



Application for Works Approval

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

Works Approval Number	W6854/2023/1
Applicant	WA Limestone Contracting Pty Ltd
ACN	604 937 715
File number	DER2023/000661
Premises	Quenda Quartz Quarry Lot 26747 Flowery Patch Road WYALKATCHEM Legal description - Lot 26747 on Deposited Plan 158624 Volume: 1604 Folio: 24 As defined by the premises map attached to the issued works approval.
Date of report	12 February 2024
Decision	Works approval granted

Lauren Edmands

A/SENIOR MANAGER, RESOURCE INDUSTRIES

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

Table of Contents

1. Decision summary	1
2. Scope of assessment	1
2.1 Regulatory framework	1
2.2 Application summary and overview of premises	1
3. Risk assessment	1
3.1 Source-pathways and receptors	1
3.1.1 Emissions and controls	1
3.1.2 Receptors	3
3.2 Risk ratings	6
4. Consultation	9
5. Conclusion	9
References	9
Appendix 1: Summary of applicant’s comments on risk assessment and draft conditions	10
Appendix 2: Application validation summary	11
Table 1: Proposed applicant controls	2
Table 2: Sensitive human and environmental receptors and distance from prescribed activity	4
Table 3: Risk assessment of potential emissions and discharges from the premises during mobilisation, installation and operation	6
Table 4: Consultation	9
Figure 1: Distance to sensitive receptors	5

1. Decision summary

This decision report documents the assessment of potential risks to the environment and public health from emissions and discharges during the mobilisation, installation and time limited operation of the premises. As a result of this assessment, works approval W6854/2023/1 has been granted.

2. Scope of assessment

2.1 Regulatory framework

In completing the assessment documented in this decision report, the Department of Water and Environmental Regulation (the department; DWER) 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 and overview of premises

On 4 October 2023 WA Limestone Contracting Pty Ltd (the applicant) submitted an application for a works approval to the department under section 54 of the *Environmental Protection Act 1986* (EP Act).

The application is to undertake mobilisation, installation and time limited operations of equipment relating to crushing and screening of quartz and granite extracted at the premises. Extraction activities, undertaken via blasting, have been approved by the Shire of Wyalkatchem (Shire) through a Development Approval (43/2018) granted 8 May 2018, therefore these have not been re-assessed through this application. If any additional extractive industry approvals are required, it is the responsibility of the applicant to obtain these from the Shire.

The premises is approximately 24 km south of Wyalkatchem townsite and 27 km north of the Cunderdin townsite. The quarry is located within the Wilson Downs pastoral property, located on Flowery Patch Road.

The premises relates to the category and assessed production capacity under Schedule 1 of the *Environmental Protection Regulations 1987* (EP Regulations) which are defined in works approval W6854/2023/1. The infrastructure and equipment relating to the premises category and any associated activities which the department has considered in line with *Guideline: Risk Assessments* (DWER 2020) are outlined in works approval W6854/2023/1.

3. Risk assessment

The department assesses the risks of emissions from prescribed premises and identifies the potential source, pathway and impact to receptors in accordance with the *Guideline: Risk Assessments* (DWER 2020).

To establish a risk event there must be an emission, a receptor which may be exposed to that emission through an identified actual or likely pathway, and a potential adverse effect to the receptor from exposure to that emission.

3.1 Source-pathways and receptors

3.1.1 Emissions and controls

The key emissions and associated actual or likely pathway during premises operation which have been considered in this decision report are detailed in Table 1 below. Table 1 also details the control measures the applicant has proposed to assist in controlling these emissions, where necessary.

Table 1: Proposed applicant controls

Emission	Sources	Potential pathways	Proposed controls
Installation and Operation			
Noise	<ul style="list-style-type: none"> • Placement and mobilisation of crushing and screening plant • Crushing and screening of material • Unloading, loading and storage of material • Trucks and other vehicle movements - including reversing alarms (croakers) 	Air/windborne pathway	<ul style="list-style-type: none"> • Maintenance of plant, vehicles and equipment in accordance with manufacturer’s specifications. • Limit quarry operating hours from 6am to 6pm, six days per week, where practicable. • Mufflers and broadband reversing alarms (croakers) to be installed on all vehicles and machinery. • Complaints register to be established and contact details signposted at the site entrance. <p><i>For noting, the applicant has advised that the closest receptor (1km from premises), being temporary worker accommodation for the Wilson Downs farm, will not be in use when operations occur. For the purposes of this assessment, the Delegated Officer still considers this as a valid receptor.</i></p>
Dust	<ul style="list-style-type: none"> • Placement and mobilisation of crushing and screening plant • Crushing and screening of material • Unloading, loading, storage of material • Transporting material via trucks on roads • Stockpiles of both unprocessed and processed material 	Air/windborne pathway	<ul style="list-style-type: none"> • Water cart available when crushing and screening campaigns occur during high-risk periods (i.e. summer). • Sprinklers and/or covers fitted to crushing and screening plant transfer points. • Vehicle speed limit of 25 km/hour imposed on internal roads. • Avoid crushing and screening during adverse weather conditions where practicable. • Maintain internal access roads in good condition. • All loads to be covered prior to departing the site. • Wetting of stockpiles as required to mitigate dust. • Rehabilitation/stabilisation of disturbed areas no longer utilised by the quarry operations. Areas no longer required by the operation to be made safe and stable as soon as practicable following closure.

Emission	Sources	Potential pathways	Proposed controls
			<p><i>For Noting: Typically, rehabilitation works are undertaken during the first winter following closure to maximize rehabilitation success.</i></p> <ul style="list-style-type: none"> Complaints register to be established and contact details signposted at the site entrance.
Contaminated Stormwater Surface water emissions Hydrocarbon / chemical	<ul style="list-style-type: none"> Uncontrolled surface water emissions leaving the quarry <p>Hydrocarbon / chemical spill</p> <p>Vehicle movements on unsealed roads</p>	Surface run-off	<ul style="list-style-type: none"> Bunding, etc. to divert surface stormwater flow around operating areas. <p><i>For noting: Rainfall in the locality is low with an average annual rainfall of less than 300mm over the past 10 years (Bureau of Meteorology), which will limit the quantity of surface water runoff being produced.</i></p>
		Infiltration/Seepage to groundwater	<ul style="list-style-type: none"> On-site storage of hydrocarbons and chemicals is not proposed. Fuel and service vehicles will be equipped with spill kits and drip trays. Waste oils removed appropriately from plant and equipment then taken offsite for disposal. Spills of environmentally hazardous materials including hydrocarbons to be recovered and disposed of at an appropriately licensed facility. Regular maintenance of plant and equipment in accordance with manufacturer’s specifications.

3.1.2 Receptors

In accordance with the *Guideline: Risk Assessment* (DWER 2020), the Delegated Officer has excluded the applicant’s employees, visitors, and contractors from its assessment. Protection of these parties often involves different exposure risks and prevention strategies and is provided for under other state legislation.

Table 2 below provides a summary of potential environmental receptors that may be impacted as a result of activities upon or emission and discharges from the prescribed premises (*Guideline: Environmental siting* (DWER 2020)).

Figure 1 below provides a summary of potential human and environmental receptors that may be impacted as a result of activities upon or emission and discharges from the prescribed premises (*Guideline: Environmental Siting* (DWER 2020)).

Table 2: Sensitive human and environmental receptors and distance from prescribed activity

Human receptors	Distance from prescribed activity
Wilson Down Residence	<p>Approximately 2.4 km south-west of the proposed premises boundary.</p> <p><i>For noting: the prevailing wind direction is from the north-east and south-east in the morning and from the west and south-east in the afternoon (Bureau of Meteorology). This receptor is in the direction of the prevailing wind in the morning.</i></p>
Temporary Worker's accommodation (used to house farming workers)	<p>Approximately 345m south of the premises boundary and 800m from crusher/screener location (marked as Caretaker Accommodation in Figure 1).</p> <p>Applicant has advised that this accommodation will not be in use when crushing and screening operations occur and therefore the applicant has screened it out as a receptor. The department has included this receptor but has noted the information provided by the applicant to inform the risk assessment accordingly.</p> <p><i>For noting: the prevailing wind direction is from the north-east and south-east in the morning and from the west and south-east in the afternoon (Bureau of Meteorology). This receptor is not in the direction of the prevailing wind.</i></p>
Environmental receptors	Distance from prescribed activity
<p>Threatened Ecological Communities (TEC) - Priority 3: Critically Endangered</p> <p>The applicant has assumed that this receptor is Eucalypt Woodlands of the Western Australian Wheatbelt (DaWE, 2016).</p>	<p>Within 0.98 km from the premises boundary and 1.4 km from the crusher</p>
Surface water bodies	<p>A non-perennial minor watercourse (creek line) intersects the south-eastern portion of the premises. The watercourse is located approximately 800m from the crushing/screening activities.</p>
Groundwater	<p>Groundwater is located at a depth of 40 mbgl and is considered moderately saline (780 mS/m).</p>

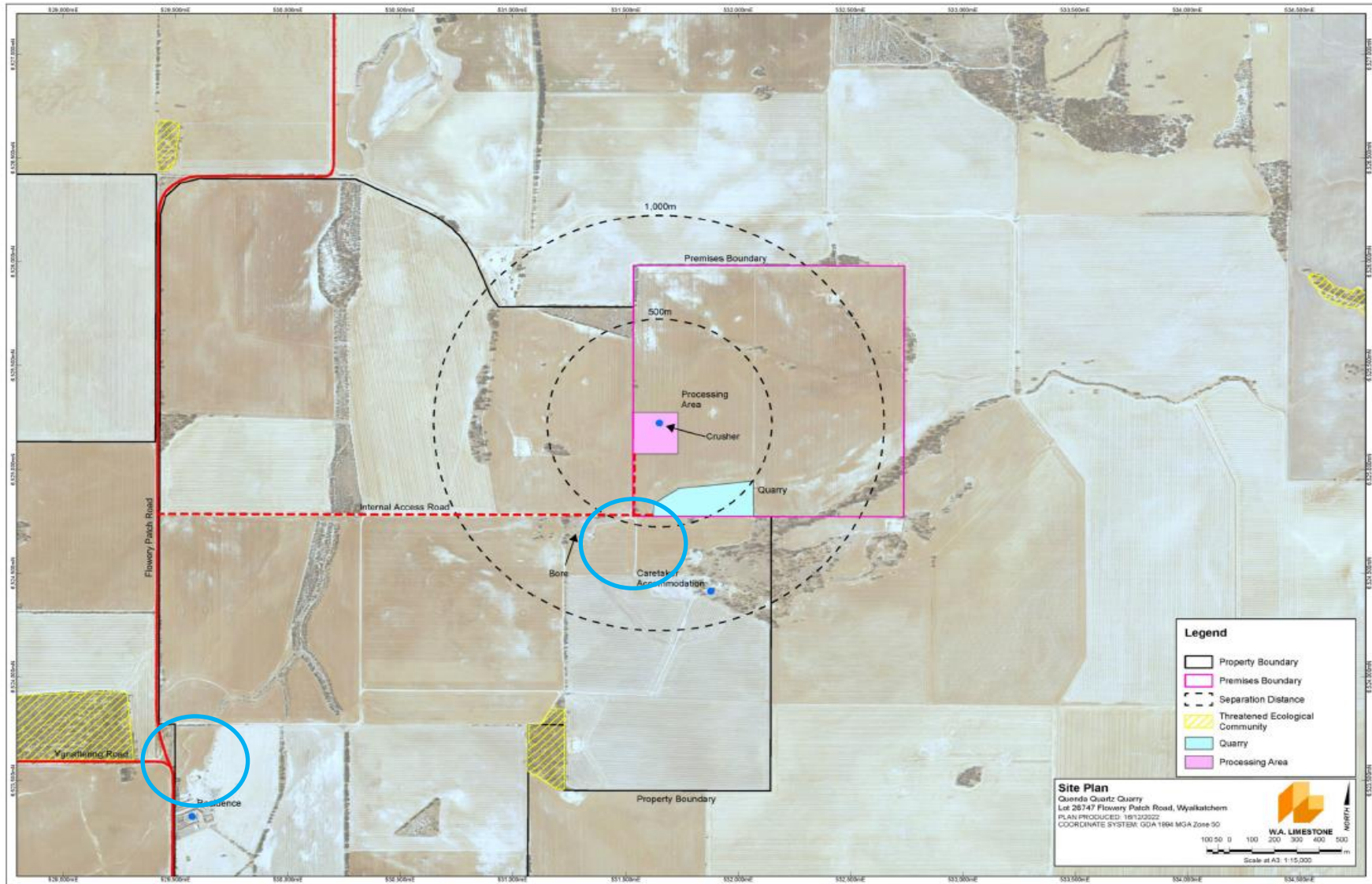


Figure 1: Distance to sensitive receptors

Works Approval: W6854/2023/1

IR-T13 Decision Report Template (short) v3.0 (May 2021)

3.2 Risk ratings

Risk ratings have been assessed in accordance with the *Guideline: Risk Assessments* (DWER 2020) for each identified emission source and takes into account potential source-pathway and receptor linkages as identified in Section 3.1. Where linkages are in-complete they have not been considered further in the risk assessment.

Where the applicant has proposed mitigation measures/controls (as detailed in Section 3.1), these have been considered when determining the final risk rating. Where the delegated officer considers the applicant’s proposed controls to be critical to maintaining an acceptable level of risk, these will be incorporated into the works approval as regulatory controls.

Additional regulatory controls may be imposed where the applicant's controls are not deemed sufficient. Where this is the case the need for additional controls will be documented and justified in Table 3.

Works approval W6854/2023/1 that accompanies this decision report authorises mobilisation, installation and time-limited operations. The conditions in the issued works approval, as outlined in Table 3 have been determined in accordance with *Guidance Statement: Setting Conditions* (DER 2015).

A licence is required following the time-limited operational phase authorised under the works approval to authorise emissions associated with the ongoing operation of the premises i.e. crushing and screening of quartz. A risk assessment for the operational phase has been included in this decision report, however licence conditions will not be finalised until the department assesses the licence application.

Table 3: Risk assessment of potential emissions and discharges from the premises during mobilisation, installation and operation

Risk events					Risk rating ¹ C = consequence L = likelihood	Applicant controls sufficient?	Conditions ² of works approval	Justification for additional regulatory controls
Sources / activities	Potential emission	Potential pathways and impact	Receptors	Applicant controls				
Installation and Mobilisation of equipment								
Placement and mobilisation of crushing and screening plant Trucks and other vehicle movements - including reversing alarms (croakers)	Noise	Air / windborne pathway causing impacts to human health and amenity	Temporary Accommodation Wilson Down Residence	Refer to Section 3.1	C = Minor L = Unlikely Medium Risk	Y	Condition 1 Condition 2 Condition 3	N/A

Risk events					Risk rating ¹ C = consequence L = likelihood	Applicant controls sufficient?	Conditions ² of works approval	Justification for additional regulatory controls
Sources / activities	Potential emission	Potential pathways and impact	Receptors	Applicant controls				
Placement and mobilisation of crushing and screening plant Trucks and other vehicle movements (including reversing alarms)	Dust	Air / windborne pathway causing impacts to human health and amenity, dust deposition onto vegetation causing deteriorated health, and decline in surface water quality.	Temporary Accommodation Wilson Down Residence TEC (Eucalypt woodlands) Creek line	Refer to Section 3.1	C = Minor L = Unlikely Medium Risk	Y	Condition 1 Condition 2 Condition 3	N/A
Operations (including time-limited)								
Crushing and screening of material Unloading, loading and storage of material Trucks and other vehicle movements (including reversing alarms)	Noise	Air / windborne pathway causing impacts to human health and amenity	Temporary Accommodation Wilson Down Residence	Refer to Section 3.1	C = Moderate L = Unlikely Medium Risk	N	Condition 1 Condition 6	The applicant has advised that the Temporary Accommodation receptor will not be in use during crushing and screening operations. As this is the closest sensitive receptor and may be impacted by noise emissions when occupied, a condition has been included to only authorise crushing and screening activities when the accommodation is unoccupied. Hours of operation have been modified from the proposed hours to reflect 'daytime' periods as specified in the <i>Environmental Protection (Noise) Regulations 1997</i> when the assigned decibel levels are the highest.

Risk events					Risk rating ¹ C = consequence L = likelihood	Applicant controls sufficient?	Conditions ² of works approval	Justification for additional regulatory controls
Sources / activities	Potential emission	Potential pathways and impact	Receptors	Applicant controls				
Crushing and screening of material Unloading, loading, storage of material Transporting material via trucks on roads Stockpiles of both unprocessed and processed material	Dust	Air / windborne pathway causing impacts to human health and amenity, dust deposition onto vegetation causing deteriorated health, and decline in surface water quality.	Temporary Accommodation Wilson Down Residence	Refer to Section 3.1	C = Moderate L = Possible Medium Risk	N	Condition 1 Condition 6	Applicant proposed controls have been added as regulatory controls however the requirement to have a water cart on site at all times when crushing/screening occurs has been added, to ensure a source of dust mitigation is available at these times, and not just during high-risk periods as proposed.
			TEC (Eucalypt woodlands) Creek line					
	Stormwater contaminated with sediment	Overland run-off, direct discharge or infiltration through soils causing degradation and contamination of surface water, vegetation and groundwater quality.	Surface water TEC (Eucalypt woodlands)	Refer to Section 3.1	C = Minor L = Unlikely Medium Risk	Y	Condition 7	Applicant proposed controls have been added as regulatory controls
Machinery malfunction Refuelling of vehicles and equipment	Surface water contaminated with hydrocarbons	Overland run-off, direct discharge or infiltration through soils causing degradation and contamination of surface water, vegetation and groundwater quality	Surface water Groundwater Vegetation / TEC (Eucalypt woodlands)	Refer to Section 3.1	C = Minor L = Unlikely Medium Risk	Y	Condition 7 Condition 8 Condition 9	Applicant proposed controls have been added as regulatory controls. <i>The Environmental Protection (Unauthorised Discharges) Regulations 2004</i> also apply.

Note 1: Consequence ratings, likelihood ratings and risk descriptions are detailed in the *Guideline: Risk Assessments* (DWER 2020).

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

4. Consultation

Table 4 provides a summary of the consultation undertaken by the department.

Table 4: Consultation

Consultation method	Comments received	Department response
Application advertised on the department's website on 13 November 2023	None received	N/A
Local Government Authority advised of proposal on 11 November 2023	No comments received from the Shire of Wyalkatchem	N/A
Main Roads WA advised of proposal on 11 November 2023	Main Roads WA (MRWA) replied on 27 November 2023 stating that road trains will have minimal impact on Main Roads WA Road network. Further MRWA mentioned that MRWA has no further comment on this proposal.	N/A
Ballardong Aboriginal Corporation advised of proposal on 11 November 2023	No comments received from the Ballardong Aboriginal Corporation	N/A
Applicant was provided with draft documents on 24 January 2024	The Licence Holder provided comments on 6 February 2024 for the clarifications made by the department (refer to Appendix 1) and waived the remaining consultation period.	Refer to Appendix 1

5. Conclusion

Based on the assessment in this decision report, the delegated officer has determined that a works approval will be granted, subject to conditions commensurate with the determined controls and necessary for administration and reporting requirements.

References

1. Department of Environment Regulation (DER) 2015, *Guidance Statement: Setting Conditions*, Perth, Western Australia.
2. Department of Water and Environmental Regulation (DWER) 2020, *Guideline: Environmental Siting*, Perth, Western Australia.
3. Department of Water and Environmental Regulation (DWER) 2020, *Guideline: Risk Assessments*, Perth, Western Australia.
4. Department of the Environment and Energy (DaWE) 2016. *Eucalyptus Woodlands of the Western Australian Wheatbelt: a nationally protected ecological community*. Commonwealth of Australia 2016.
5. WA Limestone Contracting Pty Ltd 2023, *Supporting Document: Quenda Quartz Quarry*
6. WA Limestone Contracting Pty Ltd 2023, *Works approval application form: Quenda Quartz Quarry*

Appendix 1: Summary of applicant's comments on risk assessment and draft conditions

Condition	Summary of applicant's comment	Department's response
Works Approval: Condition 1, Table 1	The Works Approval Holder responded to the clarifications regarding the capacity of the water cart that sent by the department on 24 January 2024.	The department considered the comment and updated condition.
Decision Report: Table 1	The Works Approval Holder responded to the clarifications regarding the rehabilitation/stabilisation works that sent by the department on 24 January 2024.	The department considered the comments and updated the Works Approval holder's controls.
Decision Report: Table 2	<p>The Works Approval Holder responded to the clarifications regarding the groundwater depth and inferred groundwater flow direction that sent by the department on 24 January 2024.</p> <p>The Works Approval Holder has not determined the inferred groundwater flow direction</p>	The department considered the comments and updated the depth of groundwater as 40mbgl.

Appendix 2: Application validation summary

SECTION 1: APPLICATION SUMMARY		
Application type		
Works approval	<input checked="" type="checkbox"/>	
Date application received	04/10/2023	
Applicant and Premises details		
Applicant name/s (full legal name/s)	WA Limestone Contracting Pty Ltd, ACN 604 937 715 Trading as WA Limestone	
Premises name	Quenda Quartz Quarry	
Premises location	Lot 26747 Flowery Patch Road, Wyalkatchem WA 6485 Lot 26747 on Deposited Plan 158624 Volume: 1604 Folio: 24	
Local Government Authority	Shire of Wyalkatchem	
Application documents		
HPCM file reference number:	DWERDT845148	
Key application documents (additional to application form):	Works Approval – Supporting document Attachment 1A – Joint Venture Agreement (Proof of occupier status) Attachment 1B – ASIC company extract Attachment 5 - Planning Approval	
Scope of application/assessment		
Summary of proposed activities	New Works Approval application for Category 12: Screening etc. of material: activities up to 100,000 tonnes per year. <u>Quartz aggregate production</u> is estimated to be in the order of 40,000 tonnes per year. <u>Granite aggregate production</u> is estimated to not exceed 60,000 tonnes per year, equating to a total estimated throughput of 100,000 tonnes per year.	
Category number (activities that cause the premises to become prescribed premises)		
Table 1: Prescribed premises categories		
Prescribed premises category and description	Proposed production capacity	Proposed changes to the production or design capacity (amendments only)
Category 12: Screening etc. of material	100,000 tonnes per year	N/A
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"/>	N/A

Does the applicant hold any existing Part IV Ministerial Statements relevant to the application?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	N/A
Has the proposal been referred and/or assessed under the EPBC Act?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	N/A
Has the applicant demonstrated occupancy (proof of occupier status)?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	General lease <input checked="" type="checkbox"/> Expiry: 01/08/2038
Has the applicant obtained all relevant planning approvals?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>	Approval: 43/2018 and still valid
Has the applicant applied for, or have an existing EP Act clearing permit in relation to this proposal?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	No clearing is proposed.
Has the applicant applied for, or have an existing CAWS Act clearing licence in relation to this proposal?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	No clearing is proposed.
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"/>	N/A
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"/>	N/A
Is the Premises situated in a Public Drinking Water Source Area (PDWSA)?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	N/A
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 1997;</i> <i>Environmental Protection (Unauthorised Discharge) Regulations 2004</i>
Is the Premises within an Environmental Protection Policy (EPP) Area?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	N/A
Is the Premises subject to any EPP requirements?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	N/A
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"/>	Classification: N/A Date of classification: N/A