



Application for licence

Part V Division 3 of the *Environmental Protection Act 1986*

Licence number	L9236/2020/1
Applicant	P.M.R. Quarries Pty Ltd
ACN	008 866 448
DWER file number	DER2020/000032
Premises	Old Coast Road Quarry Herron, WA 6211 Part of Lot 5 on Plan 2711 (as depicted in Schedule 1)
Date of report	22 May 2020
Decision	Licence granted

1. Definitions

Key terms relevant to this decision report and their associated definitions are listed in Table 1.

Table 1: Definitions

Term	Definition
Applicant	P.M.R. Quarries Pty Ltd
Category / categories	Categories of prescribed premises as set out in Schedule 1 of the EP Regulations.
Decision Report	refers to this document.
Delegated Officer	An officer delegated under section 20 of the EP Act.
Department	The department established under section 35 of the <i>Public Sector Management Act 1994</i> and designated as responsible for the administration of Part V Division 3 of the EP Act.
DWER	Department of Water and Environmental Regulation As of 1 July 2017, the Department of Environment Regulation (DER), the Office of the Environmental Protection Authority (OEPA) and the Department of Water (DoW) amalgamated to form the Department of Water and Environmental Regulation (DWER). DWER was established under section 35 of the <i>Public Sector Management Act 1994</i> and is responsible for the administration of the <i>Environmental Protection Act 1986</i> along with other legislation.
Emission	has the same meaning given to that term under the EP Act.
EP Act	<i>Environmental Protection Act 1986 (WA)</i>
EP Regulations	<i>Environmental Protection Regulations 1987 (WA)</i>
Noise Regulations	<i>Environmental Protection (Noise) Regulations 1997 (WA)</i>
Occupier	has the same meaning given to that term under the EP Act.
Prescribed premises	This has the same meaning given to that term under the EP Act.
Premises	refers to the premises to which this Decision Report applies, as specified at the front of this Decision Report
Risk Event	As described in <i>Guidance Statement: Risk Assessment</i>

2. Overview of premises

2.1 Classification of Premises

Table 2 Classification of premises and assessed design capacity

Category	Description	Assessed production or design capacity or throughput
Category 12	Screening etc. of material: premises (other than premises within category 5 or 8) on which material extracted from the ground is screened, washed, crushed, ground, milled, sized or separated.	50,000 tonnes per annum

2.2 Purpose and scope of assessment

P.M.R. Quarries Pty Ltd (the applicant) operates a mobile crushing and screening plant at Old Coast Road Quarry in Herron, being part of Lot 5 on Plan 2711, which the applicant owns (Figure 1). The applicant held licence L8643/2012/1 until 20 June 2018 when an administrative error caused the licence to cease to have effect.

The applicant lodged an application for a new licence with Department of Water and Environmental Regulation (DWER) on 12 December 2019 to replace the one that ceased. The applicant confirmed in the application that no material changes have been made to the premises since 20 June 2018, and no changes are proposed as part of the application.

Ceased licence L8643/2012/1 was granted on 29 November 2013 and accompanied by an Environmental Assessment Report that included an assessment of emissions from the premises and determination of licence conditions. Having regard to community concerns raised during the consultation period for the application for this new licence (see Appendix B), this decision report includes a new risk assessment for the prescribed premises. No controls beyond ceased licence L8643/2012/1 were determined from the new risk assessment. The new licence aligns largely with the conditions of the ceased licence incorporating administrative updates to conditions and the inclusion of specific measures detailed in the applicant's Environmental Management Plan.

The expiry date of this licence is 20 June 2032. This expiry date aligns with the date proposed in DWER's correspondence to the applicant on 21 March 2016 that outlined the intention to amend the expiry of the ceased licence. The licence expiry date of 2032 does not exclude the applicants need to hold applicable planning approval or other necessary approvals for the activities on site.

2.3 Description of proposed activity

The applicant operates a mobile jaw crusher to crush and screen limestone to produce various sized aggregates. The crusher has a design capacity of 150 tonnes per hour where campaign crushing and screening is carried out depending on market demands. The premises has been assessed at a design capacity of not more than 50,000 tonnes per year. The lifetime of the operation was planned for four stages, and as per advice received on 15 April 2020, is currently operating within the stage one (Figure 2). The crusher location is currently in stage one and the stockpiles are retained on the floor of the pit. The main emissions associated with the screening activities are noise and dust

Table 3 Infrastructure and equipment

Ref	Infrastructure or Equipment	Site Layout Plan reference
1	Mobile Crushing and screen plant as required (design capacity of 150 tonnes per hour)	Figure 2
2	Bulldozer D11 or equivalent	Floor of excavation pit (stage one of Figure 2)
3	Loader (cat 980 or equivalent)	Floor of excavation pit (stage one of Figure 2)
4	Water tanker (10,000L)	Floor of excavation pit, operational areas, unsealed roads
5	Vehicles (trucks), 10-40 laden trucks per day. Up to 100 trucks per day during peak production or for large contracts	Floor of excavation pit (stage one of Figure 2)

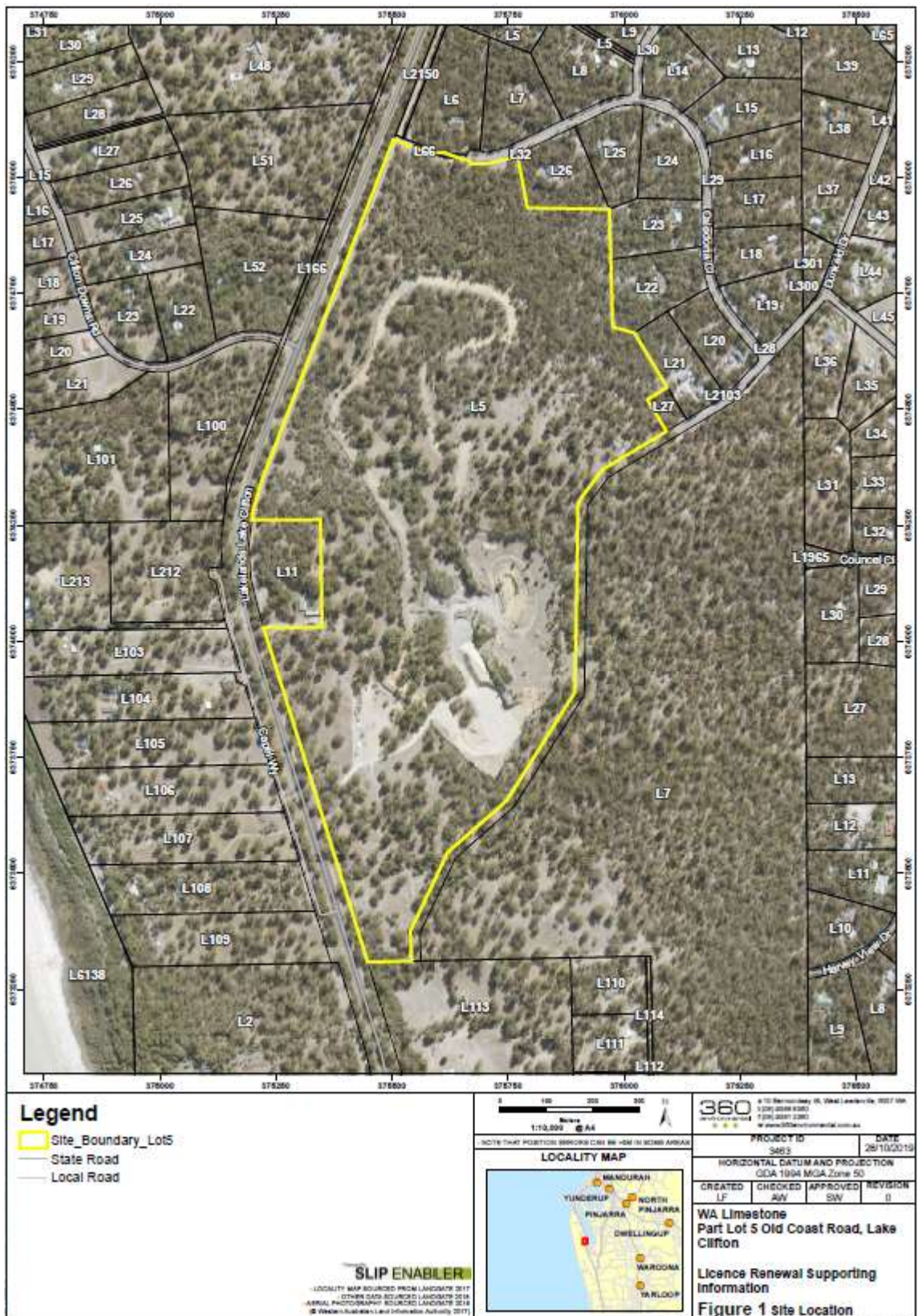


Figure 1 Site Boundary and Location

Image provided as part of works approval supporting documentation

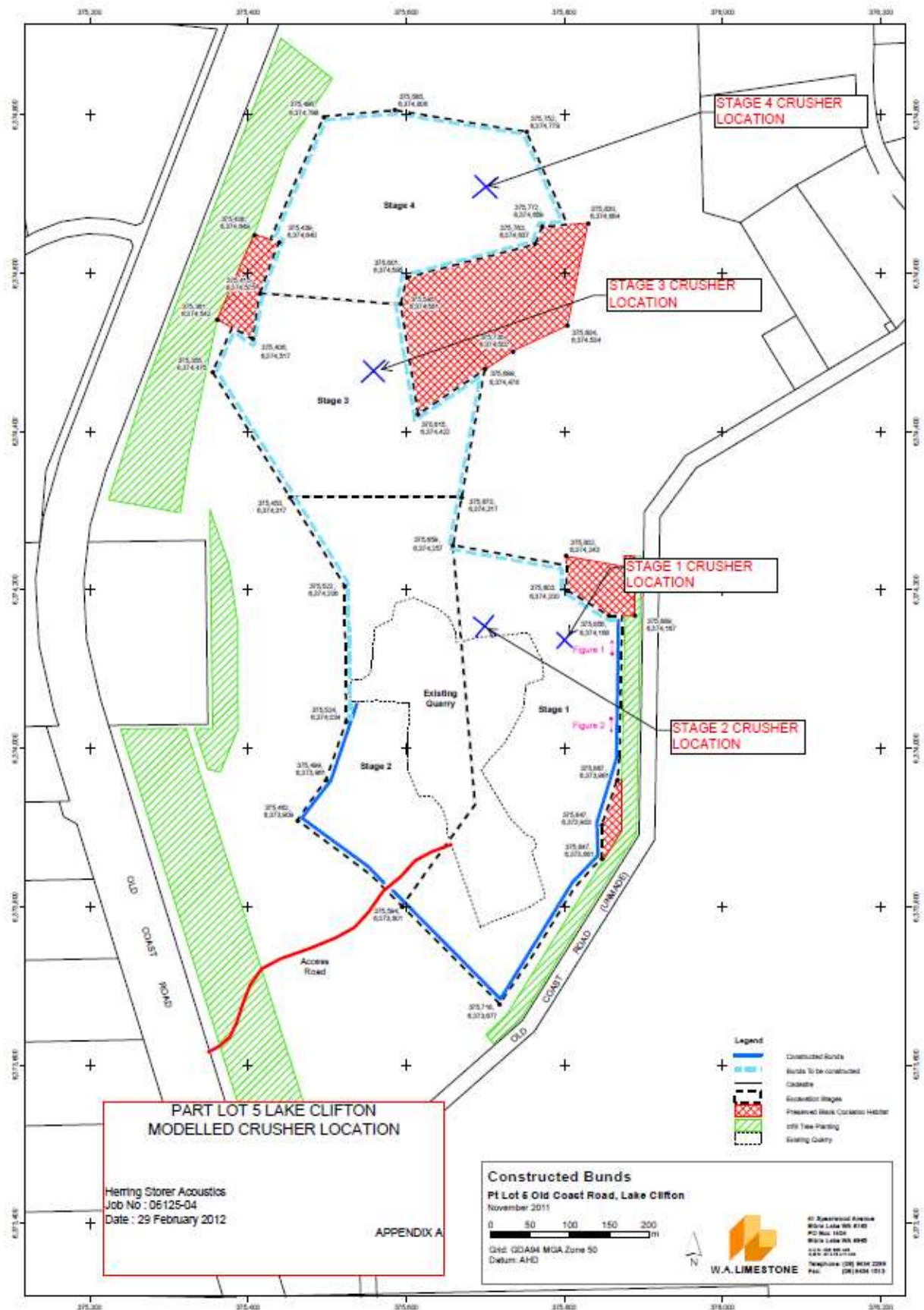


Figure 2 Operational Stages and Crusher Location

3. Legislative context and other approvals

The legislative framework for this assessment is the *Environmental Protection Act 1986* (EP Act) and *Environmental Protection Regulations 1987* (EP Regulations).

Relevant guidance documents are outlined in Appendix B: Summary of Issues Raised in Public Submissions.

Approvals relevant to the premises are outlined in the table below.

Table 4 Approvals

Legislation	Number	Approval
<i>Environmental Protection Act 1986</i>	CPS 3956/2	Approval to clear 16.82 hectares of native vegetation. Expiry 28 March 2021.
<i>Planning and Development Act 2005</i>	DA9091	City of Mandurah Development Approval granted on 28 November 2018. Expires 28 November 2023
<i>Rights in Water and Irrigation Act 1914</i>	GWL 174561 (1)	Groundwater licence allowing for the abstraction of groundwater (entitlement: 12,500kL/year. Valid until 2 March 2022).

4. Groundwater and surface water

The site lies on a limestone ridge between the Harvey Estuary and Lake Clifton. There is a superficial fresh groundwater aquifer beneath the site, with a salinity range of 500 to 1,500mg/L total dissolved solids which is considered marginal to brackish. Recharge is by precipitation and infiltration through porous sand and limestone. The applicant reports that there are no surface water drainage channels on site due to the porosity and permeability of the limestone. Supporting information provided by the applicant (360 Environmental, 2019) indicated that the deepest excavation has a floor at 11m AHD, which is more than 8m above the natural groundwater level. There is no dewatering or direct emissions or discharges to groundwater or surface water associated with the prescribed activities onsite.

As outlined in Table 4 above, the applicant has a groundwater licence allowing for the abstraction of groundwater up to 12,500kL/year. The applicant abstracts groundwater to use for dust suppression activities at the premises. The groundwater licence was previously assessed by the Department and is not included within the scope of this risk assessment.

During the consultation process a number of stakeholders outlined concerns relating to groundwater use at the premises and impacts to the quality and availability of groundwater in the area, along with impacts to environmental receptors including vegetation and Lake Clifton Thrombolites. DWER's response to the submissions are in Appendix B. Based on the prescribed activities carried out on site and the groundwater abstracted for dust suppression activities, it is not expected that the operation of the premises will impact on the quality of groundwater in the area. Assessment of groundwater availability was subject to the groundwater abstraction approval process.

5. Emission sources, pathways, receptors and controls

5.1 Emissions

The potential for emissions to impact sensitive receptors has been assessed in accordance with the Department's Risk Framework. The key emissions considered in this report are dust and noise from activities associated with category 12 infrastructure and equipment, and dust and noise emissions generated during operation of the premises, including screening and crushing activities, storage of material and vehicle movements. Emissions during operations also include sediment laden run-off associated with stockpiled material. The applicant has proposed measures to assist in controlling these emissions, where necessary. The control measures have been considered when undertaking the risk assessment detailed in Section 6.

5.2 Pathways

Air/windborne pathways

As dust and noise are considered potential emissions, the prevailing wind direction has been considered. Annual climate summary statistics from the Bureau of Meteorology Halls Head WA weather station (No. 009572), being the closest station approximately 24.6km from Lake Clifton, indicate that at 9am the prevailing wind direction is predominantly towards the north-west. At 3pm the prevailing wind direction is towards the north-east.

5.3 Receptors

Risk is assessed as a combination of emission sources, the proximity and sensitivity of receptors to those emission sources and any pathways that can allow the emission to reach and potentially harm the receptor. Figure 3 and the table below provides a summary of human and environmental receptors in proximity to the premises which have a potential to be impacted from site activities, and the risk assessment in Section 6 considers these receptors in the context of emissions and potential pathways.

Table 5 Receptors

Human receptors	Distance from activity or prescribed premises
Twenty three rural residential lots along prescribed premises boundary	Adjacent to the premises boundary. Closest to operational boundaries: <ul style="list-style-type: none"> 125m to Lot 11 boundary (225m to dwelling within this Lot) to the west (within the 9am prevailing wind direction) (Figure 3)
Environmental receptors	Distance from activity / prescribed premises
<u>Threatened ecological communities:</u> Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	On-site
Tuart (<i>Eucalyptus gomphocephala</i>) woodlands and forests of the Swan Coastal Plain	On-site

<u>Threatened ecological community:</u> Thrombolite (microbialite) Community of Lake Clifton	780m east of the site
<u>Ramsar sites:</u> Peel-Yalgorup System	1km west and 1.8km east of the site
<u>DBCA Legislated Lands and Waters:</u> Yalgorup National Park Kooljerrenup Nature Reserve	1km west 1.8km south east
<u>Threatened flora (identified by applicant)</u>	Potentially occurring on or adjacent to the site (within 1km).
<u>Threatened Fauna (identified by applicant)</u>	Potentially occurring on or adjacent to the site (within a 1km radius).
Heritage receptors	Distance from activity / prescribed premises
Registered site 3256 – Lake Clifton 2: Bridge (Type: artefacts, scatter, camp, other)	1km north
Registered site 351 – Boundary Lake (Type: fish trap, man-made structure)	1.4km west

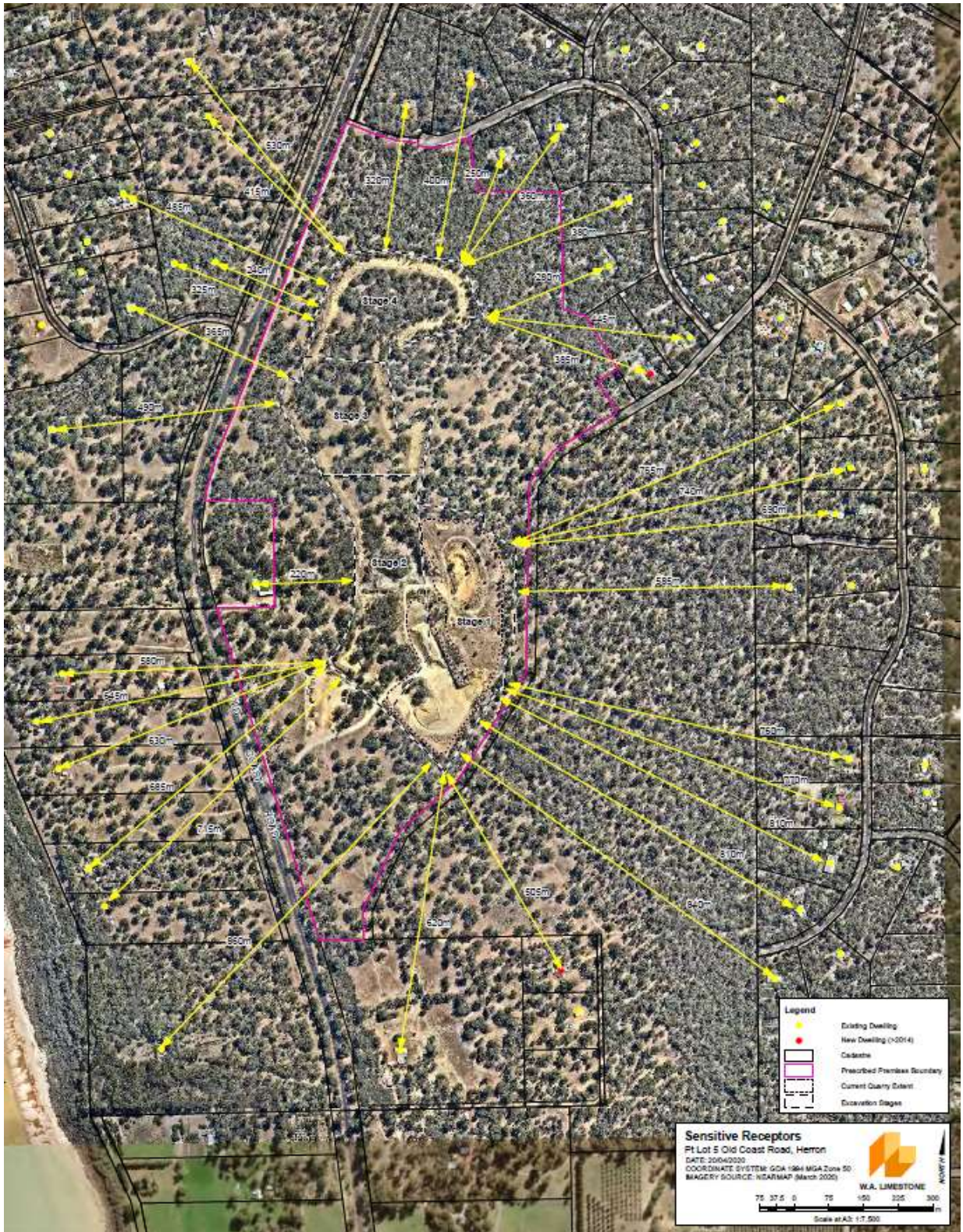


Figure 3 Distance to sensitive human receptors

Image provided as part of works approval supporting documentation

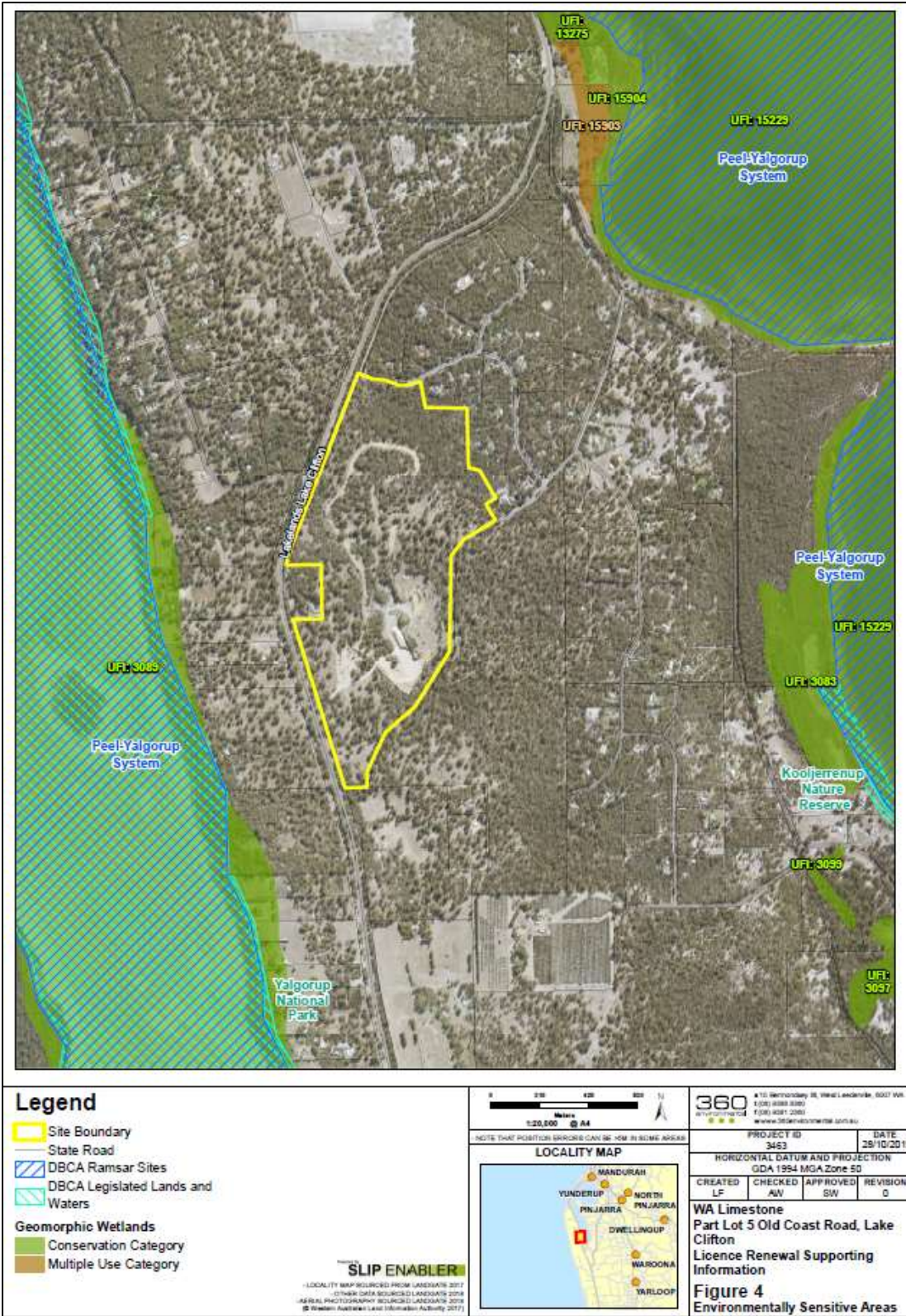


Figure 4 Environmentally Sensitive Areas

Image provided as part of works approval supporting documentation

5.4 Applicant controls

The applicant has proposed the following management measures/controls as part of the application:

Table 6 Applicant Controls

Emission (as identified above)	Source	Proposed controls
Dust	Crushing, screening, storage and transport of material. Vehicle movements and lift-off from stockpiles during operation.	<p>Ceased licence (L8643/2012/1) referred to the Excavation and Rehabilitation Management Plan (ERMP, 2009) with respect to dust controls. Proposed controls included:</p> <p>Transport</p> <ul style="list-style-type: none"> • Maintain haul road and hardstand surfaces in good condition (free of potholes, rills and product spillages); • Water and/or treat access and haul roads and paved areas using a water tanker or sprinkler system; • All loads for transport outside the pit are covered; • A readily auditable trigger of no visible dust to cross the property boundary is used; • Maintain road trucks in clean condition; • Wet down or cover loads on trucks that are likely to blow during transport; and • Limit speed in operational areas and on haul road to 40km/hr. <p>Boundaries / Operating Locations</p> <ul style="list-style-type: none"> • 80 metre road buffer zones retained along Old Coast Road, with all excavation restricted to rural zoned land; • From the operational boundary, a minimum buffer of 175m to the boundary of the residential lots to the east and 125m to the boundary of residential Lot 11 (closest residential dwelling). There is a minimum buffer of 225m to the residences; • Locate activities behind natural barriers, landform and vegetation: the mobile crusher and stockpiles will be located on the pit floor 10m below the natural ground level to help mitigate dust impact. All facilities and operations will be located on the pit floor; • Bunds of overburden proposed for the perimeter of operations to form screening barriers; • Plant screening barriers with trees – ERMP indicated a perimeter planting of trees already present; • A water tanker and/or sprinkler systems used on-site during operations to reduce dust; • Treat processing and stockpile areas with dust suppression sprays, covers and shields as appropriate; • When winds are sufficiently strong to negate the effects of

		<p>dust management, operations will temporarily cease until conditions improve and compliance can be achieved;</p> <ul style="list-style-type: none"> • Schedule activities such as vegetation, topsoil or overburden stripping on exposed ridgelines at times for suitable wind conditions when materials are less likely to generate dust; • Clearing and reinstatement of vegetation, topsoil and overburden will be confined to wetter months, April to October, where possible. • Maintain a complaints record, investigation, action and reporting procedure; and • Conduct training programs for onsite staff on dust minimisation practices. <p>Stockpiles</p> <ul style="list-style-type: none"> • Wet down stockpiles using water canon or sprinklers as required; • Stockpiles of products will be retained on the floor of the pit; • Reduce height of stockpiles to below the height of the perimeter bund (typically approximately 8m high); and • Seal stockpiles with spray-on sealant: stockpiles are assessed for their dust lift off potential and are treated accordingly.
Noise	Crushing and screening of material; vehicle movements (including reversing alarms)	<p>Equipment and Operations</p> <ul style="list-style-type: none"> • All equipment and machinery to be maintained appropriately to comply with manufacturer specifications; • All equipment to be fitted with noise shields and efficient silencers; • a noise consultant will be engaged to provide advice on mitigation measures if non-compliance with the Noise Regulations is identified. • Shut down equipment when not in use; • Quarrying and processing operations are conducted during normal working hours of 7am to 5pm, Monday to Saturday; • Lights or low frequency reversing alarms to be used to restrict noise intrusion; • Maintain a complaints record, investigation, action and reporting procedure; and • Conduct training programs for onsite staff on noise minimisation practices. <p>Boundaries/Operating Locations</p> <ul style="list-style-type: none"> • A separation of 225 meters of parkland pasture; • Locate exposed features behind natural barriers and landform; • Operate from floor of pit 9m below natural ground level. Crushing plant to be located on the floor of the pit 10m

		<p>below natural ground level; and</p> <ul style="list-style-type: none"> • Push overburden and inter-burden dumps into positions where they can form screening barriers.
Sediment	Stockpile run off	Controls for sediment and stockpile run off are not specifically addressed by the applicant. Stockpiles will be retained at the floor of the pit, below natural ground level. Sediment run-off is therefore likely to be contained within the pit.

6. Risk assessment

The identification of the sources, pathways and receptors to determine Risk Events are set out in Table 7 below, consistent with the *Guidance Statement: Risk Assessments*. Risk ratings have been assessed for each key emission source and take into account potential source-pathway-receptor linkages.

The mitigation measures / controls proposed by the applicant have been considered in determining the risk rating. As the application pertains to a licence replacement for ongoing works, emissions during operations only have been assessed (there being no construction phase).

The conditions in the issued Licence, as outlined in Table 7, have been determined in accordance with the *Guidance Statement: Setting Conditions*.

Table 7 Risk assessment - operation

Risk Event				Consequence rating*	Likelihood rating*	Risk*	Reasoning	Regulatory controls (refer to conditions of the granted instrument)
Source/Activities	Potential emissions	Potential receptors, pathway and impact	Applicant controls					
Screening activities Crushing activities Unloading, loading and storage of material Vehicle movements	Dust	Air/windborne pathway causing impacts to health and amenity of human receptors, in particular adjacent residential receptors. With respect to operational boundaries (see Figure 3), the closest residential receptor is 125m to Lot 11 and 225m to the dwelling (west).	Please refer to Section 5.4	Major	Possible	High	There have been no complaints with respect to dust during the operational period of the former licence. The applicant's dust mitigation controls therefore likely to be sufficient at mitigating dust emissions. As the former licence references an external management plan, the licence has now been updated to include management plan details within the licence as regulatory controls. The applicant suggests to limit speed on the haul road and operational areas to 40km/hr. This has been placed on the licence as a regulatory control.	To replace external reference to a management plan, the licence has been updated with: Condition 1.2.5 for operational boundary distances; and Conditions 2.2.2 and 2.2.3 for general dust management.
		Air/windborne pathway causing impacts to threatened ecological communities and threatened flora on-site and adjacent to the site.		Moderate	Unlikely	Medium	DBCA advice received on 17/4/2020 indicated that without management, dust could place vegetation and foraging birds (and other) fauna under significant additional stress. The applicant will be retaining stockpiles on the floor of the excavation pit, below natural ground level and using a water cart to suppress dust from stockpiles and in operational areas	To replace external reference to a management plan, the licence has been updated with: Condition 1.2.5 for operational boundary distances; and Conditions 2.2.2 and 2.2.3 for general dust management
		Air/windborne pathway causing impacts to Ramsar sites, DBCA Legislated Lands and Waters (closest being 1km west of prescribed premises boundary).		Moderate	Unlikely	Medium	The applicant's dust mitigation controls from the former licence are likely to be sufficient at mitigating dust emissions. As the former licence references an external management plan, the licence has now been updated to include management plan details within the licence as regulatory controls.	

<p>Screening activities</p> <p>Crushing activities</p> <p>Unloading, loading and storage of material</p> <p>Vehicle movements</p>	<p>Noise</p>	<p>Air/windborne pathway causing impacts to health and amenity of human receptors, in particular adjacent residential receptors. With respect to operational boundaries (see Figure 3), the closest residential is 125m to Lot 11 and 225m to the dwelling (west).</p>	<p>Please refer to Section 5.4</p>	<p>Moderate</p>	<p>Possible</p>	<p>Medium</p>	<p>Quarrying and processing operations are conducted during normal working hours of 7am to 5pm, Monday to Saturday, excluding public holidays. No crushing activities are permitted on Saturday. Operations take place on the floor of the pit below natural ground level and equipment are fitted with noise shields and silencers. As the former licence references an external management plan with respect to hours of operation, the licence has now been updated to include management plan details within the licence as regulatory controls.</p> <p>One submission was received on 28/2/20 during community stakeholder consultation, expressing concerns regarding noise of machinery and vehicles. Only one complaint was received during the operational period of the former licence (received in 2012). At this stage there is not enough evidence to suggest noise is an issue and that the applicant is likely to comply with the <i>Environmental Protection Noise Regulations 1997</i>.</p> <p>The applicant's noise mitigation controls from the former licence for on-going operations, as detailed in the external management plan, are considered to be sufficient at mitigating noise emissions. These conditions will replace reference to the external noise monitoring document.</p> <p>Additionally, the former licence mentions conditions which were relevant upon commencement of operations (former 3.1 and 3.2). As the report associated with initial commencement has already been submitted, these will be removed from the licence, in favour of ones which monitor on-going operations.</p> <p>If further complaints are received, noise emissions may be reassessed.</p>	<p>The current licence has been updated to include hours of operation, condition 2.3.1.</p> <p>The current licence has been updated to reflect conditions associated with on-going operations. Former condition 3.1 and 3.2 have consequently been deleted and conditions 3.1.1-3.1.2 associated with on-going monitoring of noise have been included.</p>
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Risk Event				Consequence rating*	Likelihood rating*	Risk*	Reasoning	Regulatory controls (refer to conditions of the granted instrument)
Source/Activities	Potential emissions	Potential receptors, pathway and impact	Applicant controls					
	Sediment	Overland runoff causing impacts to onsite flora and threatened fauna from the increase of suspended solids into the environment.	Please refer to Section 4.4	Minor	Unlikely	Low	Stockpiles will be retained at the floor of the pit, below natural ground level. Sediment run-off is therefore likely to be contained within the pit.	Former licence controls relating to storm water to be included in the replacement licence (condition 1.2.6).

*Consequence ratings, likelihood ratings and risk descriptions are detailed in the Department's Guidance Statement: Risk Assessments (February 2017)

7. Consultation

The consultation period was 14 days and considered appropriate for a replacement licence.

Method	Comments received	DWER response
Application advertised on DWER website (14/02/2020)	None received	N/A
Local Government Authority advised of proposal (14/2/2020)	None received	N/A
Department of Biodiversity, Conservation and Attractions	<p>Comments received on 17/04/200 indicated a requirement for dust management to protect surrounding woodland vegetation, foraging birds and other fauna.</p> <p>Comments also indicated that TECs are dependent on groundwater within the area with comments with respect to avoiding increased abstraction of groundwater.</p>	<p>DWER notes that the applicant already has dust management strategies in place including stockpile placement at the base of the excavation (below ground level) and dust suppression using water cart.</p> <p>This application pertains to crushing and screening activities. The groundwater abstraction licence GWL174561 was issued and approved on 2/3/2012.</p> <p>Further discussion of groundwater allocation for the area are discussed in Appendix B.</p>
Community consultation, letters sent to 23 stakeholders associated with surrounding residential lots (14/2/2020)	Four submissions received from community stakeholders (DWER contacted). Concerns summarised and addressed in Appendix B.	See Appendix B.
Applicant referred draft documents (5/5/2020)	Applicant requested modifications to conditions 2.2.2, 2.3.1, 3.1.1 and 3.1.2. See Appendix C.	See Appendix C.

8. Conclusion

Based on the assessment in this decision report, the Delegated Officer has determined that the application for a replacement licence will be granted, subject to conditions commensurate with the determined controls and necessary for administration and reporting requirements.

A summary of modifications and deletions are listed below:

- administrative updates to introductory text;
- renumbering of conditions where necessary;
- removed for administrative reasons as now being considered redundant: former conditions 2.2, 2.3, 2.4.1, 2.5, 3.1, 3.2 and 4;

- removed as this activity is not a prescribed activity and therefore not regulated under Part V of the *Environmental Protection Act 1986*. This activity is already managed under the extractive industry licence: former condition 1.3.1;
- removed as they reference an external management plan: former conditions 2.4.1, 2.6, 3.1;
- added to replace conditions which reference an external management plan: current conditions 1.2.5, 2.2.2, 2.2.3, 2.3.1 and 3.1.2;
- modified to include new location of the Annual Audit Compliance Report: current condition 4.2.1;
- Schedule 1: figures updated with current aerial photography.

These conditions reflect the controls determined to be and necessary for emissions management, administration and reporting requirements.

Lauren Fox

A/MANAGER - RESOURCE INDUSTRIES

INDUSTRY REGULATION

An officer delegated by the CEO under section 20 of the EP Act

Appendix A: Key documents

Document title	Availability
Licence replacement application form and supporting documentation (December, 2019)	DWER records (A1849768)
Internal advice with respect to groundwater licence GWL 174561(1)	DWER records (A1885995)
DWER letter to applicant dated 21 March 2016 Notice of amendment of licence expiry dates Section 59(1)(k) <i>Environmental Protection Act 1986</i>	DWER records (DWERDT138249)
PMR Quarries Environmental Management Plan	DWER records (DWERVT858)
DER, July 2015. <i>Guidance Statement: Regulatory principles</i> . Department of Environment Regulation, Perth.	accessed at www.dwer.wa.gov.au
DER, October 2015. <i>Guidance Statement: Setting conditions</i> . Department of Environment Regulation, Perth.	
DER, August 2016. <i>Guidance Statement: Licence duration</i> . Department of Environment Regulation, Perth.	
DER, February 2017 <i>Guidance Statement: Risk Assessments</i> . Department of Environment Regulation, Perth.	
DWER, June 2019 <i>Guideline: Decision Making</i> Department of Water and Environmental Regulation	

Appendix B: Summary of Issues Raised in Public Submissions

Number	Submitter	Summary of Submission Points	Response
1	Water Quality 1, 2, 3, 4	<ul style="list-style-type: none"> Comments that water use associated with PMR Quarry activities are causing deterioration of groundwater quality. Comments that water use associated with PMR Quarry activities are causing an increase in salinity. 	The application for a licence replacement pertains to crushing and screening activities associated with the quarry. The groundwater licence GWL 174561 was issued and approved on 2/3/2012. The latest monitoring report indicates that the applicant has been significantly underusing their allocation, with the latest recorded metred usage at 194kL between July 2018 to June 2019. This is less than a typical allocation for domestic lawns and garden irrigation.
2	Water Allocation 1, 2, 4	<ul style="list-style-type: none"> Comments that indicate concern over water allocation and availability. The comments express concern that PMR quarry operations are reducing the water available to residents, native vegetation and Lake Clifton. 	<p>As indicated in the Peel Coastal groundwater allocation plan (2015), CSIRO modelling suggests that the main cause of salinity increase at Lake Clifton has been reduced rainfall, with impacts of groundwater abstraction being secondary (Barr 2003).</p> <p>Allocation limits for the Lake Clifton and Island Point subareas have been reduced from 4.6GL/year to 1.23 GL/year. Water use is now capped at current water use. Over half of the water used in this area is for small scale stock and domestic purposes. To manage risk associated with reduced rainfall, water licensing have reduced allocation limits in the wider Peel Coastal area by almost 50 percent for both superficial and Leederville aquifers.</p>
3	Effects on vegetation 1,3,4	<ul style="list-style-type: none"> Comments that express concern that deteriorating water quality and declining water availability are impacting vegetation. Comments expressing concerns over large trees dying in the area (submitters 3 and 4). 	<p>Residents with remaining concerns relating to water quality and use of ground water from domestic bores are encouraged to refer to material available on bore water abstraction, available from the Department of Health: https://healthywa.wa.gov.au/Articles/A_E/Bore-water.</p> <p>Where concerns remain, residents are encouraged to directly contact the City of Mandurah and/or Department of Health.</p>
4	Lake Clifton Thrombolites 1	<ul style="list-style-type: none"> Comments that express concern that the change in water quality and quantity are threatening the endangered Lake Clifton Thrombolites. 	To reduce the risk of groundwater impacting on groundwater flow into the lake, water licensing at the DWER have reduced the combined allocation limits for the Lake Clifton and Island Point subareas, to the west of the lake, from 4.6GL/year to 1.23 GL/year. Water use is now

Number	Submitter	Summary of Submission Points	Response
			capped at current water use. Over half of the water used in this area is for small scale stock and domestic purposes.
5	Noise 3	<ul style="list-style-type: none"> Comments indicate concern regarding noise of operating machinery and transport vehicles in the early hours of every morning". 	<p>See Table 7 for a risk assessment with respect to concerns regarding noise.</p> <p>If further complaints are received, noise will be re-assessed at a later date under the Noise Regulations 1997.</p>

Appendix C: Summary of applicant's comments on draft conditions

Condition	Summary of applicant comments	Department's response
2.2.2	The applicant has requested an update to reflect dust management to align with campaign based activities.	DWER has modified this condition to reflect campaign based site activities.
2.3.1	The applicant has requested an update for the condition to reflect the operating hours as listed in the planning approval 07:00 – 19:00.	DWER has modified this condition to reflect the times listed in the planning approval.
3.1.1 3.1.1(d)	The applicant has requested an update to align with campaign based activities, including removal of the requirement for annual noise monitoring and for removal of 3.1.1(d) listing that the first noise assessment be conducted by 1 September 2020.	DWER has modified this condition to reflect campaign based site activities. The requirement for a noise assessment by 1 September 2020 has been modified to an assessment being submitted no more than one month after commencement of operations.
3.1.2 (e)	Request for modification to reflect short time span for monitoring any non-compliances	DWER has modified this condition to give more time for noise monitoring associated with any investigations of non-compliance.