>There is no evidence that any flora species either listed under the <i>Threatened Species Protection Act 1995</i> or the Commonwealth <i>Environment Protection and Biodiversity Conservation Act 1999</i> will be impacted by the proposal. No threatened vegetation communities, (defined in the <i>Nature Conservation Act 2000</i>) are present. Accordingly no conditions regarding vegetation or flora management are considered necessary.</p> <p>According to the Ecological Assessment no listed fauna is likely to be impacted. The reported wedge-tailed eagle survey works demonstrate that nests to the south have been actively and successfully used on multiple occasions during the existing quarry lifetime. The proposed expansion is moving away from these nests and is equally topographically screened.</p> <p>The eagle management plan reports that the nest towards which the extractive areas are moving is abandoned. The plan does not propose ongoing survey works after the 2015/2016 breeding season, which is now ended. These works are not considered to be relevant to this assessment but rather were concluding a previous monitoring program. On the basis of PCABs advice it is accepted that the proposed works are not likely to impact on eagle nesting behaviour to any greater extent than current site works. Accordingly no ongoing requirements are imposed to conduct survey works or restrict onsite operations with respect to eagle behaviour.</p> <p>The appended Weed Management Plan was written prior to the current weed management guidelines published by DPIPWE and do not entirely accord with these guidelines. Condition <b>OP2</b> is imposed to ensure consistency with the current guideline.</p>

<b>Conclusion</b>
<p>The proponent is required to comply with the condition <b>OP2</b>.</p> <p>In addition, as detailed in information clause <b>IO3</b> the proponent has a general environmental duty to comply with commitment numbers <b>7, 8</b> and <b>9</b>.</p>

<b>Issue 5: Hazardous materials</b>
<b>Description of potential impacts</b>
<p>Controlled waste management is discussed in section 6.5 and dangerous goods in section 6.6 of the DPEMP.</p> <p>Diesel fuel will be stored in bulk on site. Oils and lubricants will be required for ongoing maintenance. Release of such materials has the potential to contaminate land and pollute stormwater discharged from the land.</p>
<b>Management measures proposed in DPEMP</b>
<p>The following commitments are made in the DPEMP:</p> <p><b>Commitment 6</b> – Diesel will be stored on site in a self bunded 20,000L ‘Transtank’</p>
<b>Public and agency comment</b>
None.
<b>Evaluation</b>
<p>The self bunded ‘Transtank’ is designed for the intended use. Standard conditions are imposed requiring the presence of spill kits, and bunding and containment systems for storage and handling operations (conditions <b>H1, H2</b> and <b>H3</b>).</p>
<b>Conclusion</b>
<p>The proponent is required to comply with standard conditions <b>H1, H2</b> and <b>H3</b>.</p> <p>In addition, as detailed in information clause <b>IO3</b> the proponent has a general environmental duty to comply with commitment <b>6</b>.</p>

<b>Issue 6: Waste management</b>
<b>Description of potential impacts</b>
<p>Waste management is discussed in section 6.4 of the DPEMP.</p> <p>Other than general wastes it is reported that additional wastes are likely to be generated from the upgrade of crushing and screening equipment.</p>
<b>Management measures proposed in DPEMP</b>
<p>The following commitments are made in the DPEMP:</p> <p><b>Commitment 5</b> – redundant equipment from upgrade works to be removed from the site.</p>
<b>Public and agency comment</b>
None
<b>Evaluation</b>
<p>The DPEMP notes that waste should be managed in accordance with the waste management hierarchy.</p>

<b>Conclusion</b>
<p>No conditions are imposed in relation to general waste management.</p> <p>In accordance with best practice environmental management principles waste should be managed consistent with the waste management hierarchy, as detailed in information clause <b>O11</b>.</p> <p>In addition, as detailed in information clause <b>O13</b> the proponent has a general environmental duty to comply with commitment <b>5</b>.</p>

<b>Issue 7: Traffic Impacts (noise and dust)</b>
<b>Description of potential impacts</b>
<p>A Traffic Impact Assessment (TIA) is included as Appendix 6 of the DPEMP and traffic impacts are discussed in section 6.20 of the DPEMP.</p> <p>The TIA found that the junction of Dan Rd with the Bass Highway was suitable for increased traffic movement with a high degree of safety. The junction and slip lanes are sealed.</p> <p>The movement of traffic to and from the site may have the potential to cause environmental nuisance through the entrainment and emission of dust and through vehicle noise. It is noted that Dan Rd, which is used to access the site, is included in the site boundaries and that Dan Rd intersects with the Bass Highway. There are no residences adjacent to this intersection. The nearest residence is 750m to the south of the intersection and 230m from the Bass Highway.</p>
<b>Management measures proposed in DPEMP</b>
No relevant commitment are made in the DPEMP
<b>Public and agency comment</b>
The State Road Division, DSG, agreed with the conclusions of the Traffic Impact Assessment
<b>Evaluation</b>
Traffic entering and exiting the site will do so from a national highway. Distances to any potential receptors for dust or noise from the junction are substantial. The potential for traffic movement to cause an environmental nuisance in relation to dust or noise is considered remote. It is noted that conditions are imposed with regards to vehicle load covering and site operating hours, as previously discussed in Issues 2 and 3 of the EAR.
<b>Conclusion</b>
No additional conditions are imposed in relation to environmental nuisance caused by traffic.

<b>Issue 8: Aboriginal heritage</b>
<b>Description of potential impacts</b>
Heritage issues are discussed in section 6.10 of the DPEMP. It is reported that an Aboriginal heritage field survey conducted in 2009 found no evidence of Aboriginal heritage and concluded that it was unlikely site or artefacts would be discovered during works.
<b>Management measures proposed in DPEMP</b>
The following commitments are made in the DPEMP: <b>Commitment 10</b> – The provisions of an Unanticipated Discovery Plan will be applied during land clearance works.
<b>Public and agency comment</b>
AHT did not require a heritage survey be conducted. AHT agreed with the DPEMP conclusions.
<b>Evaluation</b>
The proponent's commitment is consistent with requirements under the <i>Aboriginal Relics Act 1975</i> .
<b>Conclusion</b>
Requirements under the <i>Aboriginal Relics Act 1975</i> are specified in information clause <b>LO3</b> .

<b>Issue 9: Decommissioning and rehabilitation</b>
<b>Description of potential impacts</b>
Decommissioning and rehabilitation works are discussed in section 8 of the DPEMP. It is reported that there is approximately 24 years of resource available in the proposed extractive areas at the proposed depths. There will still be a significant depth of rock underlying the pits. Despite proposed rehabilitation around the existing pit and the conversion of the pit into a permanent reservoir it is reported that there will be 16ha of exposed land.
<b>Management measures proposed in DPEMP</b>
In section 5.2 of the DPEMP it is stated that approximately 3ha of land surrounding the proposed reservoir is to be rehabilitated (as shown of figure 2). In Section 8 of the DPEMP a decommissioning and rehabilitation program to return the site to vegetation consistent with the surrounding woodlands is outlined.
<b>Public and agency comment</b>
None

<b>Evaluation</b>
<p>At the proposed extractive rate there is many years of resource available within the proposed mine footprint. The potential exists for a significant extension of operations at the site. Nevertheless it is necessary to ensure adequate decommissioning and rehabilitation procedures are put in place should permanent cessation of operation occur. Prior to any permanent cessation of operations it is considered that a comprehensive decommissioning and rehabilitation plan is required (standard conditions <b>DC1</b> and <b>DC2</b>). Stockpiling of topsoils would assist in any rehabilitation (standard condition <b>DC3</b>).</p> <p>The maximum area of land that may be disturbed at any one time without rehabilitation is set as 16ha. This means some progressive rehabilitation is required (condition <b>DC4</b>).</p> <p>Standard condition <b>DC5</b> requires care and maintenance arrangement be put in place should temporary suspension of the activity occur.</p>
<b>Conclusion</b>
<p>The proponent is required to comply with standard conditions <b>DC1, DC2, DC3, DC4, and DC5</b>.</p>

## 7 Report conclusions

This assessment has been based on the information provided by the proponent, Hazell Bros. Group Pty Ltd, in the permit application and DPEMP.

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

It is concluded that:

1. the RMPS and EMPCS objectives have been duly and properly pursued in the assessment of the proposal; and
2. the assessment of the proposed activity has been undertaken in accordance with the Environmental Impact Assessment Principles.

It is concluded that the proposed activity is capable of being managed in an environmentally acceptable manner such that it is unlikely that the objectives of the *Environmental Management and Pollution Control Act 1994* (the RMPS and EMPCS objectives) would be compromised, provided that the Permit Conditions - Environmental No. 9310 appended to this report are imposed and duly complied with.

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

## 8 Report approval

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



*Wes Ford*

**DIRECTOR, ENVIRONMENT PROTECTION AUTHORITY**

**Acting under delegation from the Board of the Environment Protection Authority**

Date: 1/07/2016

## 9 References

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Barry Williams; *Long Hill Quarry – Upgrade Development Proposal and Environmental Management Plan* (February 2016), for Hazell Bros. Group Pty Ltd, Moonah, Tasmania.

## 10 Appendix 1

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Permit conditions, includes Attachment 2 - DPEMP commitments

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**PERMIT PART B**  
**PERMIT CONDITIONS - ENVIRONMENTAL No. 9310**

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

Activity:           **The operation of a quarry and rock crushing activity (ACTIVITY TYPE: Crushing, grinding, milling or separating into different sizes (rocks, ores or minerals))**  
                          **LONG HILL QUARRY, DAN RD**  
                          **ELIZABETH TOWN TAS 7304**

The above activity has been assessed as a level 2 activity under the *Environmental Management and Pollution Control Act 1994* under delegation from the Board of the Environment Protection Authority.

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

Municipality:                           **MEANDER VALLEY**  
Permit Application Reference:       **PA\16\0133**  
EPA file reference:                   **244873**

Date conditions approved:           1 July 2016

Signed:



\_\_\_\_\_  
DIRECTOR, ENVIRONMENT PROTECTION AUTHORITY

## DEFINITIONS

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

## ENVIRONMENTAL CONDITIONS

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

## INFORMATION

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

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## *Attachments*

Attachment 1: The Land (modified: 20/06/2016 16:25)..... 1 page  
Attachment 2: Quarry Footprint (modified: 20/06/2016 17:14)..... 1 page  
Attachment 3: Commitments (modified: 20/06/2016 17:10)..... 1 page

## Schedule 1: 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.

**Best Practice Environmental Management** or '**BPEM**' has the meaning described in Section 4 of EMPCA.

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

**DRP** means Decommissioning and Rehabilitation Plan.

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

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

**Environmental Nuisance** and **Pollutant** each have the meanings ascribed to them in Section 3 of EMPCA.

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

**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 mining lease 7M/2009 as shown on the plan Attachment 1.

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

## Schedule 2: Conditions

### Maximum Quantities

#### **Q1 Regulatory limits**

- 1 The activity must not exceed the following limits (annual fees are derived from these figures):
  - 1.1 200,000 cubic metres per year of rocks, ores or minerals processed.
  - 1.2 200,000 cubic metres per year of rock or gravel 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.

#### **G6 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*.

**G7 Environmental Management Plan and review thereof**

- 1 Unless otherwise specified in writing by the Director, an Environmental Management Plan - Operations ('EMP Operations') for the activity must be submitted to the Director by whichever of the following dates occurs first and at five yearly intervals thereafter:
  - 1.1 In the case of the Director having approved a previous Environmental Management Plan, the fifth anniversary of the date of that approval;
  - 1.2 The fifth anniversary of the date on which these conditions take effect; or
  - 1.3 A date specified in writing by the Director.
- 2 The EMP Operations must include a statement by the General Manager, Chief Executive Officer or equivalent for the activity acknowledging the contents of the EMP Operations.
- 3 The EMP Operations must detail the potential environmental impacts arising from the ongoing operation of the activity over the next 5 years, including a strategic consideration of potential changes to the activity during that period and consideration of opportunities to implement continuous improvement.
- 4 The EMP Operations must separately identify specific commitments, with actions and timeframes, to mitigate or prevent the identified potential environmental impacts. In preparing the EMP Operations the person responsible must take into account the contents of any previous annual environmental reviews including complaints, incidents and monitoring data.
- 5 If the Director issues guidelines for preparation of the EMP Operations, the EMP Operations must address the matters listed in those guidelines.

**Atmospheric****A1 Covering of vehicles**

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

**A2 Control of dust emissions**

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

**A3 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.

## **Blasting**

### **B1 Blasting times**

Blasting on The Land must take place only between the hours of 1000 hours and 1600 hours Monday to Friday. Blasting must not take place on Saturdays, Sundays or public holidays unless prior written approval of the Director has been obtained.

### **B2 Blasting - noise and vibration limits**

- 1 Blasting on The Land must be carried out in accordance with blasting best practice environmental management (BPEM) principles, and must be carried out such that, when measured at the curtilage of any residence (or other noise sensitive premises) in other occupation or ownership, airblast overpressure and ground vibration comply with the following:
  - 1.1 for 95% of blasts, airblast overpressure must not exceed 115dB (Lin Peak);
  - 1.2 airblast overpressure must not exceed 120dB (Lin Peak);
  - 1.3 for 95% of blasts ground vibration must not exceed 5mm/sec peak particle velocity; and
  - 1.4 ground vibration must not exceed 10mm/sec peak particle velocity.
- 2 All measurements of airblast overpressure and peak particle velocity must be carried out in accordance with the methods set down in *Technical basis for guidelines to minimise annoyance due to blasting overpressure and ground vibration*, Australian and New Zealand Environment Council, September 1990.

## **Decommissioning And Rehabilitation**

### **DC1 Notification of cessation**

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

### **DC2 DRP requirements**

Unless otherwise approved in writing by the Director, a Decommissioning and Rehabilitation Plan (DRP) for the activity must be submitted for approval to the Director within 30 days of the Director being notified of the planned cessation of the activity or by a date specified in writing by the Director. The DRP must be prepared in accordance with any guidelines provided by the Director.

### **DC3 Stockpiling of surface soil**

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

### **DC4 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 16ha.

**DC5 Temporary suspension of activity**

- 1 Within 30 days of becoming aware of any event or decision which is likely to give rise to the temporary suspension of the activity, the person responsible for the activity must notify the Director in writing of that event or decision. The notice must specify the date upon which the activity is expected to suspend or has suspended.
- 2 During temporary suspension of the activity:
  - 2.1 The Land must be managed and monitored by the person responsible for the activity to ensure that emissions from The Land do not cause serious environmental harm, material environmental harm or environmental nuisance; and
  - 2.2 If required by the Director a Care and Maintenance Plan for the activity must be submitted, by a date specified in writing by the Director, for approval. The person responsible must implement the approved Care and Maintenance Plan, as may be amended from time to time with written approval of the Director.
- 3 Unless otherwise approved in writing by the Director, if the activity on The Land has substantially ceased for 2 years or more, rehabilitation of The Land must be carried out in accordance with the requirements of these conditions as if the activity has permanently ceased.

**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 Design and maintenance of settling ponds**

- 1 Sediment settling ponds must be designed and maintained in accordance with the following requirements:
  - 1.1 ponds must be designed to successfully mitigate reasonably foreseeable sediment loss which would result from a 1 in 20 year storm event;

- 1.2 discharge from ponds must occur via a stable spillway that is not subject to erosion;
- 1.3 all pond walls must be stable and treated with topsoil and vegetated or otherwise treated in such a manner as to prevent erosion; and
- 1.4 sediment settling ponds must be periodically cleaned out to ensure that the pond design capacity is maintained. Sediment removed during this cleaning must be securely deposited such that sediment will not be transported off The Land by surface run-off.

## **Hazardous Substances**

### **H1 Storage and handling of hazardous materials**

- 1 Unless otherwise approved in writing by the Director, all environmentally hazardous materials, including all chemicals, fuels, and oils, held on The Land in volumes exceeding 250 litres must be stored and handled in accordance with the following:
  - 1.1 Any storage facility must be contained within a spill collection bund with a net capacity of whichever is the greater of the following:
    - 1.1.1 at least 110% of the combined volume of any interconnected vessels within that bund; or
    - 1.1.2 at least 110% of the volume of the largest storage vessel; or
    - 1.1.3 at least 25% of the total volume of all vessels stored in that spill collection bund; or
    - 1.1.4 the capacity of the largest tank plus the output of any firewater system over a twenty minute period.
  - 1.2 All activities that involve a significant risk of spillages, including the loading and unloading of bulk materials, must take place in a bunded containment area or on a transport vehicle loading apron.
  - 1.3 Bunded containment areas and transport vehicle loading aprons must:
    - 1.3.1 be made of materials that are impervious to any environmentally hazardous material stored within the bund;
    - 1.3.2 be graded or drained to a sump to allow recovery of liquids;
    - 1.3.3 be chemically resistant to the chemicals stored or transferred;
    - 1.3.4 be designed and managed such that any leakage or spillage is contained within the bunded area (including where such leakage emanates vertically higher than the bund wall);
    - 1.3.5 be designed and managed such that the transfer of materials is adequately controlled by valves, pumps and meters and other equipment wherever practical. The equipment must be adequately protected (for example, with bollards) and contained in an area designed to permit recovery of any released chemicals;
    - 1.3.6 be designed such that chemicals which may react dangerously if they come into contact have measures in place to prevent mixing; and
    - 1.3.7 be managed such that the capacity of the bund is maintained at all times (for example, by regular inspections and removal of obstructions).

**H2 Hazardous materials (< 250 litres)**

- 1 Unless otherwise approved in writing by the Director, each environmentally hazardous material, including chemicals, fuels and oils, held on The Land in discrete volumes not exceeding 250 litres, but not including discrete volumes of 25 litres or less, must be located within bunded containment areas or spill trays which are designed to contain at least 110% of the volume of the largest container.
- 2 Bunded containment areas and spill trays must be made of materials that are impervious to any environmentally hazardous materials stored within the bund or spill tray.

**H3 Spill kits**

Spill kits appropriate for the types and volumes of materials handled on The Land must be kept in appropriate locations to assist with the containment of spilt environmentally hazardous materials.

**Operations****OP1 Operating hours**

- 1 Unless otherwise approved by the Director, activities associated with the extraction of rock, gravel, sand, clay or minerals, and loading of product, and screening/crushing must not be undertaken outside the hours of 0600 hours to 1900 hours on weekdays and 0600 hours to 1800 hours on Saturdays.
- 2 Unless otherwise approved by the Director, activities that may otherwise occur in accordance with this condition must not be carried out on public holidays that are observed Statewide (Easter Tuesday excepted).

**OP2 Weed management**

- 1 Within 6 months of the date on which these conditions take effect, or by a date otherwise specified in writing by the Director, a Weed & Disease Management Plan must be submitted to the Director for approval. This requirement will be deemed to be satisfied only when the Director indicates in writing that the submitted document adequately addresses the requirements of this condition to his or her satisfaction.
- 2 The plan must be consistent with the Weed and Disease Guidelines, or any subsequent revisions of that document.
- 3 The person responsible must implement and act in accordance with the approved plan.
- 4 In the event that the Director, by notice in writing to the person responsible, either approves a minor variation to the approved plan or approves a new plan in substitution for the plan originally approved, the person responsible must implement and act in accordance with the varied plan or the new plan, as the case may be.

**OP3 Quarry footprint**

The operational area on The Land for activities associated with rock extraction, product processing, raw material and product stockpiling, and loading and unloading of materials, must be restricted to the areas marked 'Footprint area June 2015' and 'Footprint development area' on the plan at Attachment 2.

## 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**

### **OI1 Waste management hierarchy**

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

### **OI2 Notification of incidents under section 32 of EMPCA**

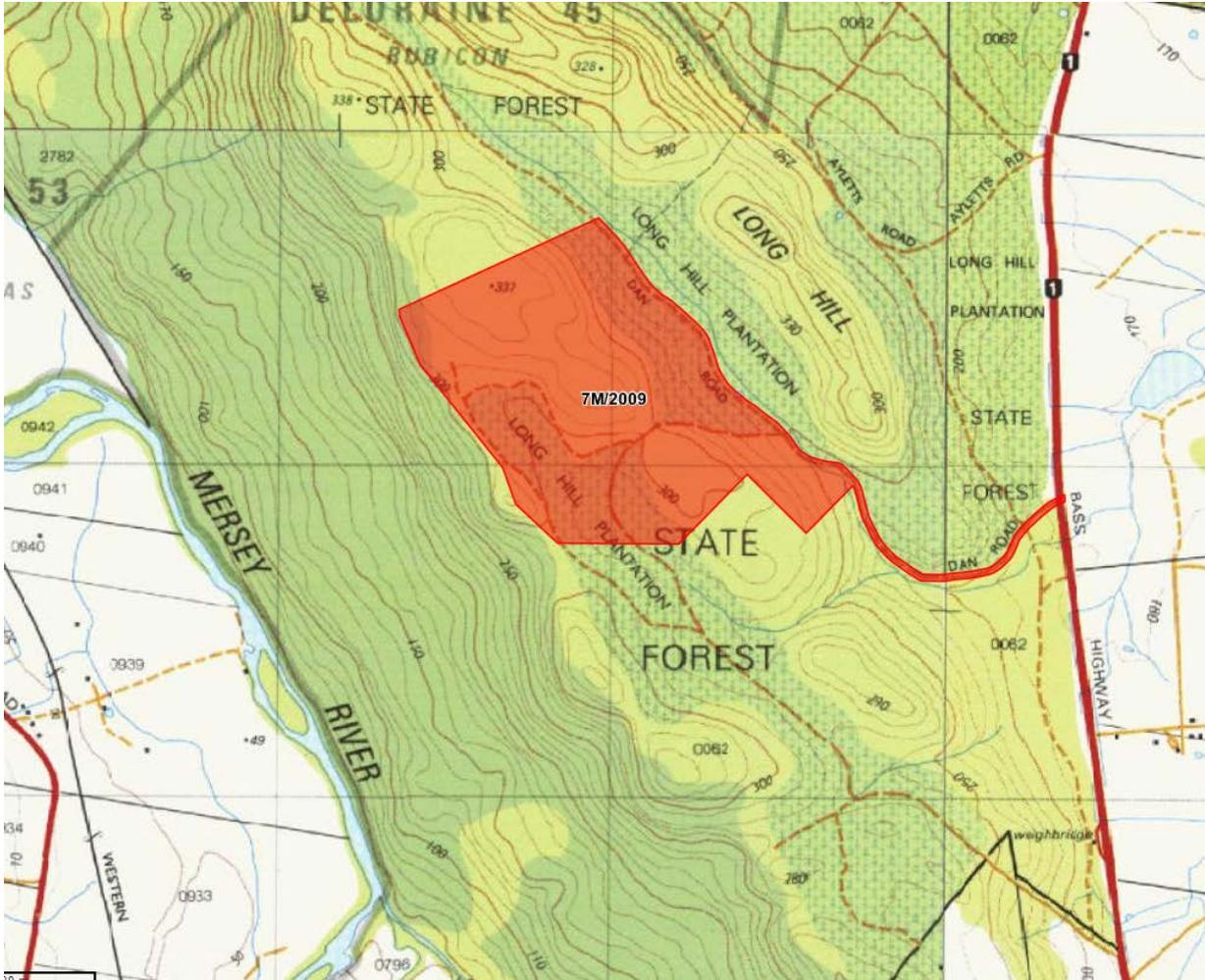
Where a person is required by section 32 of EMPCA to notify the Director of the release of a pollutant, the Director can be notified by telephoning 1800 005 171 (a 24-hour emergency telephone number).

### **OI3 Commitments**

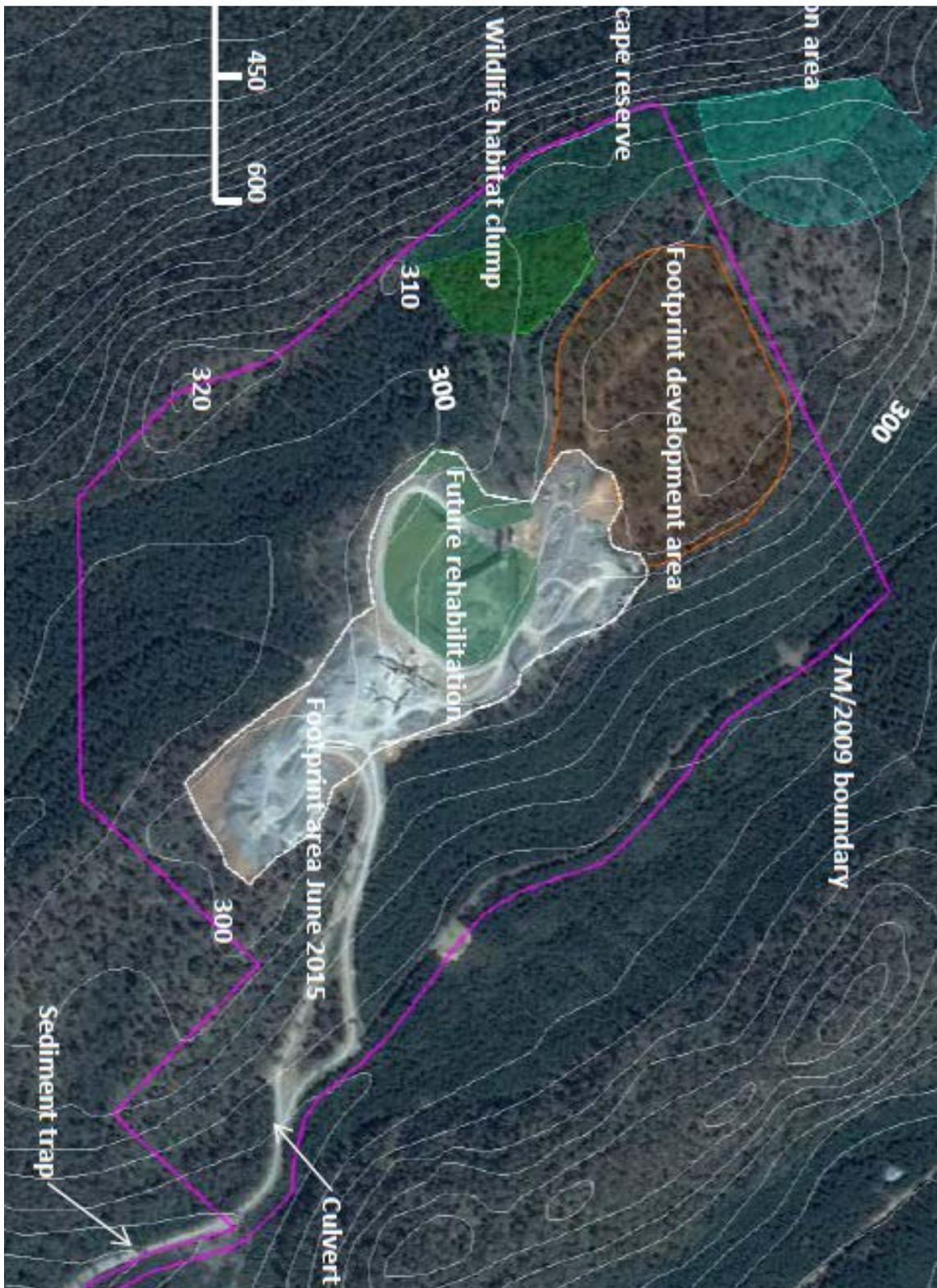
The person responsible for the activity has a general environmental duty to conduct the activity in accordance with the commitments contained in Attachment 3.

# ATTACHMENT 1: THE LAND

(Mining lease 7M/2009, shaded in red)



## ATTACHMENT 2: QUARRY FOOTPRINT



## ATTACHMENT 3: COMMITMENTS

Item	Commitment	When	Responsible
1.	Dust suppression measures will be employed to minimise workers exposure to dust and prevent a dust plume visible off site.	When required	Operator
2.	The existing sediment retention pond will capture runoff from the stages 3 and 4 extractions areas.	At all times	Operator
3.	Perimeter drains and sediment retention ponds will be cleaned out when their maximum capacity has been reduced to half or annually.	Annually	Operator
4.	Blasts of a similar scale to existing will occur up to a frequency of one per month.	Monthly	Operator
5.	Redundant equipment arising from the upgrade works will be removed from site.	On approval	Operator
6.	Diesel fuel required for site mobile equipment will be stored in a proprietary fully bunded 20 000 litre 'Transtank'.	At all times	Operator
7.	The prescriptions of the original weed management plan will continue to be applied for the upgraded operation.	At all times	Operator
8.	Where recommended weed and disease hygiene protocols disagree actual works will comply with (DPIPWE, Mar 2015)	At all times	Operator
9.	Surveillance of wedge-tailed eagle behaviour will continue until the end of the 15-16 breeding season	Feb 2016	Operator / Zoologist
10.	The provisions of an Unanticipated Discovery Plan will be applied to any clearing of undisturbed areas.	At all times	Operator
11.	A safe and healthy workplace will be provided to workers and safety risks will be kept as low as reasonably practical	At all times	Operator
12.	The controls included in this Environmental Management Plan will be applied to keep environmental risk to an acceptable level.	At all times	Operator
13.	A moratorium will be applied to 'Hot Work' on days of total fire ban	At all times	Operator
14.	If a bushfire threatens the site personnel will evacuate.	As required	Operator