



Application for Licence

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

Licence Number	L2904/2025/1
Applicant	Pure Environmental WA Pty Ltd
ACN	609 291 858
File number	App-0027454
Premises	Karratha Liquid Waste Facility Lot 120 Pindan Road, GAP RIDGE WA 6714 Legal description Lot 120 on Deposited Plan 414552 Certificate of Title Volume 4027 Folio 393 As defined by the premises map attached to the issued licence
Date of report	8 May 2025
Decision	Licence granted

Grace Heydon

MANAGER 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 L2904/2025/1 (L2904) 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 13 February 2025, the applicant applied for a licence to the department under section 57 of the *Environmental Protection Act 1986* (EP Act).

The application is for a new licence for Lot 120 Pindan Road. Existing Licence L8861/2014/1 (L8861) is currently granted to Karratha Recycling Pty Ltd (Karratha Recycling) for a Category 35, 36, 61, and 61A Liquid waste facility at Lot 120 and 121 Pindan Road. Karratha Recycling have recently sold the liquid waste component of their business to Pure Environmental WA Pty Ltd (Pure Environmental). Karratha Recycling will continue to hold L8861, but only for Lot 121; and are in the process of a concurrent licence amendment with this new licence application for Pure Environmental. A separate Amendment Report will be drafted for the Karratha Recycling amendment.

Pure Environmental now intends to operate the existing liquid waste facility under a new licence for Categories 61 and 61A at Lot 120 only.

L8861 was recently amended for Karratha Recycling to facilitate the operation of the new lined aerobic and anerobic ponds; the licence amendment was approved on 23 December 2024. Lot 120 has two existing works approvals granted to Karratha Recycling, specifically for,

- the Drying Bed (Bed) under works approval W6292/2024/1, and for
- the proposed Oleology Filtration Unit (Unit) under works approval W6782/2023/1.

Both these works approvals expire in 2027, and Pure Environmental will need to transfer the holdership for these work approvals from Karratha Recycling post granting of the new licence.

In the acquisition of the liquid waste facility business and Lot 120, Pure Environmental are not proposing to change any operations at the Premises. Following the transfer of the holdership of the two current works approvals, Pure Environmental can apply to amend the work approvals if required for future business operations; and will likely need to amend their licence to allow operations at Lot 120 for the infrastructure constructed under both works approvals.

No changes to the aspects of the Existing Licence L8861 relating to Category 61 and 61A have been requested by the Pure for the new licence.

Table 1 below outlines the proposed changes to the existing Licence.

Table 1: Proposed design or throughput capacity changes

Category	Current design capacity	Proposed design capacity	Description of proposed amendment
61	130,000 tonnes per annual period	130,000 tonnes per annual period	No changes to Production and Design Capacity – this is a new licence for a new Licence Holder.
61A	20,000 tonnes per annual period	20,000 tonnes per annual period	

The application is to seek a licence relating to Liquid waste facility at the premises.

The premises relates to the categories and assessed Production and Design Capacity (P&DC) capacity under Schedule 1 of the *Environmental Protection Regulations 1987* (EP Regulations) which are defined in licence L2904. 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 L2904.

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 2 below. Table 2 also details the control measures the applicant has proposed to assist in controlling these emissions, where necessary.

Table 2: Proposed applicant controls

Emission	Sources	Potential pathways	Proposed controls
Dust	Operation of Ponds Machinery movements	Air / windborne pathway	Water cart deployed on site. Restricted vehicle speed due to size of Premises.
Noise			Compliance with the <i>Environmental Protection (Noise) Regulations 1997</i> (Noise Regulations). The size of the premises restricts vehicle speeds.
Odour	Liquid waste acceptance and storage at Ponds		Grease traps, sewage and septage wastes are deposited into the receival Anaerobic Pond so as to not disturb the post crust, which assists in reducing odour emissions.

Emission	Sources	Potential pathways	Proposed controls
			Grease trap, sewage and septage wastes is transferred from the Anaerobic Pond to the Aerobic Pond for further treatment prior to discharged to Evaporation Pond 1 and are less odour generating than when first received at the Premises. Industrial wash wastes released into Evaporations ponds. Siting.
Leachate	Seepage from Ponds	Seepage to soil and infiltration to groundwater	GCL or HDPE lined Ponds constructed to meet not less than 1×10^{-8} m/s permeability. Premises siting. Depth to groundwater 6 – 10 mbgl.
Overtopping	Liquid waste acceptance and storage at Ponds	Seepage to soil and overflow to surface water	A 500 mm freeboard will be maintained and managed through daily operations regarding current pond capacity and potential inflows. The Ponds have the capacity to contain stormwater resulting from a 1 in 20-year storm event of 24-hours duration. Ponds are bunded, which directs stormwater away from the Ponds.
Contaminated Stormwater			

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

Table 3: Sensitive human and environmental receptors and distance from prescribed activity

Human receptors	Distance from prescribed activity
Commercial Premises	Adjacent to the Premises boundary
Stayover Kingfisher Village	1.4 km southeast of the Premises
Cievo Karratha Village	2.2 km northeast of the Premises
Residential Properties	3 km northeast of the Premises
Environmental receptors	Distance from prescribed activity

Pilbara Groundwater Area (RIWI Act 1914) <ul style="list-style-type: none"> • Groundwater typically 6-10 m below existing ground level • Hyper saline brackish 	Premises is situated within this designated area.
Pilbara Surface Water Area (RIWI Act 1914)	Premises is situated within the designated area.
Threatened ecological communities. Roebourne Plains gilgai grasslands	Premises is situated within mapped extent.
Surface water lines <ul style="list-style-type: none"> • Seven Mile Creek • Minor non-perennial water course 	500 m east of Premises

3.2 Risk ratings

Risk ratings have been assessed in accordance with the *Guideline: Risk Assessments* (DWER 2020) for each identified emission source and considers 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 4.

Licence L2904 that accompanies this decision report, authorises emissions associated with the operation of the premises.

The conditions in the issued licence, as outlined in Table 4 have been determined in accordance with *Guidance Statement: Setting Conditions* (DER 2015).

Table 4: Risk assessment of potential emissions and discharges from the premises during operations

Risk Event					Risk rating ¹ C = consequence L = likelihood	Licence Holder's controls sufficient?	Conditions ² of licence	Justification for additional regulatory controls
Source/Activities	Potential emission	Potential pathways and impact	Receptors	Licence Holder's controls				
Receival and Operation of the Liquid waste facility Vehicle movements	Dust	Air/windborne pathway causing impacts to health and amenity	Adjacent commercial premises	Refer to Section 3.1	C = Slight L = Unlikely Low Risk	Y	Condition 9	N/A
	Noise		Stayover Kingfisher Village 1.4 km southeast of Premises	Refer to Section 3.1	C = Slight L = Unlikely Low Risk	Y	N/A	N/A
	Odour		Civeo Karratha Village 2.2 km northeast of Premises Residential properties 3 km northeast of Premises	Refer to Section 3.1	C = Minor L = Likely Medium Risk	Y	<u>Condition 10</u>	DWER Assurance branch has advised the Delegated Officer of odour complaints from surrounding businesses relating to the Premises.
	Leachate	Liquid waste infiltration to groundwater through the base of the Ponds	Groundwater 6-10 mbgl	Refer to Section 3.1	C = Moderate L = Unlikely Medium Risk	Y	Conditions 1, 2, 3, 4, 5, 11, 12, 13, 14, 16, 18, 19, 20, and 21.	N/A
	Overtopping	Overland runoff potentially causing ecosystem disturbance or impacting surface water quality	Threatened ecological community	Refer to Section 3.1	C = Moderate L = Unlikely Medium Risk	Y	Condition 5	N/A
	Contaminated stormwater		Seven Mile Creek 500 m east of Premises	Refer to Section 3.1	C = Minor L = Unlikely Low Risk	Y	Condition 8	N/A

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 underlined text** depicts additional regulatory controls imposed by department.

4. Consultation

Table 5 provides a summary of the consultation undertaken by the department.

Table 5: Consultation

Consultation method	Comments received	Department response
Application advertised on the department's website on 24 March 2025. Comments due 14 April 2025.	None received	N/A
Local Government Authority advised of proposal on 25 March 2025	The City of Karratha replied on 31 March 2025 advising: <i>The City notes the amendment is in accordance with the existing development approval (as attached). As such, the City has no comment on the proposal.</i>	Noted
Applicant was provided with draft documents on 17 April 2025	Applicant responded on 1 May 2025 that they had no comments and requested to waive the comment period.	Noted

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.