



Application for Licence

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

Licence Number	L9410/2023/1
Applicant	City of Joondalup
File number	DER2018/001042-9~72
Premises	City of Joondalup - Works Operations Centre Legal description - Part Lot 8278 on Deposited Plan 30778 Certificate of Title Volume LR3127 Folio 149 As defined by the premises map attached to the issued licence
Date of report	13 November 2023
Decision	Licence granted

SENIOR ENVIRONMENTAL OFFICER – WASTE INDUSTRIES

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

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1. Decision summary

This decision report documents the assessment of potential risks to the environment and public health from emissions and discharges during the operation of the premises. As a result of this assessment, licence L9410/2023/1 has been granted.

2. Scope of assessment

2.1 Regulatory framework

In completing the assessment documented in this decision report, the Department of Water and Environmental Regulation (the department; DWER) has considered and given due regard to its regulatory framework and relevant policy documents which are available at <https://dwer.wa.gov.au/regulatory-documents>.

2.2 Application summary and overview of premises

On 7 August 2023, the applicant submitted an application for a licence to the department under section 57 of the *Environmental Protection Act 1986* (EP Act).

The application is to seek a licence relating to the operation of a waste storage facility at the premises.

The premises relates to the categories and assessed production / design capacity under Schedule 1 of the *Environmental Protection Regulations 1987* (EP Regulations) which are defined in licence L9410/2023/1. The infrastructure and equipment relating to the premises category and any associated activities which the department has considered in line with *Guideline: Risk Assessments* (DWER 2020) are outlined in licence L9410/2023/1.

The premises activities are for the storage and handling of waste materials pending further transport and disposal. Wastes accepted for storage include:

- Construction and demolition waste;
- Green waste;
- Scrap metals;
- Waste oils;
- General waste;
- Batteries; and
- Tyres.

The Applicant has been operating at the premises for over 15 years and only recently identified that the operations undertake at the premises meet the requirements of a prescribed activity. The licence application followed a scoping meeting in June 2023 between applicant representatives and DWER officers.

2.3 Consideration of Water Quality Protection Note (WQPN) 25

WQPN 25: Land use compatibility tables for public drinking water source areas (DWER, August 2021) provides guidance on land uses and activities within public drinking water source areas (PDWSAs) to protect drinking water quality and public health. The department's policy on development in PDWSAs is a presumption against the intensification of land uses. This is because more intense land uses increase the risk that the drinking water will become contaminated.

Although the primary goal is to avoid contamination of PDWSAs, the department also needs to consider land uses, activities and zonings that were present before the PDWSA was declared, or that are required to support population growth, housing, jobs and essential infrastructure or industry. So, there may be times when these risks cannot be avoided. In such cases, the risks need to be minimised or managed. However, wherever possible, DWER has a responsibility to prevent an increase in the base level of risk.

The premises is currently located in the following Priority 3 (P3) PDWSA:

- *Perth Coastal and Gwelup Underground Water Pollution Control Area.*

Based on the WQPN 25 guidance, waste storage facilities are considered to be incompatible land use within P3 areas. The department will not generally support the expansion or intensification of an existing, incompatible land use unless the overall water quality contamination risk is reduced. The department notes that the premises is an existing waste facility which is in an appropriately zoned area from a land use planning perspective and that existing activities can continue to operate. To protect water quality, the expansion of existing incompatible land uses or activities should implement appropriate management practices to ensure the overall water quality contamination risk is reduced. The Delegated Officer has considered the above guidance as part of the risk assessment outlined in Section 3.

3. Risk assessment

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

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

3.1 Source-pathways and receptors

3.1.1 Emissions and controls

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

Table 1: Proposed applicant controls

Emission	Sources	Potential pathways	Proposed controls
Operation			
Dust	Unloading, loading and storage of material Vehicle movements	Air / windborne pathway	- Sprinkler system fitted to the top of the three-sided concrete storage bunkers.
Noise	Unloading, loading and storage of material Vehicle movements	Air / windborne pathway	- Hours of operation 7 am – 4 pm Mon-Fri. - <i>Environmental Protection (Noise) Regulations 1997</i> apply.

Emission	Sources	Potential pathways	Proposed controls
Odour	Green waste and general waste acceptance and storage	Air / windborne pathway	- Stockpiles to be reduced/removed every 48-72 hours.
Loss of containment	Storage of liquids/oils	Overland runoff and seepage to groundwater	- Daily check of bunded containment areas.
Leachate	Waste storage	Overland runoff and seepage to groundwater	<ul style="list-style-type: none"> - Stockpiles to be reduced/removed every 48-72 hours. - Drainage pit captures run-off. - Base of storage bunkers to comprise 150 mm thick concrete reinforced with SL92 mesh. - The remaining outside areas of the premises is bitumen hardstand (except for landscaped areas).
Fire	Storage of wastes and used tyres	Air / windborne pathway	<ul style="list-style-type: none"> - Sprinkler system fitted to the top of the three-sided concrete storage bunkers - The sprinklers are utilised for both dust and fire suppression as needed. - In addition, two fire hydrants are strategically located at East and West points of the storage bunkers to enable the Fire Services ease of access to a dedicated high pressure water supply. The site also has numerous fire extinguishers located around the site, that are suitable for all waste types that are stored. - Operational <i>Emergency response plan and fire evacuation procedures</i> document.
Firefighting water		Overland runoff and seepage to groundwater	- Drainage pit captures run-off.

3.1.2 Receptors

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

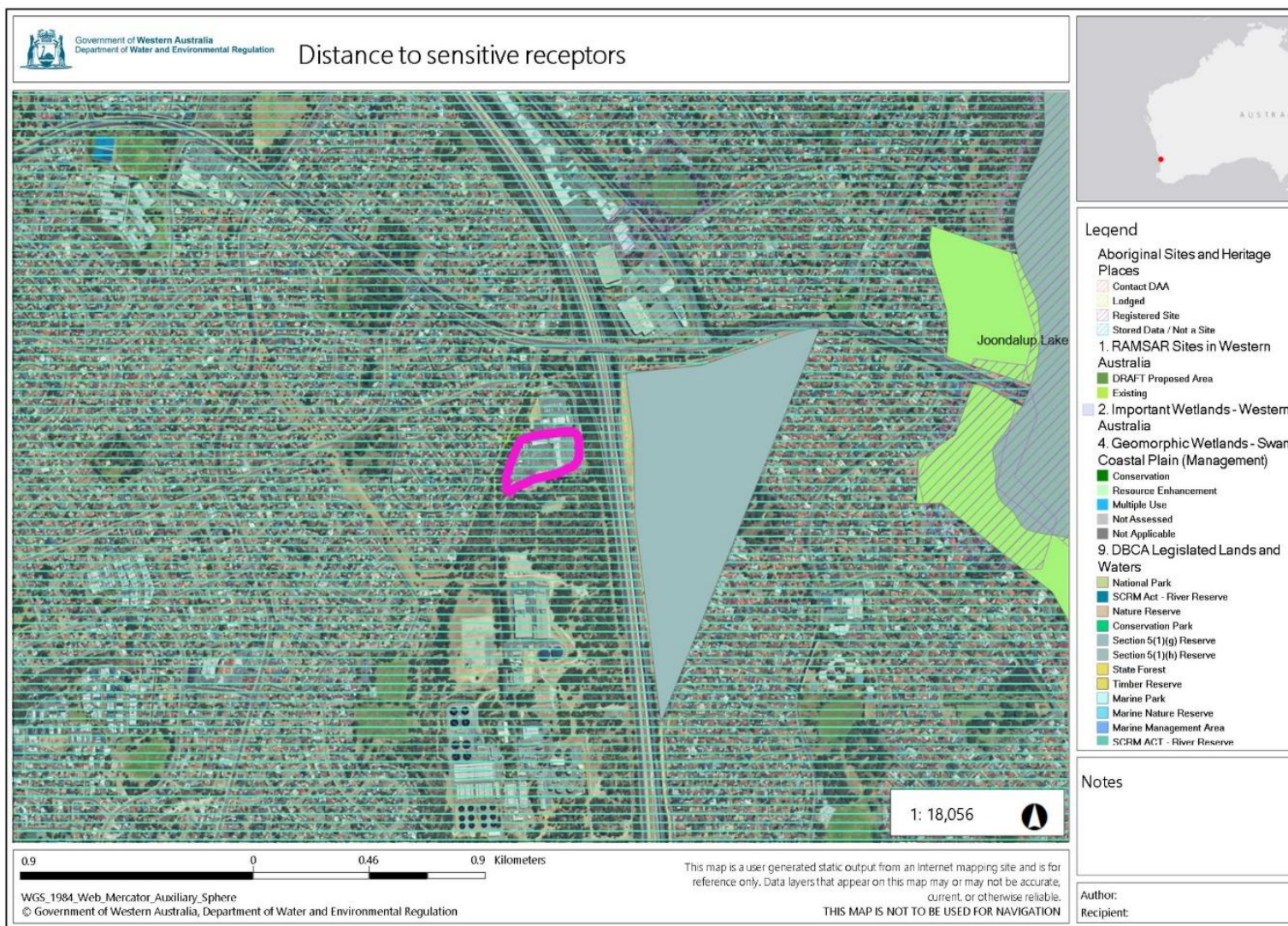
Table 2 and

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

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

Human receptors	Distance from prescribed activity
Closest residential receptors	110 m to the west
Environmental receptors	Distance from prescribed activity
Priority 3 Public Drinking Water Source Area (Perth Coastal and Gwelup Underground Water Pollution Control Area)	Premises is within the area
DBCA Legislated Land (Woodvale Nature Reserve)	200 m to the east
Lake Joondalup (conservation lake)	1.5 km to the east
Bush forever site 303	Adjacent to the south
Groundwater	Depth to groundwater approximately 29 mbgl (as indicated in the Perth groundwater map)
Aboriginal Sites and Heritage Places (Beenyup Marked Tree BeA1)	Adjacent to the west of the premises boundary

Figure 1: Distance to sensitive receptors



3.2 Risk ratings

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

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

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

Licence L9410/2023/1 that accompanies this decision report authorises emissions associated with the operation of the premises i.e. Category 62 and 57 activities.

The conditions in the issued licence, as outlined in Table 3 have been determined in accordance with *Guidance Statement: Setting Conditions* (DER 2015).

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

Risk events					Risk rating ¹ C = consequence L = likelihood	Applicant controls sufficient?	Conditions ² of licence	Justification for additional regulatory controls
Sources / activities	Potential emission	Potential pathways and impact	Receptors	Applicant controls				
Operation								
Unloading, loading and storage of material Vehicle movements	Dust	Air / windborne pathway causing impacts to health and amenity	Residents 110 m to the west	Refer to Section 3.1	C = Minor L = Unlikely Medium Risk	Y	Conditions 1, 4 5 and 13	The Delegated Officer considers the licence holder's controls to be sufficient to mitigate dust emissions during prescribed activities within the premises.
	Noise	Air / windborne pathway causing impacts to health and amenity	Residents 110 m to the west	Refer to Section 3.1	C = Minor L = Unlikely Medium Risk	Y	Condition 13	The Delegated Officer considers that the provisions of the <i>Environmental Protection (Noise) Regulations 1997</i> are sufficient to regulate noise emissions from the premises.
Green waste and general waste acceptance and storage	Odour	Air/windborne pathway causing impacts to health and amenity	Residents 110 m to the west	Refer to Section 3.1	C = Slight L = Unlikely Medium Risk	Y	Conditions 4 and 13	The Delegated Officer considers the licence holder's controls to be sufficient to mitigate odour emissions during operation of the premises.
Storage of waste liquids/oils	Loss of containment	Overland runoff potentially causing ecosystem disturbance or impacting surface water quality	Premises within a P3 public drinking water source area	Refer to Section 3.1	C = Moderate L = Unlikely Medium Risk	Y	Conditions 1, 4, 7 and 8	The Delegated Officer considers the licence holder's controls to be sufficient to mitigate loss of containment emissions during operation of the premises.
Waste storage	Leachate	Leaching to groundwater		Refer to Section 3.1	C = Moderate L = Unlikely Medium Risk	Y	Conditions 1, 4, 7 and 8	The Delegated Officer considers the licence holder's controls to be sufficient to mitigate leachate emissions during

Risk events					Risk rating ¹ C = consequence L = likelihood	Applicant controls sufficient?	Conditions ² of licence	Justification for additional regulatory controls
Sources / activities	Potential emission	Potential pathways and impact	Receptors	Applicant controls				
								operation of the premises.
Storage of wastes and used tyres	Fire incident – particulates and fire water	Air/windborne pathway causing impacts to health and amenity Overland runoff potentially causing ecosystem disturbance or impacting surface water quality	Residents 110 m to the west	Refer to Section 3.1	C = Moderate L = Rare Medium Risk	Y	Condition 1 <u>Conditions 9 and 10</u>	The Delegated Officer considers the licence holder's controls to be sufficient to mitigate fire incident emissions during operation of the premises.

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

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

4. Consultation

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

Table 4: Consultation

Consultation method	Comments received	Department response
Application advertised on the department's website	None received	N/A
Applicant was provided with draft documents on 9 November 2023	Comment regarding the applicant having no mechanism (weighbridge or other) to record the waste tonnes received onto the premises.	Conditions 11 and 12 have been amended to allow include the conversion of m ³ to tonnes through use of <i>The Approved procedure for estimation/calculation of annual return information methods by recycling and reprocessing facilities required under the Waste Avoidance and Resource Recovery Regulations 2008</i> (June 2019).

5. Conclusion

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

References

1. Department of Environment Regulation (DER) 2016, *Guidance Statement: Environmental Siting*, Perth, Western Australia.
2. DER 2017, *Guidance Statement: Risk Assessments*, Perth, Western Australia.
3. DER 2015, *Guidance Statement: Setting Conditions*, Perth, Western Australia.
4. Department of Water and Environmental Regulation (DWER) 2019, *Guideline: Decision Making*, Perth, Western Australia
5. DWER 2019, *Guideline: Industry Regulation Guide to Licensing*, Perth, Western Australia
6. Department of Fire and Emergency Services (DFES) 2020, *Guidance Note (GN02) Bulk storage of rubber tyres including shredded and crumbed tyres Version 1. 2020*, November 2019, Perth, Australia.