

Works Approval

Environmental Protection Act 1986, Part V

Works Approval Holder: Exmouth Limestone Pty Ltd

Works Approval Number: W5844/2015/1

Registered office:	Adelaide Brighton Ltd Level1, 157 Grenfell Street ADELAIDE SA 5000
ACN:	081 214 708
Premises address:	Exmouth Limestone Mine Mining Lease M08/145 EXMOUTH WA 6707 as depicted in Schedule 1.
Issue date:	Thursday, 31 December 2015
Commencement date:	Monday, 4 January 2016
Expiry date:	Tuesday, 3 January 2023

The following category/s from the *Environmental Protection Regulations 1987* cause this Premises to be a prescribed premises for the purposes of the *Environmental Protection Act 1986*:

Category number	Category description	Category production or design capacity	Approved premises production or design capacity
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 or more per year	1,000,000 tonnes per annual period

Conditions

This Works Approval is subject to the conditions set out in the attached pages.

Date signed: 31 December 2015

Danielle Eyre

Senior Manager, Industry Regulation - Resource Industries Officer delegated under section 20 of the *Environmental Protection Act 1986*



Works Approval Conditions

1 General

1.1 Interpretation

- 1.1.1 In the Works Approval, definitions from the *Environmental Protection Act 1986* apply unless the contrary intention appears.
- 1.1.2 In the Works Approval, unless the contrary intention appears:

'Act' means the Environmental Protection Act 1986;

'annual period' means the inclusive period from 1 April until 31 March in the following year;

'CEO' means Chief Executive Officer of the Department of Environment Regulation;

'CEO' for the purpose of correspondence means; Chief Executive Officer Department Administering the Environmental Protection Act 1986 Locked Bag 33 CLOISTERS SQUARE WA 6850 Email: <u>info@der.wa.gov.au</u>

'Commissioning' means the process of operation and testing that verifies the works and all relevant systems, plant, machinery and equipment have been installed and are performing in accordance with the design specification set out in the works approval application;

'Premises' means the area defined in the Premises Map in Schedule 1 and listed as the Premises address on page 1 of the Works Approval;

'Schedule 1' means Schedule 1 of this Works Approval unless otherwise stated;

'Stage 1' means the construction and installation of explosives, crushing and screening equipment and dust suppression equipment, in order to process less than 50,000 tonnes per year;

'Stage 2' means the construction and installation of all works;

'Works Approval' means this Works Approval numbered W5844/2015/1 and issued under the *Act;* and

'Works Approval Holder' means the person or organisation named as the Works Approval Holder on page 1 of the Works Approval.

- 1.1.3 Any reference to an Australian or other standard in the Works Approval means the relevant parts of the standard in force from time to time during the term of this Works Approval.
- 1.1.4 Any reference to a guideline or code of practice in the Works Approval means the current version of the guideline or code of practice in force from time to time, and shall include any amendments or replacements to that guidelines or code of practice made during the term of this Works Approval.



1.2 General conditions

1.2.1 The Works Approval Holder shall construct the works in accordance with the documentation detailed in Table 1.2.1:

Table 1.2.1: Construction Requirements ¹				
Document	Parts	Date of		
		Document		
Works Approval Application Form	All	28/04/2015		
Works Approval Application to Re-commence Mining for	All, including	01/10/2010		
the Exmouth Limestone Project, Biota Environmental	Drawings and			
Sciences	Attachments			
Email from Sarah Scott, Subject: Project: Exmouth	All, including	28/4/2015		
Limestone 2015 Reporting – File Transfer – Exmouth	associated files	11:17am		
Limestone mine works approval application.				
Email from Sarah Scott, Subject line: RE: Exmouth	All	22/12/2015		
Limestone mine works approval and licence		4:28pm		

Note 1: Where the details and commitments of the documents listed in condition 1.2.1 are inconsistent with any other condition of this works approval, the conditions of this works approval shall prevail.

- 1.2.2 The Works Approval Holder shall commission the Exmouth Limestone Mine Stage 1, for a period not exceeding 1 month.
- 1.2.3 The Works Approval Holder shall commission the Exmouth Limestone Mine Stage 2, for a period not exceeding 1 month.

2 Information

2.1 Reporting

- 2.1.1 The Works Approval Holder shall submit a compliance document to the CEO, following the construction of each of Stage 1 and Stage 2 of the works and prior to commissioning of the same.
- 2.1.2 The compliance document shall:
 - (a) certify that the works were constructed in accordance with the conditions of the Works Approval; and
 - (b) be signed by a person authorised to represent the Works Approval Holder and contain the printed name and position of that person within the company.

2.2 Notification

2.2.1 The Works Approval Holder shall ensure that the parameters listed in Table 2.2.1 are notified to the CEO and are in accordance with the notification requirements of the table.

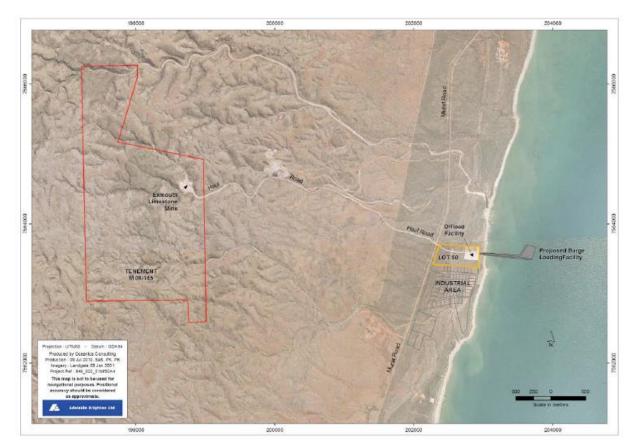
Table 2.2.1: Notification requirements					
Condition or table (if relevant)	Parameter	Notification requirement	Format or form		
1.2.4	Commencement of commissioning of Stage 2	7 days prior to start of commissioning	None specified		



Schedule 1: Maps

Premises map

The Premises is shown in the map below. The red line depicts the Premises boundary.





Decision Document

Environmental Protection Act 1986, Part V

Proponent: Exmouth Limestone Pty Ltd Works Approval: W5844/2015/1

Registered office:	Adelaide Brighton Ltd Level1, 157 Grenfell Street ADELAIDE SA 5000
ACN:	081 214 708
Premises address:	Exmouth Limestone Mine Mining Lease M08/145 EXMOUTH WA 6707
Issue date:	Thursday, 31 December 2015
Commencement date:	Monday, 4 January 2016
Expiry date:	Tuesday, 3 January 2023

Decision

Based on the assessment detailed in this document the Department of Environment Regulation (DER), has decided to issue a works approval. DER considers that in reaching this decision, it has taken into account all relevant considerations.

Decision Document prepared by:

Lindy Twycross Licensing Officer

Decision Document authorised by:

Danielle Eyre Delegated Officer



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1 Purpose of this Document

This decision document explains how DER has assessed and determined the application and provides a record of DER's decision-making process and how relevant factors have been taken into account. Stakeholders should note that this document is limited to DER's assessment and decision making under Part V of the *Environmental Protection Act 1986*. Other approvals may be required for the proposal, and it is the proponent's responsibility to ensure they have all relevant approvals for their Premises.

2 Administrative summary

Administrative details	
Application type	Works Approval Image: Constraint of the second se
Activities that cause the premises to become prescribed premises	Category number(s) Assessed design capacity
	12 Screening1,000,000 tonnes per annual period
Application verified	Date: 19/05/2015
Application fee paid	Date: 28/05/2015
Works Approval has been complied with	Yes No N/A
Compliance Certificate received	Yes No N/A
Commercial-in-confidence claim	Yes No
Commercial-in-confidence claim outcome	Cost of works only
Is the proposal a Major Resource Project?	Yes No
Was the proposal referred to the Environmental Protection Authority (EPA) under Part IV of the	Referral decision No: Yes⊠ No⊡ Managed under Part V ⊠
Environmental Protection Act 1986?	Assessed under Part IV



Is the proposal subject to Ministerial Conditions?	Yes⊠	No	Ministerial statement No:461
			EPA Report No: Bulletin 846
Does the proposal involve a discharge of waste into a designated area (as defined in section 57 of the <i>Environmental Protection Act 1986</i>)?	Yes Departmer	No⊠ nt of Wate	er consulted Yes 🛛 No 🗌
Is the Premises within an Environmental Protection	Policy (EPI	P) Area `	Yes No
Is the Premises subject to any EPP requirements?	Yes	No⊠	

3 Executive summary of proposal and assessment

Exmouth Limestone Pty Ltd (Exmouth Limestone) proposes to install mobile crushing and screening equipment at the Exmouth Limestone Mine site. This equipment will be brought to site and removed on a campaign basis.

The Exmouth Limestone Mine proposal was originally assessed at a Public Environmental Review (PER) under the Western Australia *Environmental Protection Act 1986* (EP Act) (EPA Bulletin 846). Ministerial approval was granted in November 1997 under Ministerial Statement No. 461 and remains current at the time of this assessment. An Environmental Mine Management Plan (EMMP) was prepared in 1998 to the satisfaction of the Environmental Protection Authority in accordance with Ministerial Statement 461 condition 4-1.

Mining, and crushing and screening under works approval and licence commenced in July 1998. At the completion of the initial mining campaign, mining activities ceased for the time being and the site was placed on care and maintenance. All major plant was removed.

Later, Exmouth Limestone considered to reopen the mine and made an application for a works approval in 2010 for installation of a crusher and screener. Works Approval W4779/2010/1 was issued on 23 December 2010 but the works approval expired on 26 December 2014 as mining was still on hold and the crusher and screener had not been installed.

Exmouth Limestone has made a new application for works approval in anticipation that should mining recommence, crushing and screening equipment would be required to be installed on site. The proposal remains unchanged from that of the expired W4779/2010/1. Operations at the mine will consist of drilling and blasting the ground to extract up to 1,000,000 tonnes per year of limestone, with crushing and screening of the extracted limestone.

The Exmouth Limestone Mine is situated on the eastern side of the Exmouth Gulf on the Cape Range Peninsular near Mowbowra Creek, approximately 6 km southwest of Exmouth. The premises is immediately surrounded by Vacant Crown Land. Current closest land users are at an industrial site approximately 3.7 km to the east and residential properties 4.7 km to the northwest.

The landscape of Cape Range is referred to as a karst landform and its characteristics include extensive underground drainage and cave systems. The site is located within the Exmouth Water Reserve, a Priority 1 groundwater source protection area. There will be no mining below the deepest existing creek bed level. Groundwater is approximately 50 metres (m) below the minimum elevation of mining operations. There is potential for any underlying karst caverns to provide a link to groundwater. The EMMP includes management actions if a karst cavern is excavated.



Surface waters in the vicinity of the mine area are Mowbowra Creek (flowing along the northern boundary of the mine area) and Stoney Creek (a minor creek). Shothole Canyon Creek is to the south of the mine area. The mine catchment area is a minor contributor on a regional scale to surface water flows.

The most significant emissions for consideration with this proposal relate to hydrocarbon contamination of soils and groundwater, surface water drainage and dust. Management of these emissions are included in the EMMP which is required to be implemented by condition 4-4 of Ministerial Statement 461.

Exmouth Limestone Pty Ltd has also confirmed that there will now be no hydrocarbon storage in the mine area. Service trucks will be used to re-fuel on site.

The mine will only operate in daylight hours.

With implementation of the proposal as outlined in the application documents, and managed in accordance with Ministerial Statement 461, the proposal is considered to be low environmental risk. A works approval will be issued for seven years.



4 Decision table

All applications are assessed in line with the *Environmental Protection Act 1986*, the *Environmental Protection Regulations 1987* and DER's Operational Procedure on Assessing Emissions and Discharges from Prescribed Premises. Where other references have been used in making the decision they are detailed in the decision document.

DECISION TAB	LE		
Works Approval / Licence section	Condition number W = Works Approval L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
General conditions	W1.2.1 W1.2.2 W1.2.3 Licence condition to limit processing to less than 50,000 tonnes per annual period.	Operation and construction Emission Description Emission: Hydrocarbon spills to ground, and stormwater containing high sediment load and hydrocarbons. Impact: Contamination of surrounding land (including karst landform), ground water and surface water drainage systems due to the addition of sediments and hydrocarbons. The premises is located within the Exmouth Water Reserve. Infiltration of groundwater with contaminants can occur via limestone caves. Controls: Given rainfall patterns, runoff from the site is expected to be infrequent. Creeks flow infrequently in the area. Creeks in the vicinity of the mine area comprise Mowbowra Creek (flowing along the northern boundary of the mine area) and Stoney Creek (a minor creek). Shothole Canyon Creek is to the south of the mine area. On a regional scale the mine catchment area is a minor contributor to surface water flows. The depth to groundwater will be 50 m from the lowest point of excavation. Groundwater is monitored by the Water Corporation. Exmouth Limestone has confirmed there will now be no hydrocarbon storage on the premises. Service trucks will be used to refuel equipment.	 Works Approval application supporting documentation. General provisions of the Environmental Protection Act 1986. Environmental Protection (Unauthorised Discharges) Regulations 2004. Ministerial Statement 461. Limestone Production Mining Lease M08/145 Exmouth WA Environmental and Mining Management Plan – E3787E, Halpern



Works Approval / Licence section	Condition number W = Works Approval L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
		 The Premises is required by Ministerial Statement 461 to be managed in accordance with the EMMP. The EMMP includes measures for surface water management; groundwater management; storage and handling of potential contaminants; and waste management. The EMMP includes the following measures: Surface drainage will be directed along existing drainage lines; No storage of surface water on the tenement; Six floodway crossings across Stoney Creek along the haul road will function as sediment/silt traps and will be inspected and cleared as necessary; After significant flood events, creeks will be visually inspected and water tested if there is evidence of high sediment load or hydrocarbon contamination; Significant Caves Protocols including that if a karst cavern is uncovered during excavation and considered likely to allow infiltration of potential contaminants to the water table, perimeter bunding will be placed around the cavern or the cavern will be plugged; Mine floor will be a minimum 50 m above the groundwater aquifer (52 m (AHD) confirmed by a dedicated monitoring bore; Groundwater quality from borehole sampling reported annually to the Water Corporation and the DEP; Refuelling of mobile plant by mobile bowsers will be undertaken hardstand and bunded area; Drill rig and non-mobile equipment will be refuelled inside temporary bunding; Sealed fast-fill pump nozzles used for refuelling; and Procedures for containment and clean-up of any incidental hydrocarbon spillage. 	 1998: Section 3.2.7 Significant Caves Protocol Commitment 38, Condition 4-3(1); Section 3.2.11 Surface Water Management; Section 3.2.12 Groundwater Management ; Section 3.2.13 Use Storage and Handling of Potential Contaminants; Section 3.2.16 Waste Management – Spent Lubricating Oils and Greases; and Section 3.2.16 Waste Management – Sanitary and General Wastes
		Consequence: Moderate Likelihood: Rare	



DECISION TAB	LE		
Works Approval / Licence section	Condition number W = Works Approval L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
		Risk Rating: Moderate	
		Regulatory ControlsWorks Approval condition W1.2.1 requires construction in accordance with works approval application documents.W1.2.2 and W1.2.3 allows the works to be completed in two stages, each with a one month commissioning period. Stage 1 allows installation of explosives, crushing and screening equipment and dust suppression equipment to allow small scale processing only (less than 50,000 tonnes per year). Stage 2 provides for construction and installation of the works required for processing up to 1,000,000 tonnes per year. A commissioning period is provided for test equipment runs.Ministerial Statement 461 condition 4.2 requires implementation of the EMMP during. The EMMP includes management of surface water and hydrocarbons storage and spills.	
		General provisions of the <i>Environmental Protection Act</i> 1986 apply. The <i>Environmental Protection (Unauthorised Discharges) Regulations</i> 2004 apply.	
		Residual Risk Consequence Moderate Likelihood: Rare Risk Rating: Moderate	
Premises operation	NA	No conditions relating to premises operation are required for the works approval or licence.	NA
Emissions general	NA	No conditions regarding general emissions are required for the works approval and the licence.	NA
Point source emissions to	NA	Construction and Operation No point source emissions to air are expected during construction and operation	Works Approval application supporting



DECISION TABL	E		
Works Approval / Licence section	Condition number W = Works Approval L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
air including monitoring		of the plant. No conditions relating to point source emissions to air or the monitoring of these emissions are required for the works approval or licence.	documentation.
Point source emissions to surface water including monitoring	NA	Construction and Operation There will be no point source emissions to surface water during construction and operation of the plant. No conditions relating to point source emissions to surface water or the monitoring of such emissions are required for the works approval or licence.	Works Approval application supporting documentation.
Point source emissions to groundwater including monitoring	NA	Construction and Operation There will be no point source emissions to groundwater during construction and operation of the plant. No specified conditions relating to point source emissions to groundwater or the monitoring of such emissions are required for the works approval or licence.	Works Approval application supporting documentation.
Emissions to land including monitoring	NA	Construction and OperationThere will be no direct emissions to land during construction and operation of the plant. Emissions to land due to contamination of stormwater or hydrocarbon spill are discussed in the General conditions section above.No conditions relating to emissions to land are required for the works approval or licence.	Works Approval application supporting documentation.
Fugitive emissions	NA	Construction and Operation – dust emissions Emission Description Emission: Dust generated by vehicle movement, the movement of rock and product and the crushing and screening process. Impact: Dust emissions can be harmful to human health and smother vegetation. Dust can also result in amenity impacts.	Works Approval application supporting documentation. General provisions of the <i>Environmental</i> <i>Protection Act 1986.</i>
		<i>Controls:</i> The closest land users are an industrial area approximately 3.7 km east and a residential area 4.7 km to the northwest. Clearing and access has already been completed.	Environmental Protection (Unauthorised



DECISION TAE	DECISION TABLE					
Works Approval / Licence section	Condition number W = Works Approval L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents			
		The premises is required by Ministerial Statement 461 condition 4-1 to be constructed and managed in accordance with the EMMP which includes Section 3.2.15 Management of Emissions – Dust.	<i>Discharges) Regulations 2004.</i>			
		 Measures to manage dust prescribed in the EMMP include: Permanent roads and hardstand areas to be sheeted with crushed limestone and clayey fines and kept watered during mining operations and truck movements; Point sources of dust controlled using dust suppression sprays subject to need; Dust suppression by water cart; Water will be purchased from the Water Corporation; Covering of disturbed ground with soil and vegetation once mining in an area is complete; Dust monitoring will be carried out on the Minesite and along the haul road if shown to be necessary; and Regular visual monitoring of dust generation adjacent to the mine and haul road. In addition to the EMMP, the works approval application documents include that: Water will be stored in a 10,000 Litre tank located on the mine site; Dust suppression to take into account prevailing wind conditions; No visible dust to leave the project area; and Should dust complaints be received an assessment of dust levels and management procedures will be undertaken. 	Ministerial Statement 461. Limestone Production Mining Lease M08/145 Exmouth WA Environmental and Mining Management Plan – E3787E, Halpern Glick Maunsell, March 1998 • Section 3.2.15 Management of Emissions - Dust			



DECISION TABLE					
Works Approval / Licence section	Condition number W = Works Approval L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents		
		Regulatory Controls The general provisions of the EP Act, and Ministerial Statement condition 4-1 requiring implementation of the EMMP (which includes dust management) applies. No conditions for fugitive dust will be included in the works approval or the licence. Residual Risk Consequence: Insignificant Likelihood: Unlikely Risk Rating: Low Construction and Operation – light emissions Construction and operation of the plant are planned for daylight hours. No conditions relating to fugitive light emissions are required for the works approval or			
Odour	NA	licence. Construction and Operation No odour emissions are expected from the construction and operation of the plant. No conditions relating to odour emissions are required for the works approval or licence.	General provisions of the <i>Environmental</i> <i>Protection Act 1986.</i> Works Approval application supporting documentation.		
Noise	NA	Construction and Operation Emission Description Emission: Noise and vibration from the construction and operation of the plant. Impact: Noise may impact on fauna and people. Controls: The closest land users are an industrial area 3.7 km east and residents	Environmental Protection (Noise) Regulations 1997. Application supporting documentation.		

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DECISION TABLE					
Works Approval / Licence section	Condition number W = Works Approval L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents		
		 4.7 km to the northwest. The plant will be operated to comply with the <i>Environmental Protection (Noise)</i> <i>Regulations 1997.</i> The premises is required by Ministerial Statement 461 condition 4-1 to be managed in accordance with the EMMP which includes Section 3.2.15 Management of Emissions – Noise. <u>Risk Assessment</u> <i>Consequence:</i> Insignificant <i>Likelihood:</i> Rare <i>Risk Rating:</i> Low <u>Regulatory Controls</u> The <i>Environmental Protection (Noise) Regulations 1997</i> and Ministerial Statement 461 will provide regulatory control. No conditions relating to noise emissions are required for the works approval or licence. <u>Residual Risk</u> <i>Consequence:</i> Insignificant <i>Likelihood:</i> Rare <i>Residual Risk Rating:</i> Low 	Ministerial Statement 461 Limestone Production Mining Lease M08/145 Exmouth WA Environmental and Mining Management Plan – E3787E, Halpern Glick Maunsell, March 1998 • Section 3.215 Management of Emissions - Noise		
Monitoring general	NA	As no monitoring of emissions will be required, no conditions relating to monitoring are required for the works approval or licence.	NA		
Monitoring of inputs and outputs	NA	Monitoring of inputs or outputs is not required to ensure efficient operation of the plant. No conditions relating to monitoring of inputs and outputs are required for the works approval or licence.	NA		
Process monitoring	NA	No conditions relating to process monitoring are required for the works approval or licence.	NA		
Ambient quality	NA	No ambient quality monitoring is required as the main emissions have been assessed as being low risk. No conditions relating to ambient quality monitoring	NA		

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DECISION TABLE					
WorksCondition numberJustification (including risk descriptionApproval /W = Works Approvalrelevant)LicenceL= Licencesection		Justification (including risk description & decision methodology where relevant)	Reference documents		
monitoring		are required for the works approval or licence.			
Meteorological monitoring			NA		
Improvements	vements NA No specified conditions relating to improvements are required for the works approval or licence.		NA		
Information	W2	Conditions relating to the submission of a compliance document are included in the works approval.	NA		
	Licence conditions	The licence will include conditions for submission of an Annual Audit Compliance Report, reporting of annual processing amounts in tonnes, and will also require notification to be provided 7 days prior to screening equipment departing and re- entering the premises.			
Works	NA	The proposal is considered low risk and the works approval duration will be seven	NA		
Approval		years.			
Duration					



5 Advertisement and consultation table

Date	Event	Comments received/Notes	How comments were taken into consideration
08/06/2015	Application advertised in West Australian	No comments received	NA
3/12/2015	Proponent sent a copy of draft instrument	Request for seven years duration.	Accepted due low risk. Ministerial Statement 461 is valid for the period.
		Request for the works to be staged, to allow small scale processing operations to commence initially.	Accepted and included.
		Request for commissioning period of one month to allow testing and pre-operational activities to proceed whilst Licence being finalised for issue.	Accepted and included. The site is required to be managed by the EMMP.



6 Risk Assessment

Note: This matrix is taken from the DER Corporate Policy Statement No. 07 - Operational Risk Management

Table 1: Emissions Risk Matrix

Likelihood	Consequence				
	Insignificant	Minor	Moderate	Major	Severe
Almost Certain	Moderate	High	High	Extreme	Extreme
Likely	Moderate	Moderate	High	High	Extreme
Possible	Low	Moderate	Moderate	High	Extreme
Unlikely	Low	Moderate	Moderate	Moderate	High
Rare	Low	Low	Moderate	Moderate	High