



# Decision Document

## *Environmental Protection Act 1986, Part V*

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**Proponent:** Urban Resources Pty Ltd

**Licence:** L8868/2014/1

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**Registered office:** Unit 4, 127 Melville Parade  
COMO WA 6152

**ACN:** 121 043 034

**Premises address:** Maralla Road Sand Mine  
Part of Lot 5892 Maralla Road  
BULLSBROOK WA 6084  
Being the whole of Mining Tenement M70/326

**Issue date:** Thursday, 21 May 2015

**Commencement date:** Monday, 25 May 2015

**Expiry date:** Sunday, 24 May 2020

### **Decision**

Based on the assessment detailed in this document the Department of Environment Regulation (DER), has decided to issue a Licence. DER considers that in reaching this decision, it has taken into account all relevant considerations and legal requirements and that the Licence and its conditions will ensure that an appropriate level of environmental protection is provided.

Decision Document prepared by:

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## Contents

Decision Document	1
Contents	2
1 Purpose of this Document	2
2 Administrative summary	3
3 Executive summary of proposal and assessment	4
4 Decision table	5
5 Advertisement and consultation table	11
6 Risk Assessment	12
Appendix A	13

## 1 Purpose of this Document

This decision document explains how DER has assessed and determined the application for a works approval or licence, 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.

### **Works approval and licence conditions**

DER has three types of conditions that may be imposed on works approvals and licences. They are as follows;

#### **Standard conditions (SC)**

DER has standard conditions that are imposed on all works approvals and licences regardless of the activities undertaken on the Premises and the information provided in the application. These are included as the following conditions on works approvals and licences:

Works approval conditions: 1.1.1-1.1.4, 1.2.1, 1.2.2, 5.1.1 and 5.1.2.

Licence conditions: 1.1.1-1.1.4, 1.2.1-1.2.4, 5.1.1-5.1.4 and 5.2.1.

For such conditions, justification within the Decision Document is not provided.

#### **Optional standard conditions (OSC)**

In the interests of regulatory consistency DER has a set of optional standard conditions that can be imposed on works approvals and licences. DER will include optional standard conditions as necessary, and are likely to constitute the majority of conditions in any licence. The inclusion of any optional standard conditions is justified in Section 4 of this document.

#### **Non-standard conditions (NSC)**

Where the proposed activities require conditions outside the standard conditions suite DER will impose one or more non-standard conditions. These include both premises and sector specific conditions, and are likely to occur within few licences. Where used, justification for the application of these conditions will be included in Section 4.



## 2 Administrative summary

Administrative details		
Application type	Works Approval <input type="checkbox"/>	New Licence <input checked="" type="checkbox"/>
	Licence amendment <input type="checkbox"/>	Works Approval amendment <input type="checkbox"/>
Activities that cause the premises to become prescribed premises	<b>Category number(s)</b>	<b>Assessed design capacity</b>
	5	150 000 tonnes per annual period
Application verified	Date: 16 December 2014	
Application fee paid	Date: 31 December 2014	
Works Approval has been complied with	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/> N/A <input type="checkbox"/>
Compliance Certificate received	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/> N/A <input type="checkbox"/>
Commercial-in-confidence claim	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Commercial-in-confidence claim outcome		
Is the proposal a Major Resource Project?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Was the proposal referred to the Environmental Protection Authority (EPA) under Part IV of the <i>Environmental Protection Act 1986</i> ?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Is the proposal subject to Ministerial Conditions?	Referral decision No:	
	Managed under Part V <input type="checkbox"/>	
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> )?	Assessed under Part IV <input checked="" type="checkbox"/>	
	Ministerial statement No: 024	
Is the Premises within an Environmental Protection Policy (EPP) Area Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	EPA Report No: 318	
	Department of Water consulted Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
<p>If Yes include details of which EPP(s) here. <i>Environmental Protection (Gnangara Mound Crown Land) Policy 1992</i>. The level and quality of groundwater, native vegetation and wetlands are protected in this area</p>		
<p>Is the Premises subject to any EPP requirements? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>Environmental quality objectives to be met as per Schedule 1 of the Policy. No contaminants to be discharged into the area. Mining shall only be undertaken in accordance with authorisation under the Act or any written law. Groundwater shall only be abstracted in accordance with authorisation under the Act or any written law.</p>		



### 3 Executive summary of proposal and assessment

Urban Resources Pty Ltd (Urban) proposed Maralla Road sand mine is located on Mining Tenement M70/326, part of Lot 5892, Maralla Road, Bullbrook. Brajkovich Holdings and Stefanelli Nominees privately own the land with a sand mining lease granted to Urban. The tenement lies within the City of Swan, approximately 1.5 km north of the newest subdivision in Ellenbrook.

The process will involve cleaning and sizing the sand to various grades via mobile dry screening (150,000 tonnes per annum).

Mined material (sand) will be dry screened via a mobile screening plant which will move around the mining area in stages. This mobile screening unit incorporates three way split scalping, screening and stockpiling. Vegetation is separated from sand ( $\leq 1$  mm) with waste material returned to the pit floor for rehabilitation activities. The company are planning to add a wet screen beneficiation plant to the operations in the future.

Water for the operation will be tankered onsite as needed.

The topography of the site ranges from 50 – 70 m Australian Height Datum (AHD) - in the middle of the tenement is a small hill with a ridge line of approximately 70 m AHD, which falls to approximately 50 m AHD at the northern and southern boundaries of the tenement.

The tenement is located on the highly permeable sands of the Bassendean Dune systems, which have very high infiltration rates with minimal to no surface runoff observed. Areas of wetland communities and lower depressions between the dune systems can exhibit some pooling of surface water, however, other than areas of high or permanent groundwater intrusion, only temporary ponding is experienced. One conservation category listed wetland (dampland) mapped as part of the Geomorphic Wetlands of the Swan Coastal Plain dataset occurs within the north east portion of the tenement.

The proposal is to mine silica sand material to within 2 m of the historical maximum water level that has been recorded by the Department of Water (DoW) and referenced as part of the Perth Groundwater Atlas. The operation proposes to have a minimum 2.75 m separation depth between excavation and highest anticipated groundwater level for 2007.

The majority of the tenement is declared as an Environmentally Sensitive Area (ESA). ESA's are areas where vegetation usually has high conservation values and exemptions under the clearing regulations do not apply. The clearing of native vegetation has been previously assessed and approved as part of the original *Environmental Protection Act 1986 - Part IV* process in 1988. Rehabilitation of the premises will be subject to a Mine Closure Plan approved by the Department of Mines and Petroleum.

The nearest high density residential area (Ellenbrook) is located approximately 1.5km to the south of the site, with two semi-rural residents approximately 550-600 m to the north of the northern extent of the ord to be mined.

The key potential emissions associated with the operation of the proposal are noise, dust and contaminated stormwater. The relatively basic nature of the operations proposed as well as the management commitments made by Urban Resources result in the potential environmental risk of the operations (as detailed in the Decision Table below) being assessed as low.



## 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 TABLE				
Works Approval/Licence section	Condition number W = Works Approval L = Licence	OSC or NSC	Justification (including risk description & decision methodology where relevant)	Reference documents
General conditions	L 1.2.5	OSC	<p><b>Operation</b></p> <p><u>Emission description</u>  <i>Emission:</i> Potential spillage of hydrocarbons associated with refuelling of equipment (emergency situation).  <i>Impact:</i> Potential contamination of surrounding land and soil with impacts to ecosystems from hydrocarbons.  <i>Controls:</i> No bulk storage of liquid hydrocarbons or other hazardous substances will occur on site. Fuel will be delivered to site daily via a self-contained re-fuelling truck. On-site refuelling of vehicles and machinery will be undertaken within a site compound complex and will be carried out over a constructed hardstand area.</p> <p><u>Risk Assessment</u>            Consequence: Moderate            Likelihood: Unlikely            Risk Rating: Moderate</p> <p><u>Regulatory controls</u>            Standard conditions will be included in the licence to ensure that hazardous materials are stored in accordance with the appropriate Code of Practice so that any spills and contaminated stormwater are managed appropriately. OSC 1.2.5 will be included in the operating licence to require the appropriate management of stormwater on the site.</p>	General provisions of the <i>Environmental Protection Act 1986</i> .



DECISION TABLE				
Works Approval/ Licence section	Condition number W = Works Approval L= Licence	OSC or NSC	Justification (including risk description & decision methodology where relevant)	Reference documents
			<u>Residual Risk</u> <i>Consequence:</i> Minor <i>Likelihood:</i> Unlikely <i>Risk Rating:</i> Moderate	
<b>Emissions general</b>	L2.1.1	OSC	Descriptive limits will be set through the licence relating to dust emissions, and therefore OSC regarding recording and investigation of exceedances of limits or targets has been included.	N/A
<b>Point source emissions to air including monitoring</b>	L2.2 and L3.2	N/A	<b>Operation</b> There are not expected to be any point source emissions to air from the premises under normal operating conditions.	General provisions of the <i>Environmental Protection Act 1986</i> .  Application supporting documentation.
<b>Point source emissions to surface water including monitoring</b>	L2.3 and L3.3	N/A	<b>Operation</b> There are not expected to be any point source emissions to surface water from the premises under normal operating conditions. There is a Conservation Category Wetland (CCW) category – “dampland” located in the north-eastern portion of the site. This area (including a 50m buffer) has been excluded from the construction and operational areas of the proposal.  No specific conditions relating to surface water emissions or the monitoring of the same are required for inclusion.	Application supporting documentation.  <i>Environmental Protection (Unauthorised Discharges) Regulations, 2004.</i>
<b>Point source emissions to groundwater including monitoring</b>	L2.4 and L3.4	N/A	<b>Operation</b> There are not expected to be any point source emissions to groundwater from the premises under normal operating conditions. Water quality is not expected to be impacted by operations and direct point source emissions to groundwater are not expected. Water quality monitoring of groundwater will be required under Department of Water approvals, but does not form part of this assessment. The prescribed operations will maintain a minimum separation of 2.75 m above the highest groundwater table level.	Application supporting documentation.  <i>Environmental Protection (Unauthorised Discharges) Regulations, 2004.</i>



DECISION TABLE				
Works Approval/ Licence section	Condition number W = Works Approval L= Licence	OSC or NSC	Justification (including risk description & decision methodology where relevant)	Reference documents
<b>Emissions to land including monitoring</b>	L2.5 and L3.5	N/A	<p><b>Operation</b></p> <p>There are not expected to be any point source emissions to land from the premises under normal operating conditions.</p> <p>Extraction and processing of product using the dry screening method will not produce any emissions that require discharging.</p>	<p>Application supporting documentation</p> <p><i>Environmental Protection (Unauthorised Discharges) Regulations, 2004.</i></p>
<b>Fugitive emissions</b>	L2.6.1-2.6.2	OSC	<p><b>Operation</b></p> <p><u>Emission Description</u></p> <p><i>Emission:</i> Potential dust from topsoil stripping, sand excavation, vehicle movements, screening and drying operations, and stockpiling and loading.</p> <p><i>Impact:</i> Reduced local air quality that could impact amenity and human health, potential impacts on surrounding vegetation.</p> <p><i>Controls:</i> Mitigated by the separation distance (approximately 550 m) to the nearest sensitive receptors. A dust management plan has been developed as part of the mining proposal with measures to include wetting down of dust generating areas, monitoring of operations, minimising cleared areas, rehabilitation of disturbed areas as soon as practicable after mining, not operating during strong/adverse wind conditions, restricting speed limits on site, trucks covering loads, management of stockpile heights and slopes to reduce wind pickup and the recording, investigation and follow-up actions associated with any complaints. Additionally, dust management measures in the processing area will include enclosure of sand transfer points with dust extraction and filters to be installed where appropriate.</p> <p><u>Risk Assessment</u></p> <p><i>Consequence:</i> Minor</p> <p><i>Likelihood:</i> Possible</p> <p><i>Risk Rating:</i> Moderate</p>	<p><i>Environmental Protection (Unauthorised Discharges) Regulations, 2004.</i></p> <p><i>Maralla Road Dust Management Plan – Urban Resources Pty Ltd 2015</i></p> <p>Application supporting documentation</p>





DECISION TABLE				
Works Approval/ Licence section	Condition number W = Works Approval L= Licence	OSC or NSC	Justification (including risk description & decision methodology where relevant)	Reference documents
			<p><u>Regulatory Controls</u> Both OSC 2.6.1 and 2.6.2 dust conditions will apply to the licence. It should be noted that the effectiveness of the dust management plan is dependent on water being tankered onto site as needed.</p> <p><u>Residual Risk</u> <i>Consequence:</i> Minor <i>Likelihood:</i> Unlikely <i>Risk Rating:</i> Moderate</p>	
<b>Odour</b>	L2.7	N/A	<p><b>Operation</b> There are not expected to be any odour emissions under normal operating conditions and as such, specific conditions relating to odour have not been included in the licence.</p>	N/A
<b>Noise</b>	L2.8	N/A	<p><b>Operation</b> <u>Emission Description</u> <i>Emission:</i> Noise from screening plant and beneficiation operations, backup diesel generator (when operational) and vehicle movements. No crushing or blasting will be undertaken on site. <i>Impact:</i> Unacceptable noise emissions affecting health and wellbeing of people at nearest sensitive receptors. Excessive noise may also cause disturbance to fauna inhabiting nearby areas. <i>Controls:</i> Potential noise impacts will be partially mitigated by separation distance (approximately 550 m) to the nearest residence – in line with EPA Guidance Statement 3 (Extractive industry/screening – 500 m buffer). Equipment will utilise appropriate silencing mechanisms and will be properly maintained at all times. Reversing safety alarms will be monitored and operated at the lowest audible setting to reduce potential impacts.</p> <p><u>Risk Assessment</u> <i>Likelihood:</i> Possible <i>Consequence:</i> Insignificant</p>	<p><i>Environmental Protection (Noise) Regulations, 1997.</i></p> <p>EPA Guidance Statement No. 3 - Separation Distances Between Industrial and Sensitive Land Uses, 2004.</p> <p>Acoustic Assessment for Maralla Road - HSA</p> <p>Application supporting documentation</p>





DECISION TABLE				
Works Approval/ Licence section	Condition number W = Works Approval L = Licence	OSC or NSC	Justification (including risk description & decision methodology where relevant)	Reference documents
			<p><i>Risk rating: Low</i></p> <p><u>Regulatory Controls</u> Specific conditions to regulate noise emissions are not considered necessary as the premises is subject to the <i>Environmental Protection (Noise) Regulations 1997</i>. A complaints register and a complaints management procedure will be incorporated as a condition of the operating licence. An acoustic assessment has been undertaken and maximum noise levels are modelled to be within the levels allowed in the Noise Regulations.</p> <p><u>Residual Risk</u> <i>Likelihood: Possible</i> <i>Consequence: Insignificant</i> <i>Risk rating: Low</i></p>	
<b>Monitoring general</b>	W3 L3	N/A	No general monitoring conditions are required in the works approval or licence. Routine monitoring of groundwater levels - to be reported to the Department of Water – form part of the requirements of Ministerial Statement 024 and fall outside of the scope of this assessment process.	N/A
<b>Monitoring of inputs and outputs</b>	W3 L3.6.1	N/A OSC	<p><b>Construction</b> No specified conditions relating to monitoring of input and outputs are required on the works approval.</p> <p><b>Operation</b> Monitoring of inputs and outputs will be included as an OSC to enable the assessment of volumes of material processed against licence limits and categories permitted.</p>	N/A
<b>Process monitoring</b>	N/A	N/A	No specific conditions relating to process monitoring are required to be added to the works approval or licence.	N/A
<b>Ambient quality monitoring</b>	N/A	N/A	No specific conditions relating to ambient environmental quality monitoring are required to be included in the works approval or licence.	N/A



<b>DECISION TABLE</b>				
<b>Works Approval/ Licence section</b>	<b>Condition number W = Works Approval L = Licence</b>	<b>OSC or NSC</b>	<b>Justification (including risk description &amp; decision methodology where relevant)</b>	<b>Reference documents</b>
<b>Meteorological monitoring</b>	W3 and L3	N/A	No specific conditions relating to meteorological monitoring have been included in the works approval or licence. It should be noted that reporting of current weather conditions, in the case of a complaint being received, will be required as part of the licence conditions.	N/A
<b>Improvements</b>	L4	N/A	No specific conditions relating to improvements are included in the works approval or licence.	N/A
<b>Information</b>	L5.1 – L5.4	N/A	The standard conditions relating to provision of a compliance document have been included in the works approval.  Standard conditions relating to the management of records and complaints, notification requirements, the submission of an annual audit compliance report and annual environmental report will be included in the licence.	N/A
<b>Licence Duration</b>	N/A	N/A	The proposed life of the mine is 10-12 years, with an operating licence being required for the entire period. The licence will be issued for 5 years initially.	N/A



## 5 Advertisement and consultation table

Date	Event	Comments received/Notes	How comments were taken into consideration
5/01/2015	Application advertised in West Australian (or other relevant newspaper)	Three submissions received – See Appendix A	See Appendix A
06/05/2015	Proponent sent a copy of draft instrument	No comments were received.	n/a



## 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



## Appendix A

### Submission/s

Three submissions were received by DER after the application was advertised. The submissions refer to the impacts that the operations are currently having on the submitter and the possible impacts that the granting of the licence will have in the future. These impacts are predominantly relating to noise, dust and groundwater impacts. The submitters also challenge the accuracy of the original Works Approval Decision Document.

#### Submitter 1

1. The submission states that the volume of truck movements through the site exceeds the operating conditions and occurs outside the operating condition's time limits. DER notes that the operating conditions in question are part of the Extraction Industry Licence (EIL) issued by the City of Swan and not part of DER's jurisdiction.
2. The submitter is concerned about the impacts dust may have on the drinking water source at their premises. L2.6.2 states that the licensee shall ensure visible dust from operations do not cross the premises boundary. Any generation of dust from activities outside the premises boundary from activities such as truck movements are not regulated by the DER.
3. The submitter is concerned about noise impacting on their lifestyle. The licensee will need to comply with the noise levels set in the Environmental Protection (Noise) Regulations 1997. An acoustic assessment on the activities was conducted by Herring Storer Acoustics in April 2015 and showed that the noise levels at the nearest sensitive premises would be compliant, even under a "worst case" scenario.

#### Submitter 2

1. The submission states that Urban Resources is under investigation by other statutory bodies in respect to their activities at the site. An issued licence under Part V of the EP Act does not allow the licensee to act outside the conditions of another licence or Act. DER does not consider the outcomes of unrelated investigations undertaken by other statutory authorities in assessing the emissions and discharges from the premises.
2. The submission states that Urban Resources does not have a licence to take water from DoW. Water will be used onsite for dust suppression and therefore is possibly needed to comply with licence conditions; however the company is not limited to water from a DoW licence and has confirmed they will be sourcing water from an offsite supplier.
3. The submission states that Urban Resources has breached its operating conditions over a number of years, citing operating times and daily truck movements. These matters are not part of the Part V licence and are dealt with through the local LGA, the City of Swan.
4. The submitter is concerned that the groundwater data is not up to date and thinks that the 2007 reading for maximum groundwater levels could be incorrect. The City of Swan deals with the depth of the extraction in the EIL. The works approval includes a condition that references the current groundwater level and compliance will be assessed against current data.
5. The submitter is concerned that the application for licence is for 500,000 tonnes/year. The application for licence is for a dry screen plant at 150,000 tonnes/year.
6. The submitter points out that the original Decision Document states that the nearest sensitive receptor is 1070 m from the premises boundary, neglecting a number of closer, rural premises. The submitter states that the nearest sensitive premises is 220 m to the north of



the site. The site is 220 m to the north of the cadastral boundary, but the licence premises boundary is actually the boundary for mining tenement M70/326, making the nearest sensitive premises approximately 500 m to the north. The Decision Document has been updated to reflect this.

7. The submitter is concerned about the clearing of native vegetation. This is not part of the Part V review process and in this case, has been dealt with via Ministerial Statement 024 (as noted by the submitter).

### Submitter 3

1. The submitter has asked DER to refuse the application for 270,000 tonnes/year, without adequate justification. This application is to operate a category 12 licence for a maximum throughput of 150,000 tonnes/year, as allowed by the extractive industry licence issued by the City of Swan.