



## Application for Works Approval

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

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**Works Approval Number** W3244/2026/1

**Applicant** Pure Environmental WA Pty Ltd

**ACN** 609 291 858

**File number** APP-0033555

**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 maps attached to the issued works approval

**Date of report** 5 June 2026

**Decision** Works approval granted

## Table of Contents

<b>1. Decision summary</b>	<b>3</b>
<b>2. Scope of assessment</b>	<b>3</b>
2.1 Regulatory framework	3
2.2 Application summary and overview of premises	3
2.2.1 Packaged waste consolidation and storage area	3
2.2.2 Drying Bed	4
2.2.3 ISO Container storage area	4
2.2.4 Relocation of groundwater monitoring bores	4
<b>3. Risk assessment</b>	<b>5</b>
3.1 Source-pathways and receptors	5
3.1.1 Emissions and controls	5
3.1.2 Receptors	6
3.2 Risk ratings	7
<b>4. Consultation</b>	<b>11</b>
<b>5. Conclusion</b>	<b>12</b>
<b>References</b>	<b>12</b>
<b>Appendix 1: Summary of applicant’s comments on risk assessment and draft conditions</b>	<b>13</b>

## 1. Decision summary

This decision report documents the assessment of potential risks to the environment and public health from emissions and discharges during the construction and operation of the premises. As a result of this assessment, works approval W3244/2026/1 (W3244) 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 3 February 2026, the applicant submitted an application for a works approval to the department under section 54 of the *Environmental Protection Act 1986* (EP Act).

Pure Environmental WA Pty Ltd (the applicant) currently operate the Karratha Liquid Waste Facility under Existing Licence L2904/2025/1 (L2904). Due to changing waste demand and requirements for waste treatment and disposal services, the applicant is proposing to undertake works relating to construction of the following infrastructure at the premises:

- Packaged waste consolidation and storage area;
- A second concrete Drying Bed (DB);
- An ISO Container storage area; and
- Relocation of groundwater monitoring bores.

Further detail surrounding the proposed infrastructure is outlined below.

No changes to the aspects of the Existing Licence L2904 relating to Category 61 and 61A production and design capacity (P&DC) have been requested by the Pure under this works approval application.

The premises relates to the category / categories and assessed production / design capacity under Schedule 1 of the *Environmental Protection Regulations 1987* (EP Regulations) which are defined in works approval W3244. 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 works approval W3244.

#### 2.2.1 Packaged waste consolidation and storage area

The packaged waste consolidation & storage area will be constructed and includes the following packaged waste:

- Intermediate Bulk Containers (IBC)
- Drums
- Skip bins
- Specialised industry specific packaging
- Small packages

Packaged waste will be received into the packaged waste consolidation and storage area. Waste that is licensed to be placed into the evaporation ponds onsite will be decanted into a vacuum truck before being discharged into an appropriate existing evaporation pond. The waste will be decanted within the

bunded waste consolidation & storage area to prevent any discharge entering into the environment. Waste that cannot be placed into the onsite evaporation ponds will be consolidated, palletised and stored for transport to an appropriately licensed facility.

The packaged waste consolidation & storage area will be roofed, preventing the ingress of water during a rainfall event. The hardstand is sloped into a blind sump. Any spills that occur in the area will be captured in the blind sump where they will be pumped into a container as soon as possible. During a cyclone event, the dome cover will be removed. All waste will be either moved offsite to an appropriately licensed facility or stored in the sea containers either side of the waste consolidation & storage area. The hardstand will be cleaned. All captured storm water will be collected via a vacuum truck and discharged into an evaporation pond onsite.

### 2.2.2 Drying Bed

The DB will be used to treat sludges including:

- Drill muds
- Contaminated soils and sewerage sludges
- Hydrocarbon sludges; and
- Catalysts.

All sludges will be assessed by an offsite chemist as per the Pure Waste Acceptance Procedure to ensure that the waste can be managed in a safe and environmentally sound manner.

Sludges will be discharged onto the drying bed where they will be moved into stockpiles. The stockpiles will allow the liquid phase to separate from the solid phase through a physical process (gravity). The liquid portion will be collected into a vacuum truck and depending on the waste type, either discharged into the onsite existing evaporation ponds or consolidated into IBCs or 205L drums for offsite disposal at a licensed facility. Once dry, the solid phase will be tested as per the requirements of the *DWER Landfill Waste Classification and Waste Definitions 1996* before being disposed of in a licensed landfill.

### 2.2.3 ISO Container storage area

The ISO container storage area will be used to consolidate waste into ISO containers; ISO containers are self-bunded and once full will be stored next to the pad and have a capacity of 20,000 litres. ISO containers containing waste that will be transported to an appropriately licensed facility for disposal. It will be constructed next to the package waste area. The area will enable containment of the largest package to be consolidated (1,000 litre) through a small roll over bund and a centre sump. Verification to be provided in the compliance document. ISO containers will be used for consolidation of J100 and J120 waste streams from smaller packages.

### 2.2.4 Relocation of groundwater monitoring bores

The applicant is requesting two existing groundwater monitoring bores (MB) are relocated. L2904 has three existing groundwater bores, MB1, MB2 and MB3. Bores MB1 and MB 3 reside within the existing premises while MB3 resides on a neighbouring premises. The applicant is requesting MB2 and MB3 be decommissioned and replaced with MB2a and MB3a at locations surrounding their premises boundary.

In considering this request, the Delegated Officer has consulted with hydrogeologists within the Department to confirm that the new bore locations will be sufficient to adequately capture any emissions to groundwater. It is considered that the new bores will be suitable places to triangulate groundwater flow and close enough to the existing evaporation ponds to detect any seepage, therefore the proposed locations are acceptable.

### 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 construction / 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
<b>Construction</b>			
Dust	Construction of Packaged waste area, DB, Iso Container area and monitoring bores	Air / windborne pathway	Physical separation from receptors. Water Cart on site. Premises size restricts speed.
Noise	Vehicle movements.		Physical separation from receptors. Compliance with the <i>Environmental Protection (Noise) Regulations 1997</i> (Noise Regulations). The size of the premises restricts vehicle speeds. All onsite machinery fitted with mufflers.
<b>Operation</b>			
Dust	Operation of Packaged waste area, DB, Iso Container area and monitoring bores	Air / windborne pathway	Physical separation from receptors. Water Cart on site. Premises size restricts speed.
Noise	Vehicle movements.		Physical separation from receptors. Compliance with the Noise Regulations. The size of the premises restricts vehicle speeds. All onsite machinery fitted with mufflers.
Odour			Physical separation from receptors.

Emission	Sources	Potential pathways	Proposed controls
			<p>Waste limited to packaged waste.</p> <p>Waste Acceptance Procedure assess waste to ensure highly odorous wastes are not accepted onsite.</p> <p>Odour at the Premises is managed via the Pure Odour Assessment Procedure.</p> <p>Waste limited to drill muds which are not odorous.</p> <p>Highly odorous solids will not be accepted onsite.</p> <p>Waste Acceptance Procedure assess waste to ensure highly odorous wastes are not accepted onsite.</p> <p>DB limited to less than 300m<sup>3</sup> of waste at any one time.</p> <p>Waste contained within ISO storage container, preventing the discharge of odour.</p>
Leachate / Seepage	Acceptance, processing and storage of liquid waste and drilling muds	Seepage to soil and groundwater	<p>Physical separation from receptors.</p> <p>Concrete hardstand constructed to meet not less than <math>1 \times 10^{-9}</math> m/s permeability with bunds surrounding hardstand constructed of concrete and a minimum 300mm high.</p> <p>Depth to groundwater 6-10 mbgl.</p> <p>Groundwater monitoring.</p> <p>All spills in the area will be removed as soon as possible.</p> <p>Prior to a cyclone event, all waste will be either taken offsite or stored in the sea containers either side of the storage area. The bund will also be cleaned.</p>
Contaminated Stormwater		Seepage to soil and overflow to surface water	<p>Physical separation from receptors.</p> <p>Packaged waste is consolidated and on a storage area which is bunded to exclude the ingress of stormwater.</p> <p>DB is bunded to exclude ingress of stormwater.</p> <p>ISO container storage area is bunded to exclude ingress of stormwater.</p> <p>Prior to a cyclone event, all waste will be either taken offsite or stored in sea containers either side of the storage area. The bund will also be cleaned.</p>

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

Works approval W3244 that accompanies this decision report authorises construction and time-limited operations. The conditions in the issued works approval, as outlined in Table 3 have been determined

in accordance with *Guidance Statement: Setting Conditions* (DER 2015).

A licence amendment is required following the time-limited operational phase authorised under the works approval to authorise emissions associated with the ongoing operation of the premises. A risk assessment for the time-limited operational phase has been included in this decision report, as a risk assessment for licence operations was finalised when the licence was granted. An additional risk assessment will be finalised when the department assesses the licence amendment application.

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

Risk events					Risk rating <sup>1</sup> C = consequence L = likelihood	Applicant controls sufficient?	Conditions <sup>2</sup> of works approval	Justification for additional regulatory controls / DWER comments
Sources / activities	Potential emission	Potential pathways and impact	Receptors	Applicant controls				
<b>Construction</b>								
Construction of Packaged waste area, DB, Iso Container area and monitoring bores  Vehicle movements.	Dust	Air / windborne pathway causing impacts to health and amenity	Adjacent commercial premises  Stayover Kingfisher Village 1.4 km southeast of Premises	Refer to Section 3.1	C = Slight L = Unlikely <b>Low Risk</b>	Y	N/A	N/A  The Delegated Officer has considered the scale of the works and the separation distance between the source and receptors as indicating that the risk of dust emission impacts is not foreseeable.  Dust emissions will be adequately regulated under s49 of the EP Act.
	Noise		Civeo Karratha Village 2.2 km northeast of Premises  Residential property 3 km northeast of Premises		Refer to Section 3.1			C = Slight L = Unlikely <b>Low Risk</b>
<b>Operation (including time-limited-operations operations)</b>								
Operation of Packaged waste area, DB, Iso Container area and monitoring bores  Vehicle movements.	Dust	Air / windborne pathway causing impacts to health and amenity	Adjacent commercial premises  Stayover Kingfisher Village 1.4 km southeast of Premises	Refer to Section 3.1	C = Slight L = Unlikely <b>Low Risk</b>	Y	N/A	N/A  The Delegated Officer has considered the scale of the works and the separation distance between the source and receptors as indicating that the risk of dust emission impacts is not foreseeable.  Dust emissions will be adequately regulated under s49 of the EP Act.
	Noise		Civeo Karratha Village 2.2 km northeast of Premises		Refer to Section 3.1			C = Slight

Works approval: W3244/2026/1

Risk events					Risk rating <sup>1</sup> C = consequence L = likelihood	Applicant controls sufficient?	Conditions <sup>2</sup> of works approval	Justification for additional regulatory controls / DWER comments
Sources / activities	Potential emission	Potential pathways and impact	Receptors	Applicant controls				
		impacts to health and amenity	Residential property 3 km northeast of Premises		L = Unlikely <b>Low Risk</b>			the scale of the works and the separation distance between the source and receptors as indicating that the risk of noise emission impacts is not foreseeable.  Noise emissions are adequately regulated under the Noise Regulations.
	Odour	Air / windborne pathway causing impacts to health and amenity		Refer to Section 3.1	C= Slight L = Unlikely <b>Low Risk</b>	Y	N/A	N/A
	Leachate / Seepage	Liquid waste infiltration to groundwater through the base of the DB and storage areas	Groundwater 6-10 mbgl	Refer to Section 3.1	C = Moderate L = Unlikely <b>Medium Risk</b>	Y	Condition 1, 2, 3, 4, 5, 8, 9, 10, 12 and 13.	N/A
	Contaminated stormwater	Overland runoff potentially causing ecosystem disturbance or impacting surface water quality	Threatened ecological community Seven Mile Creek 500 m east of Premises	Refer to Section 3.1	C = Minor L = Unlikely <b>Low Risk</b>	Y	Condition 1, 2, 4, 5, 8, 9, 10 and 14.	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 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 on 2 April 2026	No submissions received	Noted
Local Government Authority advised of proposal on 2 April 2026	<p>The City of Karratha responded on 8 April 2026:</p> <p>The City previously provided comments in response to the Licence Amendment for the site (L2904/2025/1 - APP-0033098) as follows:</p> <p>The City confirms that the most recent planning approval for the site, Development Approval DA25-083, was approved on 9 September 2025 for:</p> <ul style="list-style-type: none"> <li>• Industry – Noxious Additions, including: <ul style="list-style-type: none"> <li>○ new curing pond</li> <li>○ weighbridge</li> <li>○ sea container dome</li> <li>○ office and crib facilities</li> <li>○ new crossovers</li> </ul> </li> </ul> <p>The proposed licence amendment is consistent with the approved land use for the site and aligns with the type of industrial activities currently undertaken and do not trigger any additional Development Approval requirements under the City's Local Planning Scheme.</p> <p>Any proposed works may require Development Approval.</p> <p>The City understands that this proposed Works Approval is directly related to the previous Licence Amendment and that nothing further is proposed that wasn't outlined in the application for Licence Amendment.</p> <p>The City has no further comments at this stage.</p>	Noted
Applicant was provided with draft documents on 22 May 2026	<p>Applicant responded on 4 June 2026.</p> <p>Refer to Appendix 1</p>	Refer to Appendix 1

## 5. Conclusion

Based on the assessment in this decision report, the delegated officer has determined that a works approval 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.

## Appendix 1: Summary of applicant's comments on risk assessment and draft conditions

Decision Report	Summary of applicant's comment	Department's response
Section 2.2.2	Addition of Contaminated soils and sludges	Amended section 2.2.2
Section 2.2.2	Additional text to describe - Used to consolidate wastes into ISO containers, ISO containers are self-bunded and once full will be stored next to the pad	Amended section 2.2.3
Condition	Summary of applicant's comment	Department's response
Condition 1 Table 1	Isotainer is 20,000 litres and will sit separate to the pad (when not being filled as self-bunded. The 1,000 litre capacity is to hold the largest container to be decanted into the isotainer	Table 1 row 3(c) amended accordingly to 20,000 litre capacity. Confirmed with Applicant the 20,000 litre Isotainer will sit on top of the concrete pad when being filled.
Condition 2 Table 2	Monitoring well location map provided. Operational by December 2026	New monitoring bore location map in Schedule 1 Figure 7. Timeframe amended to be operation by 1 December 2026.