



Government of Western Australia
Department of Environment Regulation

Your ref: W5694/2014/1
Our ref: DER2014/001111-1
Enquiries: Luke Claessen
Phone: 08 9333 7487
Email: luke.claessen@der.wa.gov.au

Mr Stephen Elliot
Urban Resources Pty Ltd
PO Box 739
COMO WA 6952

Dear Mr Elliot

ENVIRONMENTAL PROTECTION ACT 1986: WORKS APPROVAL GRANTED

Premises:

Maralla Road Sand Mine
Part of Lot 5892 Maralla Road
Bullsbrook WA 6084

Works Approval Application Number: W5694/2014/1

A works approval under the *Environmental Protection Act 1986* (the Act) has been granted for the above premises. The Department of Environment Regulation will advertise the issuing of this works approval in the public notices section of *The West Australian* newspaper.

The works approval includes attached conditions. Under section 55(1) of the Act, it is an offence to contravene a condition of a works approval. This offence carries a penalty of up to \$125,000 and a daily penalty of up to \$25,000

In accordance with section 102(1)(c) of the Act, you have 21 days to appeal the conditions of the works approval. Under section 102(3)(a) of the Act, any other person may also appeal the conditions of the works approval. To lodge an appeal contact the Office of the Appeals Convenor on 6467 5190 or by email at admin@appealsconvenor.wa.gov.au.

Emissions from the premises that are the subject of a works approval are not authorised until or unless a licence is issued or unless the emissions are in accordance with the works approval and while that works approval is in force.

If you have any queries regarding the above information, please contact Luke Claessen on 9333 7487.

Yours sincerely

Danielle Eyre
Officer delegated under section 20
of the *Environmental Protection Act 1986*

4 September 2014

enc: *Environmental Protection Act 1986* Works Approval W5694/2014/1
cc: City of Swan



Works Approval

Environmental Protection Act 1986, Part V

Works Approval Holder: Urban Resources Pty Ltd

Works Approval Number: W5694/2014/1

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
as depicted in Schedule 1.

Issue date: Thursday, 4 September 2014

Commencement date: Monday, 8 September 2014

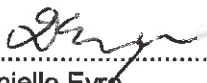
Expiry date: Thursday, 7 September 2017

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
5	Processing or beneficiation of metallic or non-metallic ore: premises on which – (a) metallic or non-metallic ore is crushed, ground, milled or otherwise processed; or (b) tailings from metallic or non-metallic ore are reprocessed; or (c) tailings or residue from metallic or non-metallic ore are discharged into a containment cell or dam.	50 000 tonnes or more per year	270 000 tonnes per annual period

Conditions

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


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Danielle Eyre
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 August until 31 July in the following year;

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

'CEO' for the purpose of correspondence means;

Manager Licensing (Greater Swan)
Department of Environment Regulation
Locked Bag 33

CLOISTERS SQUARE WA 6850

Telephone: (08) 9333 7510

Facsimile: (08) 9333 7550

Email: grswanbooragoon@der.wa.gov.au ;

'code of practice for the storage and handling of dangerous goods' means document titled "Storage and handling of dangerous goods: Code of Practice" published by the Department of Mines and Petroleum, as amended from time to time;

'dangerous goods' has the meaning defined in the *Dangerous Goods Safety (Storage and Handling of Non-explosives) Regulations 2007*;

'environmentally hazardous material' means material (either solid or liquid raw materials, materials in the process of manufacture, manufactured products, products used in the manufacturing process, by-products and waste) which if discharged into the environment from or within the premises may cause pollution or environmental harm. Note: Environmentally hazardous materials include dangerous goods where they are stored in quantities below placard quantities. The storage of dangerous goods above placard quantities is regulated by the Department of Mines and Petroleum;

'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;

'Works Approval' means this Works Approval numbered W5694/2014/1 and issued under the *Act*;

'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		
Document	Parts	Date of Document
Works Approval Application Form (DER document reference A759197).	All	14 May 2014
Maralla Road Sand Mine Processing Plant Works Approval Support Document Urban Resources Pty Ltd, EnviroWorks Consulting, Project Number U02-J04 (DER document references A769216, A770052, A769199, A770054, A770059, A770070, A770062, A770063, A770069, A769218, A770067).	All, including Drawings and Appendices	7 June 2014 (received by DER 13 June 2014)
Response Letter to DER, RE: Maralla Road Sand Mine – Beneficiation Plant (Works Approval Application Number: pqf4uw), written by Mr Stephen Elliot, Manager, Urban Resources Pty Ltd (DER document reference A769217).	All	13 June 2014

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, except where storage is prescribed in section 1.3, shall ensure that environmentally hazardous materials are stored in accordance with the code of practice for the storage and handling of dangerous goods.

1.3 Premises operation

There are no specified conditions relating to Premises operation in this section.

2 Emissions

There are no specified conditions relating to emissions in this section.

3 Monitoring

There are no specified conditions relating to monitoring in this section.

4 Improvements

There are no specified conditions relating to improvements in this section.



5 Information

5.1 Reporting

- 5.1.1 The Works Approval Holder shall submit a compliance document to the CEO, following the construction of the works and prior to commissioning of the same.
- 5.1.2 The compliance document shall:
- (a) certify that the works were constructed in accordance with the conditions of the works approval;
 - (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.

Premises map

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

Premises boundary

MARALLA RD

HALDEN RD

LEGEND

Notes: Parish Metropolitan Area Central 15m Orthomosaic Landgate 2012 Geomorphic Wetlands (Classified) Swan Coastal Plain	<ul style="list-style-type: none"> [Blue Hatched] Water [Green Hatched] Bushland [Yellow Hatched] Pasture [Light Green Hatched] Suburban Vegetation [Dark Green Hatched] Suburban Woodland [Pink Hatched] Forest [Red Hatched] Swamp 	<ul style="list-style-type: none"> [Orange Hatched] K. S. S. S. [Brown Hatched] Non-forest [Grey Hatched] Mining Tenements
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Scale 1:6728

Approximate scale representation of 1:6728

Geographic Datum: Australian 1984

Note: This map has been prepared by aerial photography interpretation and may contain errors.

Prepared by: [Name]

Date: 15/01/2012

This map was derived from the map which was used to prepare the site plan and is intended to provide a general indication of the location of the premises.

Department of Planning and Infrastructure
 Environmental Management Division



Decision Document

Environmental Protection Act 1986, Part V

Proponent: Urban Resources Pty Ltd

Works Approval: W5694/2014/1

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, 4 September 2014

Commencement date: Monday, 8 September 2014

Expiry date: Thursday, 7 September 2017

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 and legal requirements and that the Works Approval and its conditions will ensure that an appropriate level of environmental protection is provided.]

Decision Document prepared by: Luke Claessen
Licensing Officer

Decision Document authorised by: Alan Kietzmann
A/Manager Licensing



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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 checked="" type="checkbox"/> New Licence <input type="checkbox"/> Licence amendment <input type="checkbox"/> Works Approval amendment <input type="checkbox"/>	
Activities that cause the premises to become prescribed premises	Category number(s) 5	Assessed design capacity 270 000 tonnes per annual period
Application verified	Date: 19 June 2014	
Application fee paid	Date: 4 July 2014	
Works Approval has been complied with	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>	
Compliance Certificate received	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" 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 type="checkbox"/> No <input checked="" 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"/>	Referral decision No: Managed under Part V <input type="checkbox"/> Assessed under Part IV <input checked="" type="checkbox"/>
Is the proposal subject to Ministerial Conditions?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Ministerial statement No: 024 EPA Report No: 318
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 <input type="checkbox"/> No <input checked="" type="checkbox"/> Department of Water consulted Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Is the Premises within an Environmental Protection Policy (EPP) Area Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> 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		
Is the Premises subject to any EPP requirements? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> 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.		



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 works approval includes:

- The use of a tracked, diesel-powered mobile screening plant (which will be moved around the mining areas);
- construction of a ROM;
- construction of a compound with concrete hardstand
- installation of a wet trommel screen, cyclone and rotary drier/cooler;
- construction of settling ponds.

The process will involve cleaning and sizing the sand to various grades via two, basic processing methods:

- Mobile dry screening (150,000 tonnes per annum)
- Wet and dry beneficiation (120,000 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 (≤ 1 mm) with waste material returned to the pit floor for rehabilitation activities.

The wet and dry beneficiation process will consist of:

1. Run of Mine (ROM) wet plant feed
2. Wet trommel screen sand sizing
3. Removal of fine fraction (processing waste) via cyclone
4. Dewatering
5. Stockpiling of wet plant product (washed sand)
6. Washed sand dry plant feed
7. Drying of sand via rotary dryer
8. Cooling of sand via rotary cooler
9. Dry screening and separation into different sand products
10. Dry sand product bagging and loading.

The processing plant will produce a chemically benign, wet processing waste (fine particle stream). The processing waste and all other reject material will be stockpiled, and then returned to the mine area for use in rehabilitation and stabilisation operations.

Water for the operation will be derived via an on-site bore with groundwater allocation of 100,000kL to be transferred from The Vines Golf Course / Resort. The application for this water resource is being assessed by the Department of Water.

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). ESAs 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. The beneficiation plant works proposed in this application occur on areas of the site that have already been cleared of vegetation under Ministerial Statement 024 – which was issued under the Part IV process. 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 850 m to the north and east of the proposed processing plant.

The proponent has stated that the proposal to construct a Processing Plant (Screening and Beneficiation) at the Maralla Road Sand Mine complies with Ministerial Statement 024, which was issued by the Minister for Environment under Part IV of the *Environmental Protection Act 1986*, based on assessment of the proponent's proposal for the project: *Specialty Silica Sand Project at Gnangara - Public Environmental Report (PER)* (Silica Sales Pty Ltd, 1987).

The key potential emissions associated with the construction and 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.

The works approval will be issued to Urban for the standard period of three years. After construction, Urban will be required to provide a compliance document to DER and apply for a category 5 *Environmental Protection Act 1986* licence to allow operations to commence.

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	W – N/A L 1.2.5	N/A OSC	<p>Construction and Operation</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: Minor Likelihood: Unlikely Risk Rating: Moderate</p> <p><u>Regulatory controls</u> Conditions will be included in the works approval and 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	
Emissions general	W2 L2.1.1	N/A 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
Point source emissions to air including monitoring	W2 and W3 L2 and L3	N/A	<p>Construction and Operation</p> <p><u>Emission Description</u> <i>Emission:</i> Silica dust from beneficiation/drying processes. <i>Impact:</i> Potential respirable dust impacts human health, . <i>Controls:</i> The proponent has stated the installation of a dust baghouse and filter upstream of the rotary drier to reduce particulate emissions to <50 mg/m³ from the drying operations will be completed.</p> <p><u>Risk Assessment</u> <i>Consequence:</i> Moderate <i>Likelihood:</i> Unlikely <i>Risk Rating:</i> Moderate</p> <p><u>Regulatory Controls</u> OSC will be included in the operating licence that will require the appropriate management and monitoring of silica dust from point sources on the site.</p> <p><u>Residual Risk</u> <i>Consequence:</i> Moderate <i>Likelihood:</i> Unlikely <i>Risk Rating:</i> Moderate</p>	<p>General provisions of the <i>Environmental Protection Act 1986</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
Point source emissions to surface water including monitoring	W2 and W3 L2.3 and L3.3	N/A	<p>Construction and Operation There are not expected to be any point source emissions to surface water from the premises during construction or 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.</p> <p>No specific conditions relating to surface water emissions or the monitoring of the same are required for inclusion.</p>	<p>Application supporting documentation.</p> <p><i>Environmental Protection (Unauthorised Discharges) Regulations 2004</i></p>
Point source emissions to groundwater including monitoring	W2 and W3 L2.4 and L3.4	N/A	<p>Construction and Operation The processes involved in the beneficiation plant will use water sourced from the local aquifer, with no additives proposed. 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.</p>	<p>Application supporting documentation.</p> <p><i>Environmental Protection (Unauthorised Discharges) Regulations 2004</i></p>
Emissions to land including monitoring	W2 and W3 L2.5 and L3.5	N/A	<p>Construction and Operation <u>Emission description</u> Emission: Discharge of processing water from unlined infiltration ponds (normal operations). The mining and beneficiation activities do not require the use of chemicals, mainly dry screening and washing with pumped groundwater - resulting in a chemically benign by-product (no significant change in water quality expected) – this process water will also be used in rehabilitation and dust suppression activities. <u>Impact:</u> This process water should not be contaminated as the beneficiation and other related processes do not require additives, however some localised groundwater mounding beneath the ponds may occur. Water will be locally sourced and recycled into the processes, and used for dust suppression as required. The pumping of groundwater for operational use and discharge of</p>	<p>Application supporting documentation</p> <p><i>Environmental Protection (Unauthorised Discharges) Regulations 2004</i></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>process water may affect the local hydrology of the area. The water extraction is regulated by the Department of Water. Most of the process water will filter back into the aquifer (save water used for dust suppression and lost to evaporation). Controls: No additional controls are proposed to manage the emissions.</p> <p><u>Risk Assessment</u> Consequence: Moderate Likelihood: Unlikely Risk Rating: Moderate</p> <p><u>Regulatory controls</u> No regulatory controls are proposed for the discharge of water to land.</p> <p><u>Residual Risk</u> Consequence: Moderate Likelihood: Unlikely Risk Rating: Moderate</p>	
Fugitive emissions	W – N/A L2.6.1-2.6.2	OSC	<p>Construction and Operation <u>Emission Description</u> Emission: Potential dust from topsoil stripping, sand excavation, vehicle movements, screening and drying operations, and stockpiling and loading. Impact: Reduced local air quality that could impact amenity and human health, potential impacts on surrounding vegetation. Mitigated by the separation distance (approximately 850 m) to the nearest sensitive receptors. Controls: 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.</p>	<p><i>Environmental Protection (Unauthorised Discharges) Regulations, 2004.</i> 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>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> <i>Consequence:</i> Minor <i>Likelihood:</i> Possible <i>Risk Rating:</i> Moderate</p> <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 accessing a reliable water source. At the time writing, an application for water licence of 100,00kL had been lodged with the Department of Water, but not yet assessed.</p> <p><u>Residual Risk</u> <i>Consequence:</i> Minor <i>Likelihood:</i> Unlikely <i>Risk Rating:</i> Moderate</p>	
Odour	W2 L2.7	N/A	<p>Construction and Operation 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
Noise	N/A L2.8	N/A	<p>Construction and Operation <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.</p>	<i>Environmental Protection (Noise) Regulations 1997</i> EPA Guidance

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>Impact: Unacceptable noise emissions affecting health and wellbeing of people at nearest sensitive receptors. Excessive noise may also cause disturbance to fauna inhabiting nearby areas. Potential noise impacts will be partially mitigated by separation distance (approximately 850 m) to the nearest residence – in line with EPA Guidance Statement 3 (Extractive industry/screening – 500 m buffer).</p> <p>Controls: 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> Likelihood: Possible Consequence: Insignificant Risk rating: Low</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>. DER's further assessment for an operating licence will require the proponent to provide specific sound level details and modelling of the proposed equipment, to ensure potential impacts have been taken into account. A complaints register and a complaints management procedure will be incorporated as a condition of the operating licence.</p> <p><u>Residual Risk</u> Likelihood: Possible Consequence: Insignificant Risk rating: Low</p>	<p>Statement No. 3 - Separation Distances Between Industrial and Sensitive Land Uses, 2004.</p> <p>Application supporting documentation.</p>
Monitoring general	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



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
Monitoring of inputs and outputs	W3 L3.6.1	N/A OSC	Construction No specified conditions relating to monitoring of input and outputs are required on the works approval. Operation 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.	N/A
Process monitoring	N/A	N/A	No specific conditions relating to process monitoring are required to be added to the works approval or licence.	N/A
Ambient quality monitoring	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
Meteorological monitoring	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
Improvements	W4 and L4	N/A	No specific conditions relating to improvements are included in the works approval or licence.	N/A
Information	W5 L5.1 – L5.3	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
Licence Duration	N/A	N/A	The construction works for the beneficiation plant are planned to be carried out continuously over a 12 month period, with work to commence as soon as possible after all relevant approvals have been gained. The works approval will	N/A

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
			be issued for a standard 3 year duration which will allow for any delays. 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.	



5 Advertisement and consultation table

Date	Event	Comments received/Notes	How comments were taken into consideration
28/07/2014	Application advertised in West Australian (or other relevant newspaper)	No comments received.	N/A
31/07/2014	Application referred to interested parties listed: City of Swan	No comments received.	N/A
29/08/2014	Proponent sent a copy of draft instrument	Minor wording change as equipment details not finalised.	Incorporated into final versions of documents.



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

