Government of Western Australia
Department of Water and Environmental Regulation

Decision Report

Application for Licence

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

Licence Number	L2855/2025/1
Applicant	BRADTRAC PTY LTD
ACN	624 664 160
File number	DER2024/000557
Premises	BRADTRAC PTY LTD 6 Muchea East Road Muchea WA 6501 Legal description - Lot 700 on Deposited Plan 59598 As defined by the coordinates in Schedule 2
Date of report	19 February 2025
Decision	Licence granted

Sarah Cross

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Sarah Cross
SENIOR ENVIRONMENTAL OFFICER
INDUSTRY REGULATION
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 L2855/2025/1 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 26 September 2024, the applicant submitted an application for a licence to the department under section 57 of the *Environmental Protection Act 1986* (EP Act).

The application sought a licence relating to used tyre storage (tyre fitting business) and a solid waste facility at the premises. The premises is approximately 1.7 km east of the town of Muchea.

The applicant has been operating a tyre-fitting business since 2011, trading as Bradtrac Pty Ltd, at 6 Muchea East Road, Muchea. In January 2023 the department identified that the premises was storing in excess of 500 used tyres and advised the applicant that they needed to obtain a licence under Part V of the EP Act.

Bradtrac Pty Ltd (the applicant) intends to store up to 2,000 used tyres at any one time that originate from the tyre-fitting business. The tyres are cut down into 4-6 pieces using a cross-cutter machine and two SW150 tyre cutting machines. The tyre pieces are then disposed of via landfilling at a licence 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 L2855/2025/1. 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 L2855/2025/1.

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
Construction			
Dust	Installation of fire water containment infrastructure	Air / windborne pathway	No controls proposed.
Noise			No controls proposed.
Operation			
Dust	Acceptance, storage and processing of used tyres and cut rubber pieces Vehicle movements	Air / windborne pathway	There is a concrete hardstand in both the tyre processing and cut tyre storage areas.
Noise		Air / windborne pathway	No controls proposed.
Mosquito breeding in pooled water in tyres	Acceptance, storage and processing of used tyres and cut rubber pieces Storage of new tyres	Air / windborne pathway	Used tyres from the tyre fitting business are cut down into four to six pieces immediately.
Fire/smoke		Air / windborne pathway	The facility comprises of the following fire management equipment and practice: - fire extinguishers, - 40 mm high volume fire horse, - portable firefighting unit - processed tyre area is segregated from the rest of the yard - Monthly fire pump inspections and annual fire training.
Contaminated firefighting water		Direct discharge to land Seepage to soil and groundwater	The tyre processing area and tyre storage area contain a concrete hardstand, all sides are raised/bunded and fall to a center drain. The applicant proposes to install a firewater catchment tank in connection with the abovementioned centre drain to collect firewater generated during a fire event. The applicant has ability to cap the tyre processing area to hold excess firewater and pump it out afterwards. The front and side premises boundary includes a slotted drainage pipe with soaks.

Emission	Sources	Potential pathways	Proposed controls
Contaminated stormwater			The front and side premises boundary includes a slotted drainage pipe with soaks. Raised clay mound on fence line which creates a catchment area and so all water drains to front and side catchment area.
Hydrocarbon spills during refueling			No controls proposed.

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 activity / prescribed premises
Residential Premises	170 m east of the premises boundary
Industrial premises	Immediately adjacent to east premises boundary
Environmental receptors	**Distance from activity / prescribed premises**
Priority Ecological Communities	Priority 3 - Banksia Woodlands of the Swan Coastal Plain ecological community - 530 m northeast of the premises boundary
Threatened Fauna	Carnaby's cockatoo- Endangered – 200 m northwest of the premises boundary
Geomorphic wetlands – multiple use wetland	Premises located in Ellen Brook Floodplain
Department of Biodiversity, Conservation and Attractions - legislated lands	Nature Reserve – 2 km southwest of the premises boundary
Minor surface water line	65 m south of the premises boundary
Rights in Water and Irrigation Act 1914 (RIWI) – Surface water Areas	Premises located in Swan River system
Rights in Water and Irrigation Act 1914 (RIWI) – Groundwater Area	Premises located in Gingin groundwater Area

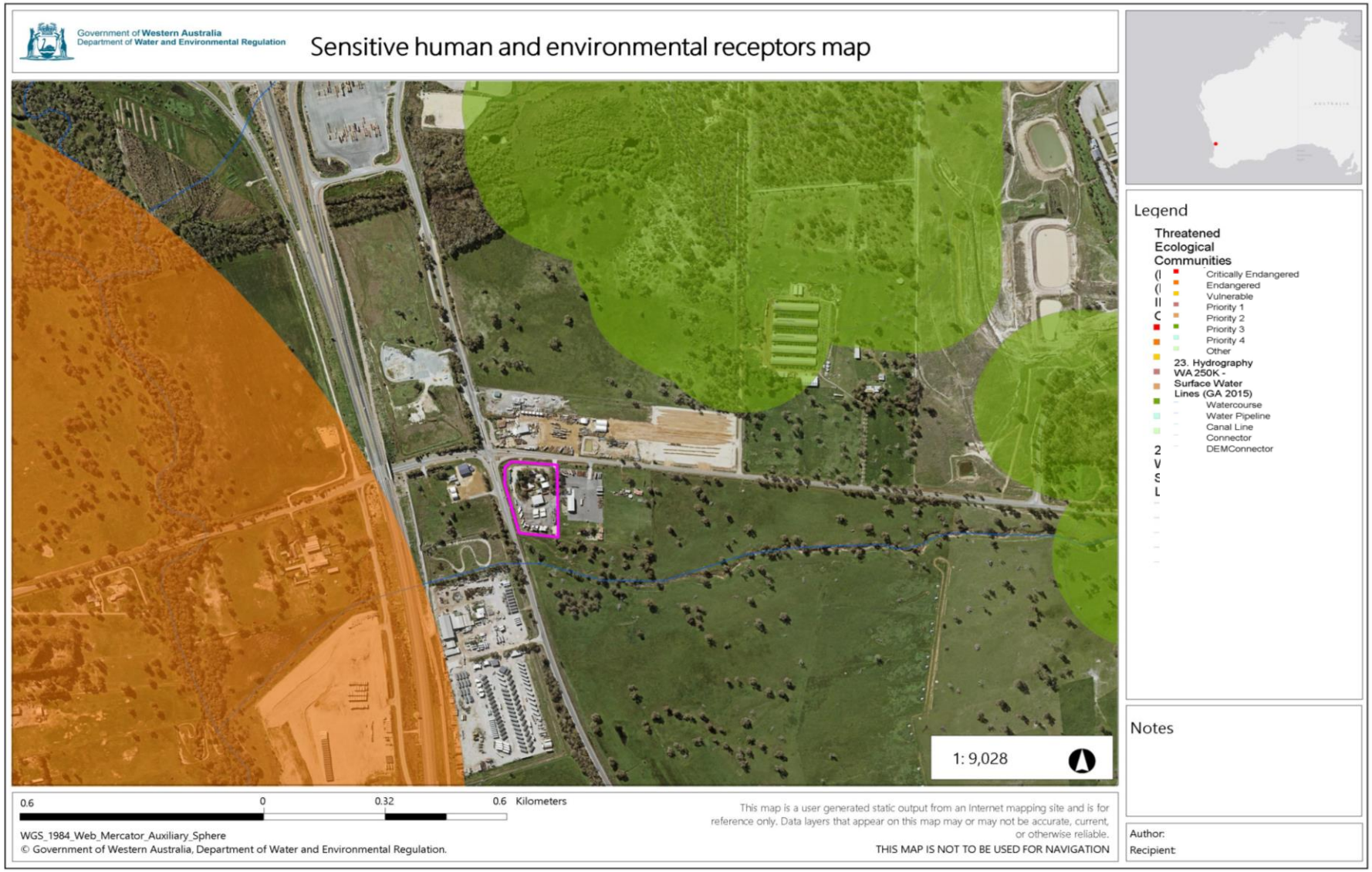

Figure 1: Distance to sensitive receptors

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 L2855/2025/1 that accompanies this decision report authorises emissions associated with the operation of the premises.

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 construction and 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**				
Construction								
Installation of fire water containment infrastructure	Dust	Air / windborne pathway causing impacts to health and amenity	Residences 170 m east of the premises boundary Industrial premises immediately adjacent to east premises boundary	Refer to Section 3.1	C = Slight L = Unlikely **Low Risk**	Y	Condition 15	The Delegated Officer considers dust emissions can be effectively regulated by the general provisions of the EP Act.
	Noise			Refer to Section 3.1	C = Slight L = Unlikely **Low Risk**	Y	Condition 15	The Delegated Officer considers noise emissions associated with the construction can be sufficiently managed through the *Environmental Protection (Noise) Regulations 1997*
Operation								
Acceptance, storage and processing of used tyres and cut rubber pieces Vehicle movements	Dust	Air / windborne pathway causing impacts to health and amenity	Residences 170 m east of the premises boundary Industrial premises immediately adjacent to east premises boundary	Refer to Section 3.1	C = Slight L = Unlikely **Low Risk**	Y	Condition 6 and 15	The Delegated Officer considers dust emissions can be effectively regulated by the general provisions of the EP Act.
	Noise			Refer to Section 3.1	C = Slight L = Unlikely **Low Risk**	Y	Condition 4 and 15	The Delegated Officer considers noise emissions associated with the operation can be sufficiently managed through the *Environmental Protection (Noise) Regulations 1997*
Acceptance, storage and processing of used tyres and cut rubber pieces Storage of new tyres	Mosquito breeding in pooled water in tyres	Air / windborne pathway causing impacts to health and amenity		Refer to Section 3.1	C = Moderate L = Rare **Medium Risk**	Y	Condition 5, 6 and 15	The Delegates Officer considers that the applicant's proposed controls are sufficient to prevent mosquito breeding occurring under most circumstances.
	Unauthorised fires – smoke and fire spread	Air / windborne pathway causing impacts to health and amenity	Residences 170 m east of the premises boundary Industrial premises immediately adjacent to east premises boundary Priority Ecological Communities Threatened Fauna	Refer to Section 3.1	C = Severe L = Unlikely **High Risk**	Y	Condition 4, 5, 6, 7. 11, 12, 13, 14 and 15	The Delegated Officer has identified the impact of air emissions generated during a tyre fire and has noted that a fire prevention and management plan can assist to mitigate the risks of fire. The licence holder will be required to prepare and implement a Fire and Emergency Management plan that is consistent with AS3745.

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**				
	Contaminated firefighting water	Overland runoff potentially causing ecosystem disturbance or impacting surface water quality Subsurface seepage	Beneficial users of groundwater Priority Ecological Communities Threatened Fauna Geomorphic wetlands Minor surface water line RIWI Act – Surface water Areas RIWI Act – Groundwater Area	Refer to Section 3.1	C = Major L = Unlikely **Medium Risk**	Y	**<u>Condition 1</u>** Condition2, 3, 4, 5, 6, 8, 9, 10, 14 and 15	After taking into account the environmental siting of the premises and the applicant's proposed controls, the Delegated Officer added a requirement of constructing appropriately sized firewater containment infrastructure to retain all firewater generated within the tyre processing area.
	Contaminated stormwater			Refer to Section 3.1	C = Major L = Unlikely **Medium Risk**	Y	**<u>Condition 1</u>** <u>Condition 2, 3, 4, 8, 9, 10 and 15</u>	The tyre processing area is bunded to stop stormwater from entering the processing area. Additionally, the applicant advised that a clay mound was erected on the fence line to establish a catchment area, ensuring that all stormwater flows to the front and side catchment areas. Condition 10 has been added to the licence requiring the licence holder to take reasonable and practicable measures to prevent stormwater run-off from becoming contaminated by the activities and operations undertaken at the premises.
	Hydrocarbon spills during refueling			Refer to Section 3.1	C = Minor L = Unlikely **Medium Risk**	Y	Condition 4. 8, 9, 14 and 15	*Environmental Protection (Unauthorised Discharges) Regulations 2004* apply.

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. **<u>Bold and underline text</u>** 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 on 9 December 2024	Refer to appendix 1	Refer to appendix 1
Local Government Authority - Shire of Chittering advised of proposal on 07 February 2025	The Shire of Chittering confirmed that the property only has planning approval for a transport depot and that there are no approvals for a solid waste facility or for the storing or fitting of tyres. The Shire advised that the applicant will need to obtain the relevant approvals from the Shire to conduct these activities on the property.	Noted. The licence holder should contact the Shire of Chittering to obtain the relevant planning approval.
Department of Fire and Emergency Services (DFS) advised of proposal on 10 February 2025	None received	N/A
Applicant was provided with draft documents on 11 February 2025	Refer to appendix 2	Refer to appendix 2

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) 2015, *Guidance Statement: Setting Conditions*, Perth, Western Australia.
2. Department of Water and Environmental Regulation (DWER) 2020, *Guideline: Environmental Siting*, Perth, Western Australia.
3. DWER 2020, *Guideline: Risk Assessments*, Perth, Western Australia.
4. Department of Fire and Emergency Services (DFES) 2020, *Guidance Note: GN02 Bulk Storage of Rubber Tyres Including Shredded and Crumbed Tyres*, Perth, Western Australia.

Appendix 1: Summary of stakeholder's comments on the application

Summary of stakeholder's comment	Department's response
There is indication that the proponent does not follow the regulations as outlined in *DFES Guidance Note GN02 Bulk Storage of Rubber Tyres*, on tyre storage from the photographs supplied in the application. There are no stacks only haphazard piles that could contribute to mosquito breeding and difficult to control any fire should it happen.	In order to address mosquito breeding the applicant proposes to immediately cut whole, used tyres, which originated from the tyre-fitting business, into 4–6 pieces. The Delegated Officer has incorporated this requirement into condition 6 of the licence. Due to the immediate processing of tyres, the requirements of Section 6, Section 7, and Section 8 in *DFES Guidance Note GN02 Bulk Storage of Rubber Tyres* are not applicable for this application. The Delegated Officer has added stockpile size conditions and setbacks to the licence. Conditions 11-13 (Fire and emergency management) have been added to the licence to address fire prevention and management.
There are no pollution traps associated with the concrete bunded area. This will result at some time in polluted water entering the adjacent waterway referred to as the Muchea East Brook and into the ground water. In this catchment the soil is underlaid by Guildford clays that form a hard layer across which infiltrated ground water flows into the Ellen Brook as base flow. This area is low lying and prone to flooding during winter and summer rainfall events.	The Delegated Officer has taken into account the distance to sensitive receptors and added the requirement to construct appropriately sized firewater containment infrastructure to retain all firewater generated within the tyre processing area. Additionally, the tyre processing area is bunded to stop stormwater becoming contaminated by the activities being undertaken on the premises. The premises also contains a raised clay mound to assist in preventing stormwater from leaving the premises.
In the event of a fire within the tyre stacks, toxic substances will flow through the proposed drainage system directly into the Muchea East Brook to the Ellen Brook. A volunteer group monitors the water flowing in the Muchea East Brook during the winter months for nutrients, metals and metalloids and hydrocarbons but not for toxic substances.	
There is minimal information on the vegetated swales and their adequacy for the job. The vegetation to protect the Muchea East Brook and screening from the Great Northern Hwy that was a condition in their original application to the Shire of Chittering didn't happen so there appears to be little commitment to compliance.	The Licence Holder is to note this information and contact the Shire of Chittering directly to discuss the requirement for vegetated swales.

Appendix 2: Summary of applicant's comments on risk assessment and draft conditions

Summary of applicant's comment	Department's response
The applicant noted that the existing swale drains on the premises are designed to capture all water and any contaminants to prevent them from entering the stormwater drain. Additionally, the applicant stated that the capacity of the swale drainage exceeds the fire water volume collected within the isolated bunded storage area. Moreover, the applicant was informed that the land was surveyed and designed by a civil engineer, and the drain was also installed by a commercial plumber as per plans.	The Delegated Officer acknowledges this information and concludes that the permeability of the swale drains make them ineffectual for containing fire water produced during a fire incident. The licence conditions relating to the collection and capture of firewater remain.
The applicant confirmed that the property was not vegetated as shown in the supporting documents. The applicant stated that their insurance company conducted a fire and liability assessment at the time, and it was classified as extremely high risk due to the additional fuel load on the property, and therefore declined to insure the premises. The applicant stated that it was determined that the incorporation of a grassed, irrigated boundary in the vicinity of the swale drain would return Bradtrac to a low to medium fire risk rating.	Noted. The department recommends the licence holder contact the Shire of Chittering directly to discuss the requirement for vegetated swales. This requirement does not impact the risk assessment undertaken for the premises.