



Application for Licence Amendment

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

Licence Number	L9113/2018/1
Licence Holder	B. & J. Catalano Pty Ltd
ACN	008 961 975
File Number	DER2018/000081
Premises	Shenton Ridge Hard Rock Quarry Part of Lot 501 on Plan 26892. Coalfields Highway, ROELANDS WA 6226 As defined by the Premises map attached to the Revised Licence
Date of Report	4 October 2021
Decision	Revised licence granted

**A/MANAGER, RESOURCE INDUSTRIES
REGULATORY SERVICES**

an officer delegated under section 20 of the *Environmental Protection Act 1986* (WA)

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1. Decision summary

Licence L9113/2018/1 (L9113) is held by B. & J. Catalano Pty Ltd (the Licence Holder) for the Shenton Ridge Hard Rock Quarry (the Premises), located on part of Lot 501 on plan 26892 Coalfields Highway at Roelands.

This Amendment Report documents the assessment of potential risks to the environment and public health from proposed changes to the licence in the form of;

- Increased production limit from 100,000 to 350,000 tonnes per year,
- Extend the term of the Licence to match the planning approvals granted by the Shire of Harvey,
- Extend the materials stockpile area further to the north, away from the eastern boundary resulting in the stockpile areas becoming 8.93 hectares (ha), which is less than the approved area of 9.358 ha,
- Divert all contaminated stormwater from the new materials stockpile area into a new detention basin for treatment and discharge into the Green Basin prior to final discharge to the environment.

As a result of this assessment, Revised Licence L9113/2018/1 has been granted.

This Revised Licence consolidates and supersedes the existing Licence previously granted in relation to the Premises. The Revised Licence has been granted in a same format as was originally approved on 21 August 2019.

This Report details the assessment of the production limit increase, new stockpile area and new stormwater infrastructure plus the existing dust and noise condition. The licence format will remain the same and will be converted into the new DWER licence format at next opportunity or new licence review.

2. Scope of assessment

2.1 Regulatory framework

In completing the assessment documented in this Amendment Report, the department has considered and given due regard to its Regulatory Framework and relevant policy documents which are available at <https://dwer.wa.gov.au/regulatory-documents>.

2.2 Application summary

On 4 December 2020, the Licence Holder submitted a Licence (L9113) amendment application to the department under section 59 and 59B of the *Environmental Protection Act 1986* (EP Act).

This amendment report assesses the matters requested by the Licence Holder and are discussed and addressed below in sections 2.2.1 to 2.2.4.

2.2.1 Increased production from 100,000 to 350,000 tonnes per year

An increase in production (screening etc. of material) from 100,000 tonnes per year to 350,000 tonnes per year is considered consistent with the initially approved design capacity of the processing infrastructure on the Premises. In 2019 when L9113 was first assessed, the design capacity for the processing infrastructure was determined to be 1,760,000 tonnes per year if operated with an average throughput rate of 200 tonnes per hour, 24 hours per day for 365 days each year. The Licence Holder has confirmed no changes to the initial design capacity of the processing infrastructure, however it is acknowledged the existing plant has the capability to

operate at 400 tonnes per hour.

The statutory Planning Approval from the Shire of Harvey for the Premises limits crushing and screening (processing of material) operations to between the hours of 7am to 5pm Monday to Saturday.

The initial approved throughputs of the processing infrastructure based on the Planning Approval limited the hours of operations and accounted for an average production rate of 200 tonnes per hour, which gives an allowable throughput of 624,000 tonnes per year. Therefore, a production increase for L9113 to 350,000 tonnes per year is 56% of the approved throughput authorised under Planning Approval.

The Delegated Officer notes that the proposed throughput increase is not the result of any increase in infrastructure design capacity, but rather, as a result of operating for longer periods of time as authorised by the existing Planning Approval.

2.2.2 Extend licence term to align with Planning Approval

On 31 March 2017, the Development Approval for the material processing and quarry operations was granted for a period of fifteen years, which would commence once the Shire of Harvey issued the Extractive Industry Licence (EIL). The Shire of Harvey granted the EIL on 21 September 2018 for 15 years initially with a further five-year period once the Licence Holder demonstrates compliance with the Development Approval.

In consultation with the Shire, the department has been able to confirm that compliance with the Development Approval has been demonstrated by the Licence Holder. The Development Approval and EIL is regulated by the Shire of Harvey.

The Licence will be amended to expire on 21 September 2033.

2.2.3 Extend materials stockpile to the north of existing process area

The Licence Holder has proposed to extend the material stockpile to the north of the existing materials processing area. This will expand the boundary of the prescribed premises. The existing processing and stockpiling area is approximately 3.61 ha. The new material stockpile to the north will increase the stockpile area by 5.78 ha. Therefore, the existing processing and new material stockpile areas will total 9.39 ha. Figure 1 indicates the existing processing and new stockpile areas as the highlighted blue, orange, and red areas.

A 3 metre bund will be constructed along the eastern side of the northern stockpile area to minimise visual and noise impacts.

The material processing infrastructure, ablution facility, crib room and fuel tanker will remain in their current positions and will be confirmed in the amended licence Schedule 1 plan indicating the Infrastructure Location within the Premises.

The Shire of Harvey confirmed the increased material stockpile areas does not trigger the requirement to amend the existing Development Approval but will require the final approved plan to be updated.

2.2.4 Diversion of stormwater from north stockpile area to the Green Dam

A new stormwater catchment created within the northern stockpile area (depicted as the blue area in Figure 1) requires the construction of a new detention basin with a minimum capacity of 780 cubic metres (m³). All stormwater falling within the new northern stockpile area will be directed into the new retention basin (N Basin in Figure 1) and will then discharge via an overflow diversion drain into the SE Basin and eventually into the Green Dam prior to discharge. No new surface water monitoring sites are required as the Green Dam is the management control for water quality protection and the primary water sampling location will remain as conditioned under the Existing Licence L9113.

The new N Basin will be sized to contain a minimum of 2 hours run-off resulting from a 10 year Average Recurrence Interval (ARI) rainfall event from the 1.99 ha area. This equates to 40 mm of rainfall. The capacity of the N Basin will be 800 m³ and will be surveyed to confirm its constructed capacity. The combined capacity of the SE Basin and N Basin must be greater than 2,320 m³ to achieve acceptable retention times to remove sediment from sediment laden stormwater flows. The Licence Holder has confirmed the combined storage capacity of the SE Basin and the N Basin will be 13,800 m³.

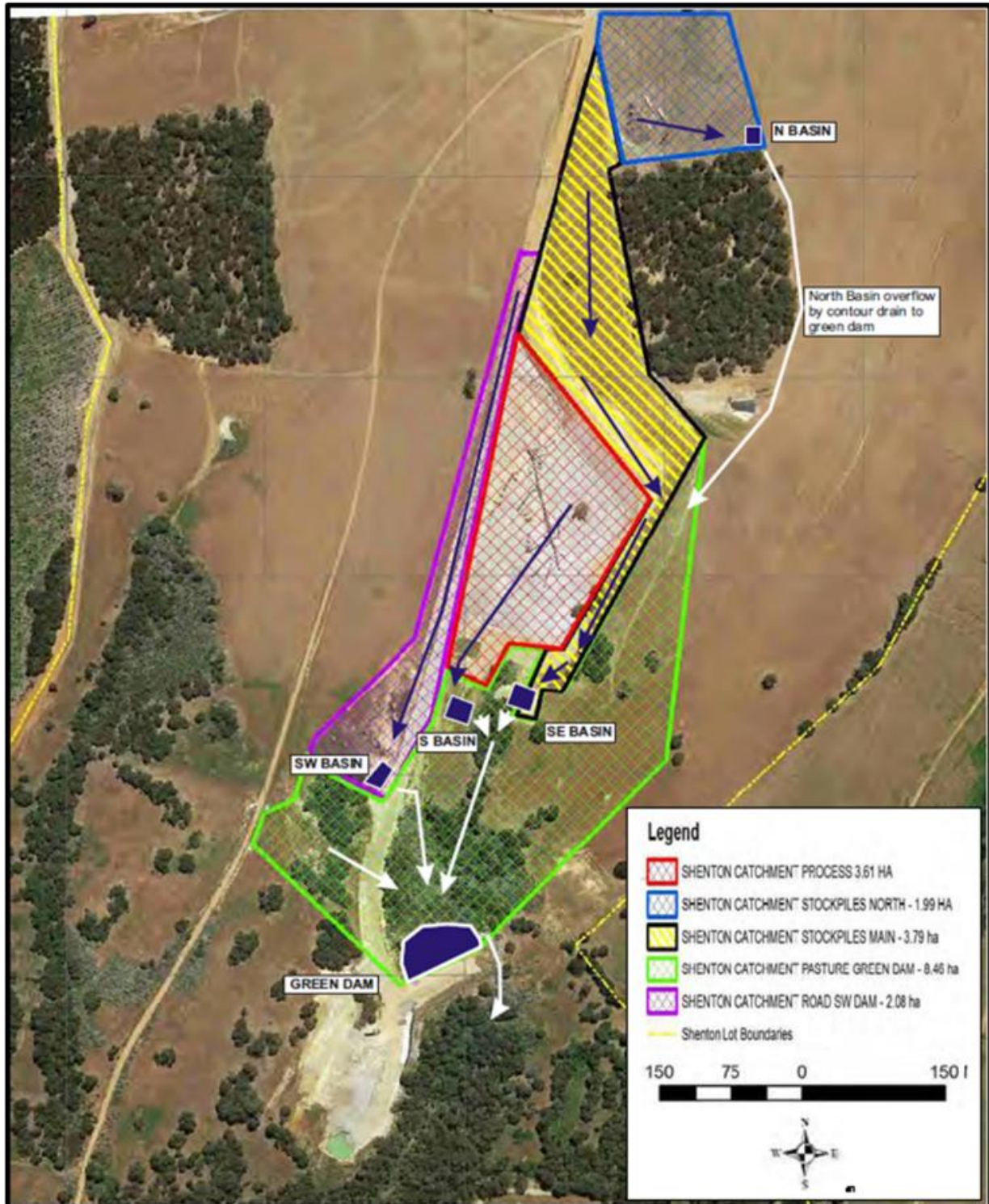


Figure 1: Stormwater Catchments proposed by the amendment

2.3 Consolidation of Licence

As part of this amendment package the department has consolidated the licence by incorporating changes as summarised in Table 1.

Table 1: Licences consolidated in this amendment

Instrument	Issued	Summary of approval
W5828/2015/1	06/02/2018	New Works Approval issued.
L9113/2018/1	21/08/2019	New Licence issued following construction of the premises and establishment of crushing and screening plant.
L9113/2018/1	04/10/2021	Licence amendment to authorise construction and operation of northern material stockpile area, construction of detention basin and 3 m high north eastern bund.

The obligations of the Licence Holder have not changed. The department has undertaken additional risk assessment of the Premises related to noise, dust and contaminated stormwater (sediment) emissions as a result of extending the material storage areas further north of the existing processing area footprint.

The full consolidation of licence conditions as they relate to the revised licence are detailed in Section 9.1.

3. Exclusions to the Premises

The material extraction area (hard rock quarry) falls outside the defined prescribed premises boundary in Schedule 1 of the Licence. The activity of quarrying on private land is regulated by the Shire of Harvey and requires approval under the *Planning and Development Act 2005*. An Extractive Industry Licence (EIL) from the Shire of Harvey was issued for the quarry on 21 September 2018 (as detailed in Table 3).

Emissions from the quarry pit will not be assessed or regulated by this licence. However, the *Environmental Protection (Unauthorised Discharge) Regulations 2004* prohibit the discharge of specific substances including liquids with pH less than 4 or more than 10, petrol, diesel, other hydrocarbons, sediment, engine coolant etc. (as listed in Schedule 1 of the Regulations). The quarrying and associated activities must also comply with the *Environmental Protection (Noise) Regulations 1997*.

4. Legislative context

Table 2 summarises other approvals relevant to this assessment.

Table 2: Relevant approvals and tenure

Legislation	Number	Approval
<i>Planning and Development Act 2005</i>	DR 17/2016	A decision to grant development approval under the Greater Bunbury Region Scheme and the Shire of Harvey District Planning Scheme No 1 was made by State Administrative Tribunal (SAT) on 31 March 2017. The approval is valid for a period of fifteen years from the date of commencement of the EIL required by Condition 1a of the Development Approval.
<i>Planning and Development Act 2005 & Shire of Harvey Extractive</i>	13/29601 & 14/11545	A decision to grant the Extractive Industry Licence (EIL) was made on 21 September 2018. The approval is valid for a period of 5 years from the date of commence of the licence referred to in condition 1a of the Development Approval (Initial Period); and a further period of five years

Legislation	Number	Approval
<i>Industries Local Law.</i>		following satisfactory compliance with the conditions of planning consent.
<i>Department of the Environment and Energy</i>	EPBC 2017/8085	Approval granted on 5 December 2019 for section 18 and 18A controlling actions whilst clearing vegetation and operating a hard rock quarry. The approval is current until 30 November 2069.
<i>Department of Water and Environmental Regulation</i>	CPS 7943/1	Approval granted on 3 December 2018 to mechanically clear 1.6 Ha of native vegetation within the hard rock quarry and processing area. The permit will expire on 3 January 2034.

4.1 Part IV of the EP Act

The hard rock quarry proposal was referred to the EPA that determined the potential impacts are not so significant as to warrant formal assessment under Part IV of the EP Act. However, public advice was given in respect to impacts on flora, inland waters and amenity via notice under section 39A(3) (CMS14037, March 2015).

5. Noise assessment and monitoring

5.1 Cumulative noise impacts

Noise modelling was completed in August 2016 for the Premises operations at the materials processing area and the quarry pit as part of the original works approval and licence application. The noise modelling did not include both the hard rock quarry operations and the gravel extraction operations occurring at the same time because the cumulative impacts will only occur for a limited period when the gravel operation occurs. In addition, there is considerable separation between both operations and sensitive receptors, so cumulative impacts from noise emissions are unlikely to occur.

Based on the predicted worst-case scenarios for modelling undertaken for both operations, the maximum expected cumulative noise level at the nearest residence to the west located at Lot 175 Coalfields Road, were modelled to comply with the assigned noise level of 45 dB(A) specified in the *Environmental Protection (Noise Regulations) 1997* (Noise Regulations).

As required by Licence conditions, the Licence Holder measured noise emissions once normal operations at the processing area had commenced and provided an acoustic report and proposed control measures to ensure compliance with the Noise Regulations.

5.2 Modelling of Noise emissions

On 26 July 2018, further information was provided including a review of the noise bunds constructed under Works Approval (W5828/2015/1) and a revised Noise Management Plan dated May 2018. In October 2018, DWER completed a review and reassessment of the information provided and found that the material processing operations at the Premises are likely to comply with the Noise Regulations.

The acoustic assessment for the proposed residence located on Lot 500 Coalfields Road (Landform August 2016 and 26 July 2018) was not considered in this assessment as the residence on Lot 500 has not been approved nor constructed.

The modelling undertaken considered the following scenarios:

- Assessment of day period (0700 – 1900 hours Monday to Saturday) noise levels from operation of the quarry pit and material processing plant with all plant operating at the same time; and
- Assessment of night period operations (2200 – 0700 hours Monday to Saturday) noise

levels from loading and movement of trucks only.

The predicted noise levels were provided for the following residential premises as depicted in Figure 2:

- South (Lot 28 Collie River);
- South-west (Lot 29 Seven Hills);
- West (Lot 175 Coalfields Road); and
- North-east (Lot 23 Coalfields Road).

The predicted noise levels for the residences located to the south, south-west, west and north-east are depicted in Table 3.

Table 3: Assessment of noise levels (day and night) from operation of the quarry pit and processing plant

Residence/Premises	Distance from processing area (m)	Day/night period	Maximum expected noise level (dB(A))	Maximum expected noise level including 5db for tonality (dB(A))	Applicable LA10 Assigned Noise Level (dB(A))	Expected compliance with the Noise Regulations
South (Lot 28 Collie River)	3430	Day	34	39	45	Complies
		Night	23	28	35	Complies
South-west (Lot 29 Seven Hills)	3200	Day	19	24	45	Complies
		Night	6	11	35	Complies
West (Lot 175 Coalfields Road)	2600	Day	38	43	45	Complies
		Night	28	33	35	Complies
Eastern boundary of Lot 501	50	All hours	50	55	60	Complies
North-east (Lot 23 Coalfields Road)	2400	Day	25	30	45	Complies

5.3 Noise monitoring conducted November 2019

Noise monitoring was conducted at the Premises on 25 November 2019. Noise levels associated with the Premises operations were measured at the three prescribed points N1, N2 and N3 as depicted in Figure 2. Noise levels were recorded with a Larson Davis 831 Sound Level Meter. A field calibration check was carried out both before and after the measurements with a Bruel & Kjaer 4231 Acoustic Calibrator. All equipment was NATA calibrated and certified.

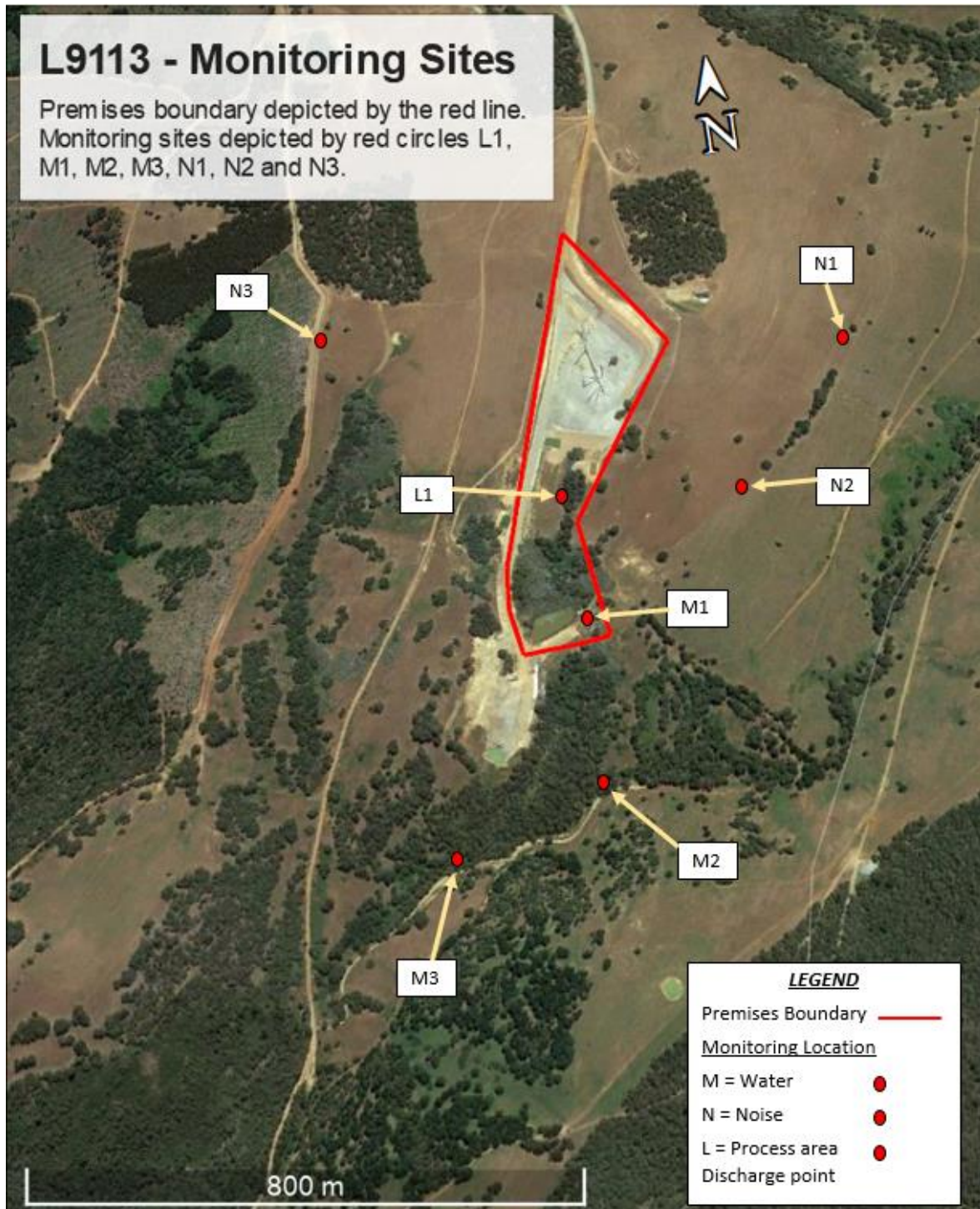


Figure 2: Map depicting the noise monitoring locations. Noise monitoring conducted at points N1, N2 and N3.

The objectives of the 2019 noise monitoring were to:

- Confirm predicted noise levels of operations with regards to the noise modelling report submitted previously;
- Assess the noise levels received at the neighbouring noise sensitive premises, for compliance with the Noise Regulations; and
- Demonstrate compliance with relevant acoustic criteria within operating Licence L9113/2018/1.

The results of these measurements and comparison to the previously modelled noise levels are listed in Table 4 below.

Table 4: Measured Noise Levels

Location	Measured Noise Level, L _{A10} dB	Modelled Noise Level L _{A10} dB
N1	34	34
N2	38	38
N3	45	50

The measured noise emissions at N1 and N2 were determined not to be tonal, however the noise emissions at N3 would be considered tonal. As a result, the noise level emissions at location N3 attract a +5 dB(A) adjustment. Hence, the adjustment to the measured noise levels as listed in Table 5 are appropriate.

Table 5: Noise adjusted for tonal characteristics

Location	Adjusted Noise Level	Where the noise emission contains		Assessable Noise Level, L _{A510} , dB
		Impulsiveness (dB)	Tonality (dB)	
N1	34	-	-	34
N2	38	-	-	38
N3	45	-	+5	50

Based on the 2019 measured noise levels of 34 dB(A), 36 dB(A) and 45 dB(A) at measurement points N1, N2 and N3 respectively whilst allowing for tonal characteristics, the measured noise levels were equal to or lower than that of the predictive modelling in the previous 2016 Herring Storer Acoustics report, thus compliance was demonstrated at all existing residences.

Noise emissions for the crushing and screening activities conducted at the Premises have therefore been found to previously comply with the requirements of *Environmental Protection (Noise) Regulations 1997*.

6. Source-pathways and receptors

6.1 Emissions and controls

The key emissions and associated actual or likely pathway during premises operation which have been considered in this Amendment Report are detailed in Table 6 below. Table 6 also details the proposed control measures the Licence Holder has proposed to assist in controlling these emissions, where necessary.

Table 6: Licence Holder controls

Emission	Sources	Potential pathways	Proposed controls
Noise	Operation of process plant and machinery	Air	<p>Approved Noise Management Plan.</p> <p>Eastern Noise bund will be constructed because northern material stockpile extension is about 10 metres higher in the landscape but the setback from the eastern neighbour's boundary will remain over 200 metres away.</p> <p>Eastern and western boundary noise monitoring will be completed to measure noise emissions incorporating the material stockpile extending further north.</p>
Dust	Operation of process plant, machinery and material stockpile lift-off.	Air	<p>Approved Management Plan</p> <p>Dust suppression on stockpiles using water sprinklers</p> <p>Reducing operation in adverse weather conditions</p> <p>Haul Road surfacing to reduce vehicle dust</p> <p>Restrictive speed limits within quarry and processing area.</p> <p>Dust suppression using water sprinklers on transfer hoppers and conveyors when operating crushing and screening plant.</p>
Contaminated stormwater discharge	Hydrocarbon and sediments	Contaminating soil and water discharge to nearby stream	<p>Approved Management Plan.</p> <p>Double-skinned, mobile and skid-mounted fuel tanker of 20 m³ maximum capacity.</p> <p>Tanker located within a bunded and lined enclosure.</p> <p>New northern basin detention pond constructed to minimum of 780 m³ to address sediment retention.</p> <p>Spill kit containing absorbent granules to be located in designated area.</p> <p>Commitment to notify DWER and the downstream Woolkabunning Kiaka Community and the Shire of Harvey of any hydrocarbon spill greater than 5 litres.</p>

6.2 Receptors

In accordance with the *Guidance Statement: Risk Assessment* (DER 2017), the Delegated Officer has excluded employees, visitors and contractors of the Licence Holder's from its assessment. Protection of these parties often involves different exposure risks and prevention strategies, and is provided for under other state legislation.

The distances to residential receptors are detailed in Table 7 and depicted in Figure 3.

Table 7: Receptors and distance from activity boundary

Residential receptors	Distance from Prescribed Activity
R1 – House located south (Lot 28 Collie River)	3,430 m from the processing area
R2 – House located north-east (Lot 23 Coalfields Road)	2,400 m from the processing area
R3 – House located west (Lot 175 Coalfields Road)	2,600 m from the processing area
R4 – Houses located south-west (Lot 29 Seven Hills)	3,200 m from the processing area

6.3 Specified ecosystems

Specified ecosystems are areas of high conservation value and special significance that may be impacted as a result of activities or emissions and discharges from the Premises. The distances to specified ecosystems are shown in Table 8. Table 8 also identifies the distances to other relevant ecosystem values which do not fit the definition of a specified ecosystem.

Table 8: Specified ecosystems¹

Specified ecosystems	Distance from Prescribed Activity
Geomorphic Wetlands	500 m north (upstream)
Parks and Wildlife Managed Lands and Waters	Wellington National Park - 900 m to the east
Threatened/Priority Flora	None within a 5 km radius
Threatened/Priority Fauna	Cockatoo nesting habitat trees beside hard rock quarry pit and about 250m south from the material stockpiles processing area.

Note 1: Identified through a search of current publicly available geographical information system datasets in accordance with *Guidance Statement: Environmental Siting*.

6.4 Groundwater and water sources

The distances to groundwater and water sources are shown in Table 9.

Table 9: Groundwater and water sources

Groundwater and water sources	Distance from Premises	Environmental value
Collie River Irrigation District	Site within the irrigation district	Proclaimed under the <i>Rights in Water and Irrigation Act 1914</i> (RIWI Act).
Minor waterbody	On-site immediately west of the processing area	Drainage line that flows to a “naturalised dam” (existing man-made dam). The naturalised dam overflows to a minor perennial watercourse. The minor perennial watercourse eventually feeds into the River Collie approximately 5 km downstream.
Groundwater	Based on information from nearby bores, the depth to groundwater is	The underlying groundwater is fresh.

	<p>expected to be at least 9 metres below ground level (mbgl). 2 bores located within the vicinity of the premises (1.6 km to the north-west and 4 km to west) have standing water levels of 9 mbgl and 18 mbgl respectively.</p>	
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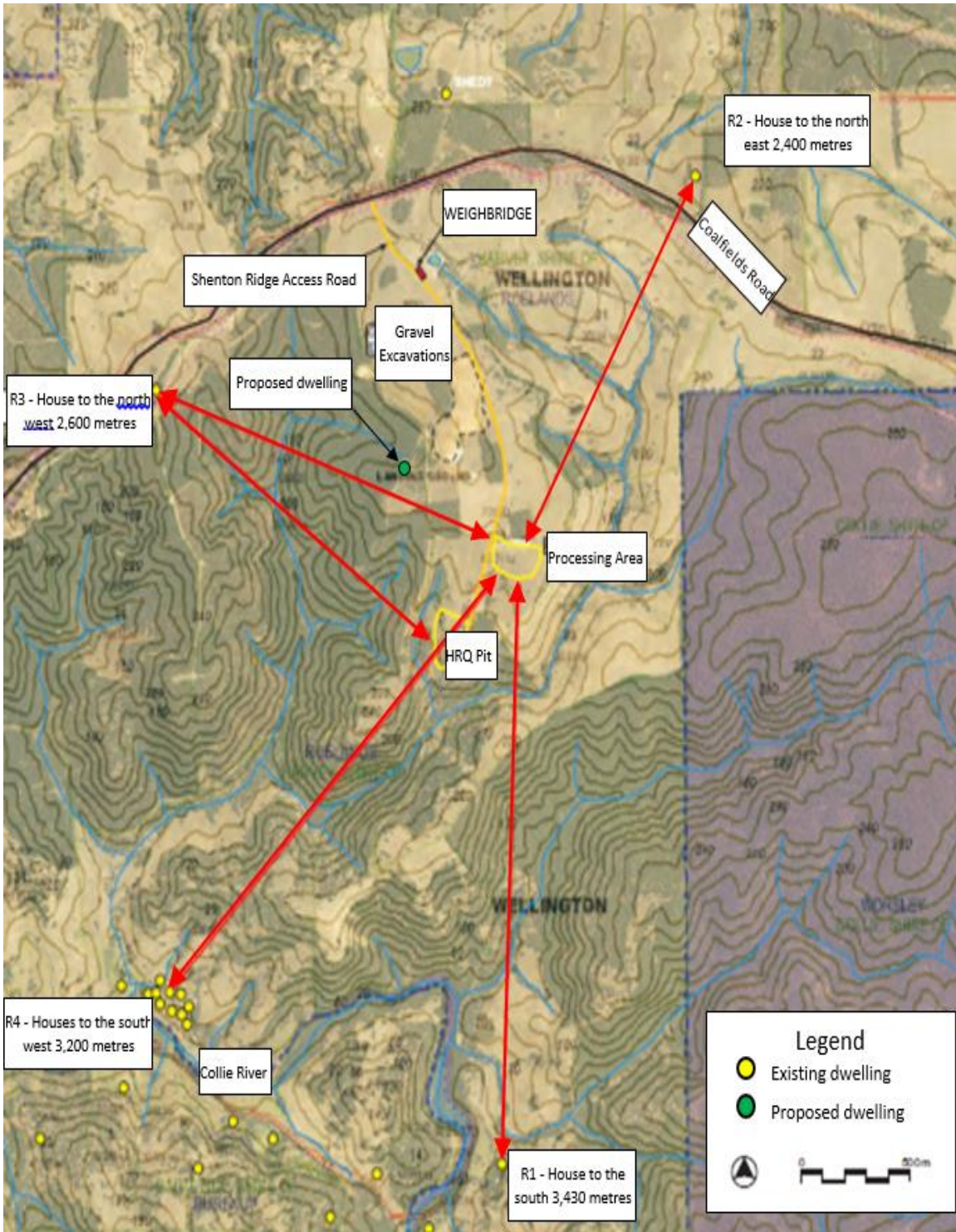


Figure 3: Plan depicting the locations of sensitive residences to the south, south-west, west and north-east

7. Risk ratings

Risk ratings have been assessed in accordance with the *Guidance Statement: Risk Assessments* (DER 2017) for those emission sources which are proposed to change and takes into account potential source-pathway and receptor linkages as identified in Section 6. Where linkages are in-complete they have not been considered further in the risk assessment.

Where the Licence Holder has proposed mitigation measures/controls (as detailed in Section 6), these have been considered when determining the final risk rating. Where the Delegated Officer considers the Licence Holder's proposed controls to be critical to maintaining an acceptable level of risk, these will be incorporated into the licence as regulatory controls.

Additional regulatory controls may be imposed where the Licence Holder's controls are not deemed sufficient. Where this is the case the need for additional controls will be documented and justified in Table 10.

The amended Licence L9113/2018/1 that accompanies this Amendment Report authorises emissions associated with the operation of the Premises. The conditions in the Amended Licence have been determined in accordance with *Guidance Statement: Setting Conditions* (DER 2015).

Table 10: Risk assessment of potential emissions and discharges from the Premises during operations

Risk Event					Risk rating ¹ C = consequence L = likelihood	Licence Holder's controls sufficient?	Conditions ² of licence	Justification for additional regulatory controls
Source/Activities	Potential emission	Potential pathways and impact	Receptors	Licence Holder's controls				
Operation								
<p>Operation of crushing and screening plant.</p> <p>Machinery operation within the process area and material stockpiles.</p> <p>Use and storage of lubricants and hydrocarbons.</p>	Noise	Air / windborne pathway causing impacts to health and amenity	<p>Sensitive receptors are greater than 2.4km from the crushing and screening plant located within the processing area.</p>	<p>Noise Monitoring conducted in November 2019 demonstrated compliance with Acoustics modelling and the Noise Regulations. See Section 5.3</p> <p>New material stockpile area is elevated at least 10 to 15 metres higher in the landscape.</p> <p>A 3m high noise bund to be constructed on the eastern side of new material stockpile area located to the north of the existing processing area.</p> <p>Increased production will occur by operating plant for longer periods of time without increasing plants</p>	<p>Operations:</p> <p>C = <i>Minor</i></p> <p>L = <i>Rare</i></p> <p>Low Risk</p>	Yes	<p>Amend Condition 2 Table 3 and Schedule 2 Table 12 to include new 3m high noise bund at northern stockpile area in the infrastructure table.</p> <p>Amend Condition 3 and Schedule 2 Table 11 limiting production to 350,000 tonnes per annual period.</p> <p>Update / addition of Conditions 9 to 12 to require noise monitoring and to include another noise sampling location (N4) as per Schedule 3.</p>	<p>New infrastructure of the northern material stockpile area and 3-metre-high bund needs to be described within the premises.</p> <p>Production limit and licence tenure amended (refer section 2.2.1 and 2.2.2).</p> <p>Another round of noise monitoring is required to confirm continued compliance with the Noise Regulations while operating at new northern stockpile area and ensure the noise bund is adequate. Include new monitoring site N4.</p> <p>Monitoring objectives and reporting remains at a time when full production</p>

Risk Event					Risk rating ¹ C = consequence L = likelihood	Licence Holder's controls sufficient?	Conditions ² of licence	Justification for additional regulatory controls
Source/Activities	Potential emission	Potential pathways and impact	Receptors	Licence Holder's controls				
				operational production rate. Approved Management Plan			<u>New conditions 25, 26 and 27 requiring compliance report confirming construction of 3m high noise bund.</u>	is being achieved. Standards conditions required to confirm construction of noise bund has been completed and reported to DWER.
Operation of crushing and screening plant. Machinery operation within the process area and material stockpiles. Unfavorable (high wind) weather conditions.	Dust	Air / windborne pathway causing impacts to health and amenity	Sensitive receptors are greater than 2.4km from the crushing and screening plant located within the processing area.	Approved Management Plan Sprinkler system on cracker dust and metal dust stockpiles.	Normal operation: C = Moderate L = Possible Medium Risk	No	<u>New condition 7 requiring fixed reticulated sprinkler system to be maintained and operated on the cracker dust and metal dust stockpiles.</u> <u>New condition 8 prevention of visible dust crossing the boundary of the premises.</u>	Sprinkler system will ensure dust can be controlled should dust lift off from stockpiles occur.
Operation of the crushing and screening plant. Machinery operations within processing area and new materials stockpile area. Seasonal stormwater event.	Contaminated stormwater discharge	Soil and water Overflow of detention basins and stormwater run-off	Surface water systems and aquatic ecosystems. Downstream water supply Soil and vegetation adjacent to areas of spill or breach	Approved Management Plan Amendment to Water Management Plan to include the northern material stockpile area and detention basins. Retention of 2 hour 1 in 10 year stormwater event prior to discharge to local waterway.	Normal operation: C = Moderate L = Unlikely Medium Risk	Yes	Amend Condition 2 Table 3 and Schedule 2 Table 12 to include new northern Basin construction details including diversion drains and outlet specifications. <u>New conditions 25, 26 and for compliance report confirming construction of northern material stockpile area, water diversion drains and northern detention basin.</u>	The total area of the existing and proposed processing area is 9.39 ha or less than 2% of the water catchment area. North basin design capacity meets DWER standards to retain sediment laden stormwater. Standard conditions required to confirm construction of northern material stockpile area, northern detention basin and diversion drain has been completed and reported to DWER.

Note 1: Consequence ratings, likelihood ratings and risk descriptions are detailed in the *Guidance Statement: Risk Assessments* (DER 2017).

Note 2: Proposed Licence Holder's controls are depicted by standard text. **Bold and underline text** depicts additional regulatory controls imposed by department.

8. Consultation

Table 11 provides a summary of the consultation undertaken by the department.

Table 11: Consultation

Consultation method	Comments received	Department response
Four neighbouring stakeholders were notified of the application on 6 January 2021.	<p>Submission period extended till 16 March 2021 when 3 submissions were received.</p> <p>The submissions were summarised and provided to the Licence Holder. A response to these submissions by the Licence holder was received on 28 April 2021.</p> <p>The DWER response to the stakeholder submissions is available from Appendix 1.</p>	Noted the comments from the 3 interested parties and responded to these concerns in Appendix 1.
Shire of Harvey was notified of the application on 6 January 2021.	<p>Shire of Harvey replied by email on 29 March 2021 stating:</p> <ul style="list-style-type: none"> • DWER licence is the only approval limiting production at the Premises; • The shire does not require an amend to the Development Approval or Extractive Industry Licence; • Submissions raised previously at the SAT process cannot be revisited by shire; and • Following DWER's decision the approved site plan may require amendment by the Shire. 	Noted.
Licence Holder was provided with draft amendment on 9 August 2021.	<p>Comments received from Licence Holder on 30 September 2021 including:</p> <ul style="list-style-type: none"> • Clarification of Licence Holder's Registered Business address; • Confirmation of stormwater basin storage capacities; and • Confirmation of existing dwellings located in proximity to the premises. 	Clarifications noted and incorporated into Amendment Report.

9. Conclusion

Based on the assessment in this Amendment Report, the Delegated Officer has determined that a Revised Licence will be granted, subject to conditions commensurate with the determined controls and necessary for administration and reporting requirements.

9.1 Summary of amendments

Table 12 provides a summary of the proposed amendments and will act as record of implemented changes. All proposed changes have been incorporated into the Revised Licence as part of the amendment process.

Table 12: Summary of licence amendments

Condition no.	Proposed amendment and justification (if required)
Term of the Licence	Licence expiry amended from 31 December 2023 to expire on 21 September 2033.
2 Table 3	Amend table 3 to include a visual and noise bund of 3 metres high located on the eastern boundary of the new northern material stockpile area.
2 Table 3	Amended Table 3 to include N Basin design capacity and diversion drain to direct discharge back to the green dam via the SE basin.
3	Amended throughput tonnage to 350,000 tonnes per annual period.
7	New condition for control of dust lift-off from the cracker/metal dust stockpile using fixed reticulated sprinkler system.
8	New condition to ensure visible dust does not cross the boundary of Lot 51.
9	Amend condition 9 to include new noise monitoring location N4 as depicted in Schedule 3.
10	Amend to ensure monitoring of noise occurs within 6 of the licence amendment approval.
11	Amend to require noise monitoring assessment within 1 month of completion.
16, 19, 21 & 23 Table 9	Adjusted number within condition to reference the correct renumbered conditions
25	New conditions within 30 days of completing construction for audit report of infrastructure constructed be completed.
26	New condition describing the information required by the audit report in condition 25.
Schedule 1 premise map	New premise boundary map.
Schedule 1 boundary coordinates	New table of coordinates prepared as related to premise map boundary.
Schedule 1 – infrastructure plan	New plan including new infrastructure.
Schedule 2 – Table 10	Change approved premise production or design capacity column to 350,000 tonnes per annual period.
Schedule 2 – Table 11	Update the table to include, N Basin capacity, visual and noise bund and northern material stockpile area.
Schedule 3 – monitoring location	New plan to include N4 monitoring location
General changes	Revised licence condition's numbers and removed any redundant conditions and realigned condition numbers for numerical consistency; and corrected clerical mistakes and unintentional errors.

References

1. Department of Environment Regulation (DER) 2016, *Guidance Statement: Environmental Siting*, Perth, Western Australia.
2. DER 2017, *Guidance Statement: Risk Assessments*, Perth, Western Australia.
3. DER 2015, *Guidance Statement: Setting Conditions*, Perth, Western Australia.
4. Application and supporting documents, B. & J. Catalano Pty Ltd, dated 4 December 2020 (DWER Reference DWERDT387122).
5. L9113/2018/1 Licence for B. & J. Catalano Pty Ltd, dated 21 August 2019.
6. L9113/2018/1 Decision Report for B. & J. Catalano Pty Ltd, dated 21 August 2019.
7. L9113 Catalano Hard Rock IR-L08 Request for further information Schedule 1 & 2 dated 28 April 2021 (DWER Reference A2000311).
8. Amendment to Works Approval – Shire of Harvey – dated 31 March 2021 (DWER Reference A2022607).

Appendix 1: Summary of submissions by stakeholders

	Emission or Discharge	Concerns raised by interested parties	DWER response
1	Production increase to 350,000 tonnes per annual period & increased licence tenure.	<p>The parties raised concerns about the Licence Holder increasing annual production from 100,000 to 350,000 tonnes per annum and extending the licence duration and contradicting statutory planning approvals such as the Development Approval, Extractive Industry Licence and State Administrative Tribunal determination.</p> <p>Concerns also expressed about compliance and auditing of these approvals.</p> <p>Concerns raised about Licence Holder winding back production should impacts occur to the community.</p>	<p>DWER has assessed the application to increase production and licence tenure having had regard for other statutory approval production throughputs or tenures already approved by other decision-making authorities. Section 2.2.1 of this report outlines considerations of production rate and Section 2.2.2 outlines the licence tenure.</p> <p>Compliance with other statutory approvals is the responsibility of the Licence Holder who must frequently report to those regulators. The premises will also be subject to future inspections from DWER's Compliance and Enforcement function in addition to other regulatory authorities.</p> <p>Where necessary, DWER may amend, revoke or suspend a licence at any time should an emission impact the environment or public health or compliance not be achieved as required by DWER licence conditions.</p>
2	Contamination of surface waters	Concerns were raised by dam owners that water quality will become contaminated with approximately three times increase in material stockpile area.	DWER notes that the processing and material storage area of the premises (less than 10ha) represents less than 2% of the water catchment area that reports to streams and dams in the area. Section 7 of the risk assessment considers potential impacts to surface water under "Contaminated stormwater discharge". The risk assessment determined that, with the Licence Holders' controls, there is a medium risk of any impacts occurring and existing conditions of the licence are adequate to continue to mitigate this risk.
3	Reduced stream flow	Concerns raised that increased production would require more water to control dust from the operations, which will impact on stream users.	<p>As with row 2 above.</p> <p>DWER calculated there is sufficient water during an average rainfall season such there would be minimal impact on water availability to downstream users.</p>

	Emission or Discharge	Concerns raised by interested parties	DWER response
4	Operation in the quarry	Concerns were raised about the approval of the hard rock and quarrying operations including blasting operations. Concern was raised about the prevention of fly rock and protecting neighbors' safety and wellbeing.	The operations of the hard rock quarry are regulated by the Local Government Authority in accordance with the Development Approval and Extractive Industry Licence and are not matters regulated under Part V of the <i>Environment Protection Act 1986</i> .
5	Fugitive Dust and Noise emissions	Concerns raised that the increase in production will result in increased noise and the increased stockpile heights and three times increase in stockpile storage area will cause more dust lift off and impacts to the health and amenity of the community.	DWER has had regard for these submissions and considered the risk of dust and noise emissions in accordance with its Regulatory Frameworks. (Section 7). This has resulted in the addition of two dust management control conditions 7 and 8 in the amended licence. The first requires the maintenance and operation of sprinkler systems on the cracker dust and metal dust stockpiles and the second requires the Licence Holder to ensure no visible from the processing area and stockpiles discharges beyond the property boundaries. As the new material stockpile is up to 15 metres higher in the landscape, noise management conditions 9, 10, 11 and 12 have been added to require an extra round of noise monitoring at full production outputs. The amended licence also requires the construction of a 3 metre high noise bund on the eastern side of the new material stockpile area (Condition 2).
6	Management Plans	Concerns were raised about the accuracy of all the management plans approved by all the statutory approvals and if they provided sufficient protection for the community.	DWER has had regard for the Licence Holder's management plans when reviewing the controls that will be implemented during crushing and screening operations as well as management of the material stockpiles including stormwater controls. As the management plans are required as conditions of other statutory approvals (e.g. Development Approval and Extractive Industry Licence) they are approved by the Local Government Authority. The plans are not required or approved by the DWER licence but are considered within the Regulatory Framework when management controls are assessed, to inform the Risk Assessment as described in Section 5 of this report. Where DWER considers the Licence Holder's proposed controls to be critical to maintaining an acceptable level of risk, these have been incorporated into the licence as regulatory controls in accordance

	Emission or Discharge	Concerns raised by interested parties	DWER response
			with DWER <i>Guidance Statement: Risk Assessments</i> (February 2017).
7	Expense to supply of potable water for downstream users	Concerns raised about decrease in potable water and expense of treating or carting potable water by self-supply users.	<p>The supply and expense of supply of potable water is beyond the scope of an assessment under Part V of the <i>Environment Protection Act 1986</i>.</p> <p>Section 7 of this report considered impacts from potentially contaminated stormwater generated by crushing and screening activities onsite and determined there is a medium risk of impacts occurring from this emission. In accordance with DWER <i>Guidance Statement: Risk Assessments</i> (February 2017) this risk rating is acceptable and therefore subject to regulatory controls.</p> <p>Condition 2 and Schedule 3 outline required controls for new stormwater infrastructure to ensure design meets DWER standards to retain sediment laden stormwater and allow for sufficient retention to achieve adequate treatment of sediment. These conditions are required to ensure any potentially contaminated stormwater is retained and does not impact downstream users.</p> <p>The Delegated Officer notes the total area of the existing and proposed processing area is 9.39 ha or less than 2% of the water catchment area and that the downstream user is located more than 3km downstream from the processing area.</p>
8	Monitoring surface water	Concerns raised about how the contaminated water will impact surrounding streams and wetlands and who will monitor and manage these operations.	<p>The Licence Holder is required to conduct monitoring of surface water and report the results in accordance with the conditions of the licence.</p> <p>Section 7 of this report determined there is a medium risk of contamination of surface water bodies during operation of the premises, and monitoring conditions have been applied to the licence to detect any impacts to the downstream waterways caused by the operation.</p> <p>Existing licence conditions 13 to 21 outline stormwater management and monitoring conditions that are applicable to ensure negligible impacts to downstream users.</p>

	Emission or Discharge	Concerns raised by interested parties	DWER response
9	Impacts to neighbors land	Concerned raised that state government has placed this hard rock quarry where separation buffers prevent subdivision or land use changes. It is felt that the licence holder should be willing to enter into purchase or compensation negotiations due to the separation buffers.	The compensation or negotiations to purchase lands is beyond the scope of this assessment under Part V of the <i>Environmental Protection Act 1986</i> .
10	Heritage and cultural values	Concerns were raised that the Collie River and its tributaries are registered as sites of heritage and cultural significance and would need to be thoroughly assessed.	Section 7 of this assessment report has considered the potential environmental impacts to nearby surface water bodies associated with the application to amend licence L9113/2018/1. DWER is cognizant of the heritage and cultural values of the Collie River, however, the separation distance of the Premises material processing and stockpile areas and the water storage / treatment / monitoring requirements conditioned by the licence reduces the likelihood of potential environmental impacts on registered sites. Heritage and Cultural values are beyond the scope of the risk assessment under Part V of the <i>Environment Protection Act 1986</i> . These matters are managed under the <i>Heritage Act 2018</i> .
11	Objection to the project	Submitters requested that DWER consider these objections to the expansion of the hard rock quarry on the grounds of insufficient information and object to its expansion.	DWER has performed an environmental risk assessment of the application to amend licence L9113/2018/1 in accordance with the EP Act (Part V) Regulatory Framework. Consideration has been given to application supporting documents, relevant Management Plans, other regulatory mechanisms / legislation, potential emission sources, pathways and receptors and stakeholder submissions. The Delegated Officer has determined the risk is acceptable, subject to a number of regulatory controls, as outlined in Section 7 of this report.
12	Coalfield Highway Traffic	Concerns raised of a substantial increase in the heavy traffic on the two lane Coalfields Highway with traffic hazards such as sun rise and sun set, ingress and egress to the property being unsuitable, this being a main road with high speed and significant traffic volumes.	Traffic on Coalfields Highway is beyond the scope of an assessment under Part V of the <i>Environment Protection Act 1986</i> .

Appendix 2: Application validation summary

SECTION 1: APPLICATION SUMMARY				
Application type				
Works approval	<input checked="" type="checkbox"/>	W5828/2015/1 expires on 06/02/2021		
Renewal	<input checked="" type="checkbox"/>	Current licence number:	L9113/2018/1	
Amendment to licence	<input checked="" type="checkbox"/>	Current licence number:	L9113/2018/1 - DER2018/000081	
		Relevant works approval number:	W5828/2015/1 Expires on 6/02/2021	N/A
Date application received	4/12/2020 – Application signed on 19/10/2020			
Applicant and Premises details				
Applicant name/s (full legal name/s)	B. & J. Catalano Pty Ltd			
Premises name	Shenton Ridge Hard Rock Quarry			
Premises location	Part of Lot 501 on Plan 26892, Coalfields Road, ROELANDS			
Local Government Authority	Shire of Harvey			
Application documents				
HPCM file reference number:	DER2018/000081			
Key application documents (additional to application form):	<i>Management Plan 2014-03 Report (Approved by Shire of Harvey)</i>			
Scope of application/assessment				
Summary of proposed activities or changes to existing operations.	<p><u>Licence Amendment</u></p> <p>Construction of Category 12 processing area of HRQ.</p> <p>Construct new detention basin in Northern sector (>800m3 for 19,900m2 catchment).</p> <p>Operation of Category 12 crushing and screening plant in processing area. Location and design capacity remains unchanged.</p> <p>Expand stockpile area (no processing) up to 8.93ha when area of 9.36ha has been approved by Council.</p> <p>Setback to east changes from 50m to boundary to 240m with no change to western setback.</p> <p>Processing are remains unchanged at about 1ha of the 9.36ha approved by Council.</p> <p>Increase throughput from 100,000 to 350,000 tonnes per year limit.</p> <p>Processing plant capacity is 150-200 tonnes per hour running at 35 hours per week for 52 weeks is 364,000 tonnes. Plant will run longer not with greater intensity therefore dust and noise remain similar.</p> <p>Quarry footprint, operations and blasting is subject to Council approval plus compliance with the <i>EP Noise Regulations 1987</i>.</p>			

Category number/s (activities that cause the premises to become prescribed premises)

Table 1: Prescribed premises categories

Prescribed premises category and description	Assessed production or design capacity	Proposed changes to the production capacity (amendments only)
Category 12: Screening etc. of material.	Assessed – 100,000 tonnes per year.	Increase to 350,000 tonnes per annum.

Legislative context and other approvals

Has the applicant referred, or do they intend to refer, their proposal to the EPA under Part IV of the EP Act as a significant proposal?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Not referred to Part IV
Does the applicant hold any existing Part IV Ministerial Statements relevant to the application?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Not applicable
Has the proposal been referred and/or assessed under the EPBC Act?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Reference No: 2017/8085
Has the applicant demonstrated occupancy (proof of occupier status)?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Certificate of title <input checked="" type="checkbox"/>
Has the applicant obtained all relevant planning approvals?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Approval: DR17/2016, 13/29601 & 14/11545 Expiry date: 21 August 2028
Has the applicant applied for, or have an existing EP Act clearing permit in relation to this proposal?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	CPS No: 7943/1 exp 3/1/2034 No clearing proposed in stockpile area.
Has the applicant applied for, or have an existing CAWS Act clearing licence in relation to this proposal?	N/A <input checked="" type="checkbox"/>	Not applicable
Has the applicant applied for, or have an existing RIWI Act licence or permit in relation to this proposal?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	RIWI Licence not required.
Does the proposal involve a discharge of waste into a designated area (as defined in section 57 of the EP Act)?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Not applicable
Is the Premises situated in a Public Drinking Water Source Area (PDWSA)?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Not applicable
Is the Premises subject to any other Acts or subsidiary regulations	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	<i>Environmental Protection (Noise) Regulations 1987 and Environmental Protection (Unauthorized Discharge) Regulations 2004</i>
Is the Premises within an Environmental Protection Policy (EPP) Area?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Not applicable

Is the Premises subject to any EPP requirements?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Not applicable
Is the Premises a known or suspected contaminated site under the <i>Contaminated Sites Act 2003</i> ?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Not applicable