



Decision Document

Environmental Protection Act 1986, Part V

Proponent: **Tox Free Australia Pty Ltd**

Licence: **L8991/2016/1**

Registered office: Level 5, 55 Carrington Street
NEDLANDS WA 6009

ACN: 127 853 561

Premises address: Tox Free Kimberley Resource Recovery Centre
18 Archer Street, Broome WA 6725

Issue date: Thursday, 22 September 2016

Commencement date: Monday, 26 September 2016

Expiry date: Thursday, 25 September 2036

Decision

Based on the assessment detailed in this document the Delegated Officer has decided to issue a Licence. The Delegated Officer considers that in reaching this decision, all relevant considerations have been taken into account.

Decision Document prepared by: Damian Thomas
Licensing Officer

Decision Document authorised by: Stephen Checker
Delegated Officer



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1 Purpose of this Document

This decision document explains how the 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 <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	Category number(s)	Assessed design capacity
	61	10,000 tonnes per annual period
	62	10,000 tonnes per annual period
Application verified	Date: 07/08/2016	
Application fee paid	Date: 10/08/2016	
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	Not applicable	
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 type="checkbox"/> No <input checked="" type="checkbox"/>	Referral decision No: Managed under Part V <input type="checkbox"/> Assessed under Part IV <input type="checkbox"/>
Is the proposal subject to Ministerial Conditions?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Ministerial statement No: EPA Report No:
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 type="checkbox"/> No <input checked="" type="checkbox"/>		
Is the Premises subject to any EPP requirements? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		



3 Executive summary of proposal and assessment

Tox Free Australia Pty Ltd (Tox Free) currently operates a Materials Recovery Facility (MRF) at 18 Archer Street, Broome. The MRF provides waste collection, recycling and processing services for a variety of commercial, industrial and domestic settings.

The operations on site currently comprise a materials handling facility, transit of controlled wastes and sorting, separating and packaging of recyclable materials for reprocessing. Infrastructure already on site includes administration buildings, a workshop, a vehicle wash down area, a 55,000L bunded storage tank, a 35,000L self bunded waste oil storage tank, four 2,000L in-ground sumps, temporary storage area for Intermediate Bulk Containers (IBCs), staff lunch room, corrugated iron shed (used for the MRF) as well as parking, storage and lay down areas.

Tox Free hold a Controlled Waste Bulk and Packaged Carrier Licence (No. T00700) for the carriage of controlled wastes within Western Australia in accordance with the *Environmental Protection (Controlled Waste) Regulations 2004*. Under the Controlled Waste Licence, the site is licensed for the carriage of Bulk Controlled Waste and Packaged Controlled Waste. The licence expires 26 February 2020.

Tox Free have applied to DER for a licence to operate the Category 61 Liquid Waste Facility (LWF) constructed under works approval W5548/2013/1 and Category 62 Solid Waste Depot for the MRF. Tox Free submitted the works approval compliance document required under condition 5.11 and 5.1.2 of the works approval on 18 July 2016 advising that Tox Free have complied with all the conditions of the works approval. Liquid wastes, including oily water, waste oil and wash water, will be stored onsite, in bulk and packaged form, pending transportation by licensed carriers to an authorised waste disposal site. Works Approval W5548/2013/1 did not originally assess the MRF however due to policy changes, the operation of the MRF will be assessed under this licence application.

Works Approval W5548/2013/1 involved upgrading the MRF and packaged waste transit area to include the following:

- installation of a bulk truck loading / unloading area;
- Installation of a new packaged waste transit area with the capacity to store up to 40 IBCs
- installation of a 35,000L self bunded waste oil storage tank;
- installation of four 2,000L in-ground sumps;
- connection of an existing 55,000L bunded oily water storage tank to the four 2,000L in-ground sumps;
- installation of power, water and lighting to this area as well as an electronic gate at the entrance; and
- moving the current cleaning facilities to this area.

Tox Free operates and provides collection, recycling and reprocessing services for a variety of commercial, industrial and domestic settings including:

- Domestic putrescible waste services;
- Commercial waste services;
- Industrial street sweeping;
- Cyclone clean up;
- Litter collection;
- Liquid waste management;
- Industrial and household hazardous substances management;
- Medical waste collection; and
- Asbestos collection and disposal.



The proponent has provided the following summary of MRF operations:

At the MRF recyclable co-mingled materials collected from households and commercial businesses are fed along a receivable belt and processed by separators into specific streams of glass, ferrous metal, aluminium, clear plastics (Code 1) and other plastics (Code 2), mixed paper and cardboard. Once sorted the material is baled for transportation to recycling markets for re-processing into new products or transferred to the Broome Landfill for disposal.

Industrial and household hazardous substances management waste will be brought onto the premises but won't be processed through the MRF. It will be transited prior to disposal at one of Tox Free's other licensed premises (unless industrial waste waters). The transit storage will be on the new concrete pad.

Medical waste is collected by Tox Free and it is directly taken to the licensed Broome Landfill for deep burial. It is not and will not be brought onto the premises.

Asbestos collection and disposal is managed by Tox Free but is only collect for transport (double wrapped, labelled etc.) and it is also taken directly to Broome Landfill for deep burial. It is not and will not be brought onto the premises.

Figure 1 below shows the layout design of the constructed liquid waste storage area. All areas for the storage and handling of liquid wastes will be bunded and sealed by way of High-Density Polyethylene (HDPE) lined concrete pads and will be compliant with the relevant Australian Standards for the Storage of Dangerous Goods. Operations will be monitored daily and contaminated stormwater will be pumped out of bunds and disposed of via licence waste carriers. Spill kits will be available on site and all staff will be appropriately trained to handle hazardous materials and spill response.

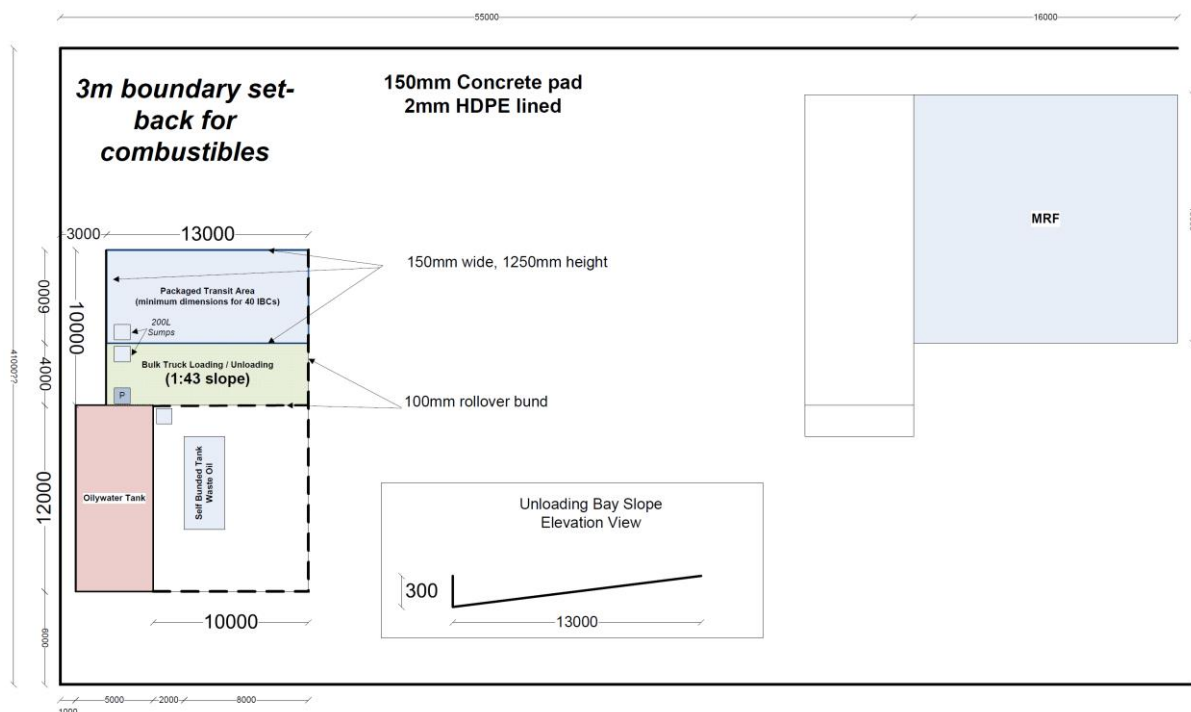


Figure 1. Layout design of the Tox Free Broome liquid waste storage area.



The maximum production and design capacity for the LWF will be 10,000 tonnes per annual period while the maximum production and design capacity of the MRF will be 10,000 tonnes per annual period.

This Decision Document is based on an assessment of the Applicant's application for DER Licence dated 18 July 2016 and Works Approval Supporting Document Broome Facility Upgrade Tox Free Broome, 18 Archer Street, Broome Western Australia – February 2013 and additional documentation submitted 5 August 2016.

This Decision Document identifies the risks of the Application and the proposed controls for these risks. In Summary:

- The Licence will be granted subject to the controls and likely conditions for the Licence described in section 4 of this draft Decision Document.

Location and siting

The premises location current features are:

- **Geology:** Reference to published geological maps indicates the superficial geology underlying the local area comprises sand and sandstone. The bedrock underlying the site comprises fine to coarse-grained sandstone, mudstone and conglomerate.
- **Land use:** The premises are an existing Waste Depot and Tox Free have leased and operated for premises since 2006.
- **Topography:** The site is located in Broome approximately 4km south west of the township. The site and immediate surrounding areas are generally level. The elevation of the site is approximately 18m AHD (Australian Height Datum).
- **Zoning:** The site is zoned as 'Light and service Industry'. The surrounding land uses are listed below:
 - North: A mixed use zone is present to the north of the site. This is currently vacant and comprises bushland;
 - East: Occupied light industrial premises are located to the east of the site;
 - South: Archer Street and light industrial premises are located to the south of the site; and
 - West: McDaniel Road and light industrial premises are present to the west of the

Potential sensitive receptors in the vicinity of the premises are:

- **Groundwater:** The groundwater underlying the site is present in three levels of aquifers. The uppermost aquifer is the Canning – Broome (Sandstone) aquifer which comprises thin superficial formations along the coast. The salinity of the aquifer ranges from fresh inland to brackish or saline along the coast, with salt water intrusion at the base of the aquifer along the coast. Underlying this aquifer is the Canning – Wallal aquifer which is an extensive aquifer covering the north-west portion of the Canning Basin. The aquifer is saline underlying Broome, however salinity decreases further south within the Canning Basin. The deepest aquifer is the Canning – Grant aquifer, which is the largest aquifer in the Canning Basin. It consists of several thousand metres of Sandstone and represents a large groundwater resource. The groundwater salinity ranges from fresh to brackish in this aquifer. The Canning- Grant aquifer currently has a limited use; however it is recognised as having considerable development potential. The water supply for the township of Broome is supplied by groundwater production bores situated to the north east of the town. The production bores are located within the Canning – Broome Sandstone aquifer. Groundwater is indicated to be present at 25m to 30m within this aquifer. Local groundwater flow is indicated to be towards the south east. Groundwater quality underlying the site is indicated to be brackish and there is a potential for salt water intrusion due to the site's proximity to the coast.
- **Surface water:** The nearest surface water body is Roebuck Bay located 1km to the south east of the site which leads into the Indian Ocean. Due to the proximity of the site to the coast, here



is the potential for localised flooding to occur at the site associated with storm surges during cyclones and periods of heavy rain.

- Existing residences and landowners: The closest receptors are a residential area 800m north, and there is tourist accommodation located 500m east of the premises.

Proposed operations

The Applicant proposes to operate the following at the premises:

- Dedicated MRF; Recyclable commingled materials collected from households and commercial businesses are fed along a receivable belt and processed by separators into specific streams of glass, ferrous metal, aluminium, clear plastics (Code 1) and other plastics (Code 2), mixed paper and cardboard. Once sorted the material is baled for transportation to recycling markets for re-processing into new products or disposed to a licensed landfill.
- 55,000L bunded oily water storage tank;
- New packaged waste transit area with the capacity to store up to 40 IBCs;
- 35,000L self bunded waste oil storage tank; and
- Four 2,000L in-ground sumps which are connected to the 55,000L bunded oily water storage tank.

Potential emissions

Potential emissions as a result of the works and operation of the premises are:

- General conditions Stormwater: Potential emissions may arise from the operations at the premises;
- Premises operation: Potential emissions may arise from the leakage of liquid waste (waste oil etc) from operations at the premises;
- Dust: Potential emissions may arise from operations at the premises;
- Odour: Potential emissions may arise from operations at the premises; and
- Noise: Potential emissions may arise from the operations at the premises.

Further details of emissions and regulatory controls for the premises are detailed within section 4 of the Decision Table.

Occupation and planning approval

The Premises is currently occupied by the Applicant.

The Shire of Broome granted Planning Approval for upgrades to the MRF and Liquid Waste Facility at Lot 25, No 18 Archer Street MINYIRR 6725, on 21 January 2015 under Town Planning Scheme No.4. There was no expiry date associated with the operation for the premises. The Delegated Officer considered that requirements for planning approval have been sufficiently met for the purposes of DER's *Guidance Statement: Land use planning*.

Consultation

DER referred the Application to the Shire of Broome on 18 August 2016. A response was requested by 29 August 2016. No response was received.

Approval of works

This Decision Document and the Licence specifies the assessment of the Application and regulatory requirements for the operation of the Category 61 and 62 premises to proceed.



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	Justification (including risk description & decision methodology where relevant)	Reference documents
Interpretation	L1.1.1 – 1.1.4	Operation Operation is subject to the general provisions of the <i>Environmental Protection Act 1986</i> . Category 61 and 61A activities fall under Schedule 1 Part 2 of the <i>Environmental Protection Regulation 1987</i> and will be subject to licence.	General provisions of the <i>Environmental Protection Act 1986</i>
General conditions	N/A	Operation <i>Emission:</i> Contaminated stormwater discharge from the Premises where stormwater is not appropriately managed, comes into contact with contaminants (e.g. hydrocarbons) or becomes loaded with sediment. <i>Impact:</i> Stormwater and contaminants leaving the Premises and entering adjacent properties may potentially impact the health, welfare, convenience, comfort or amenity of persons offsite, or increase contaminant loads in surface water and/ or groundwater. <i>Controls:</i> The site is sealed (bitumen and concrete) so uncontaminated stormwater is quickly directed off-site. The storage tanks are self bunded or bunded and sit on an impervious hardstand pad, the wash-down bay is bunded and impervious and stormwater is directed away from the infrastructure to avoid contamination. All transfer of liquid waste will occur within impervious bunded hardstand areas. Visual inspections will be conducted daily to assess performance of tanks, wash-down bay, all bunds and capacity of the four sumps. If any residual water resides in bunds or the sumps it will be pumped out into impervious IBC's and transported and disposed of site. Numerous spills kits are available on site. All MRF operations occur within a dedicated shed on an	General provisions of the <i>Environmental Protection Act 1986</i> DER's <i>Guidance Statement: Regulatory Principles</i> DER's <i>Guidance Statement: Setting Conditions</i> DER's <i>Guidance</i>



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Works Approval Licence section	Condition number W = Works Approval L = Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
		<p>impervious floor.</p> <p><u>Risk assessment:</u> <i>Consequence:</i> Insignificant <i>Likelihood:</i> Unlikely <i>Risk Rating:</i> Low</p> <p><u>Regulatory controls:</u> Stormwater management conditions will not be included in the licence as the risk rating is 'Low' and the Delegated Officer considers that the provisions of Section 49 of the <i>Environmental Protection Act 1986</i> and the provisions of the <i>Environmental Protection (Unauthorised Discharge) Regulations 2004</i> are sufficient to regulate the emissions of stormwater during operation.</p> <p><u>Residual risk:</u> <i>Consequence:</i> Insignificant <i>Likelihood:</i> Unlikely <i>Risk Rating:</i> Low</p>	<p><i>Statement: Licence and works approval process</i></p>
Premises operation	L1.2.1 – 1.2.3	<p>Operation</p> <p><u>Emission Description</u> <i>Emission:</i> Potential leakage of liquid waste oil, oily water and wash water from temporary storage within the 55,000L, 35,000L storage tanks and the maximum 40 x 1,000L IBCs stored on the premises. <i>Impact:</i> Potential reduced groundwater and surface water quality in the local area. There is no surface water or ephemeral water courses located within a kilometre of the premises. <i>Controls:</i> The site is sealed with an impervious liner (bitumen or concrete surface) and the 35,000L waste oil tank is self bunded. The 55,000L oily water tank is installed within a dedicated bunded hardstand pad that has a permeability of at least 1×10^{-9} m/s and the</p>	<p>Application supporting documentation</p> <p>General provisions of the <i>Environmental Protection Act 1986</i></p>



DECISION TABLE			
Works Approval Licence section	Condition number W = Works Approval L = Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
		<p>Packaged Transit Area may store a maximum of 40 x 1,000L IBCs is installed within a dedicated bunded hardstand pad that has a permeability of at least 1×10^{-9} m/s which has four dedicated impervious sumps to collect and treat any spills. Any residual water / waste oil that reside within any bund or sump within the premises will be pumped out into impervious IBC's and removed from site. The premises have dedicated spill kits on site to remediate any small spills within the premises. Depth to groundwater is greater than 8m.</p> <p><u>Risk Assessment</u> <i>Consequence:</i> Minor <i>Likelihood:</i> Unlikely <i>Risk Rating:</i> Moderate</p> <p><u>Regulatory Controls</u> Condition 1.2.1 in the licence authorises the types of solid and liquid waste that can only be accepted at the premises for storage prior to transport and disposal off-site, the maximum quantity limits of waste types accepted at the premises and waste specifications. Condition 1.2.2 stipulates that waste that do not meet the acceptance criteria set out in condition 1.2.1 it is removed from the Premises by the delivery vehicle or, where that is not possible, stored in a quarantined storage area or container and removed to an appropriately authorised facility as soon as practicable. Condition 1.2.3 stipulates waste processing requirements and condition 1.2.4 stipulates containment infrastructure for the storage tanks.</p> <p><u>Residual Risk</u> <i>Consequence:</i> Minor <i>Likelihood:</i> Unlikely <i>Risk Rating:</i> Moderate</p>	



DECISION TABLE			
Works Approval Licence section /	Condition number W = Works Approval L = Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
Fugitive emissions	N/A	<p>Operation</p> <p><u>Emission description:</u> <i>Emission:</i> Dust arising from sort / separation activities at the MRF and dust arising from vehicle (truck/tanker) movements during the operations at the premises. <i>Impact:</i> Reduced local air quality from airborne particulates is possible. The closest receptors are a residential area 800m north, and there is tourist accommodation located 500m east of the premises. Additional receptors adjacent and nearby the Premises include a vacant land to the north and light industrial areas to the east, west and south. <i>Controls:</i> The MRF operations occur within a dedicated closed shed and the sorting of waste does not generate dust in significant amounts. There will be negligible dust emissions from the premises as the site is fully sealed and vehicle speeds are greatly reduced due to the size of the premises.</p> <p><u>Risk assessment:</u> <i>Consequence:</i> Insignificant <i>Likelihood:</i> Possible <i>Risk Rating:</i> Low</p> <p><u>Regulatory controls:</u> Fugitive dust conditions will not be included in the licence as the risk rating is 'Low' and the Delegated Officer considers that the provisions of Section 49 of the <i>Environmental Protection Act 1986</i> are sufficient to regulate dust emissions during operation of the Premises</p> <p><u>Residual risk:</u> <i>Consequence:</i> Insignificant <i>Likelihood:</i> Possible <i>Risk Rating:</i> Low</p>	<p>Section 49 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	Justification (including risk description & decision methodology where relevant)	Reference documents
Odour	N/A	<p>Operation</p> <p><u>Emission Description</u> <i>Emission:</i> Odour emissions from operation of the MRF and LWF infrastructure storage tanks and packaged transit area. <i>Impact:</i> Amenity impacts on nearest receptors. The closest receptors are a residential area 800m north, and there is tourist accommodation located 500m east of the premises. Limited impacts are expected as the Delegated Officer considers the types of waste handled at the premises to constitute a low odour risk. <i>Controls:</i> Waste oil, oily water and wash water will only be temporally stored on site in dedicated sealed tanks prior to transport and disposal off-site. Transfer of waste oil at the site will only be intermittent and based on small volumes. Any residual liquid waste residing within a sump or bund will be pumped out and disposed off-site. Waste destined for the MRF by virtue of the waste type do not generate odour.</p> <p><u>Risk Assessment</u> <i>Consequence:</i> Insignificant <i>Likelihood:</i> Possible <i>Risk Rating:</i> Low</p> <p><u>Regulatory Controls</u> Odour conditions will not be included in the licence as the risk rating is 'Low' and the Delegated Officer considers that the provisions of Section 49 of the <i>Environmental Protection Act 1986</i> are sufficient to regulate dust emissions during operation of the Premises.</p> <p><u>Residual Risk</u> <i>Consequence:</i> Insignificant <i>Likelihood:</i> Unlikely <i>Risk Rating:</i> Low</p>	Application supporting documentation



DECISION TABLE			
Works Approval Licence section	Condition number W = Works Approval L = Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
Noise	N/A	<p>Operation</p> <p><u>Emission description:</u> <i>Emission:</i> Noise arising from the operation of the MRF and LWF and associated vehicles such as tankers and trucks. <i>Impact:</i> Interference with the health, welfare, convenience, comfort or amenity of sensitive residential receptors. The closest receptors are a residential area 800m north, and there is tourist accommodation located 500m east of the premises. <i>Controls:</i> The operations will be undertaken in accordance with the Proponents QUEST Noise Management System currently employed at the premises. Traffic controls such as speed limits are also employed. The Proponent has a dedicated complaints system and complaints register. Hours of operation are Monday to Friday 6am to 5pm and Saturday 6am to 12pm.</p> <p><u>Risk assessment:</u> <i>Consequence:</i> Insignificant <i>Likelihood:</i> Possible <i>Risk Rating:</i> Low</p> <p><u>Regulatory controls:</u> No specific noise management conditions will be included in the licence as the risk rating is 'Low' and the Delegated Officer considers that the provisions of the <i>Environmental Protection (Noise) Regulations 1997</i> will be sufficient to regulate noise emissions during operation of the Premises.</p> <p><u>Residual risk:</u> <i>Consequence:</i> Insignificant <i>Likelihood:</i> Possible <i>Risk Rating:</i> Low</p>	<p>Application supporting documentation</p> <p><i>Environmental Protection (Noise) Regulations 1997</i></p>



DECISION TABLE			
Works Approval / Licence section	Condition number W = Works Approval L = Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
Monitoring of inputs and outputs	L2.1.1	Operation Monitoring of waste inputs and outputs is required to regulate waste volumes accepted at the premises. Monitoring of inputs and outputs under condition 2.1.1 and annual reporting of inputs and outputs is required under condition 3.2.1 on the licence.	Application supporting documentation General provisions of the <i>Environmental Protection Act 1986</i>
Information	L3.1 L3.2 L3.3	Operation An annual audit compliance report is required under licence condition 3.1.2. The proponent has a dedicated complaints management procedure which is currently employed under the QUEST Management System. Condition 3.1.3 requires the licensee to implement a complaints management system. An annual environmental report is required under licence condition 3.2.1 and 3.2.2. Notification of any breach of condition is required under licence condition 3.3.1.	Application supporting documentation General provisions of the <i>Environmental Protection Act 1986</i>
Licence duration	N/A	As a 'low risk' premises in accordance with DER's <i>Guidance statement: Licence Duration</i> , the licence will be issued for a 20 year period.	DER's <i>Guidance statement: Licence Duration</i> .



5 Advertisement and consultation table

Date	Event	Comments received/Notes	How comments were taken into consideration
15/08/2016	Application advertised in West Australian (or other relevant newspaper)	No comments received.	N/A
20/09/2016	Draft copy to Proponent	Comments received 21 September 2016. One comment for licence condition 1.2.1 to include 'or other smaller packages'.	Delegated Officer considered the suggested change did not materially alter the assessment. Wording included in condition.



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