



Application for Works Approval

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

Works Approval Number W6929/2024/1

Applicant Karratha Recycling Pty Ltd

ACN 163 991 106

File number DER2024/000156

Premises Karratha Recycling Liquid Waste Facility
Lot 120 and 121 Pindan Road
GAP RIDGE WA 6714
As defined by the premises map attached to the issued works approval

Date of report 29 July 2024

Decision Works approval granted

Grace Heydon
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 construction and operation of the premises. As a result of this assessment, works approval W6929/2024/1 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 12 April 2024, the applicant submitted an application for a works approval to the department under section 54 of the *Environmental Protection Act 1986* (EP Act). The Applicant operates the Premises under Existing Licence L8861/2014/1.

The application was to originally undertake construction works relating to an additional lined aerobic and anaerobic pond and a drying bed at the Category 61 (Liquid waste facility) prescribed premises. The two ponds were to be lined with Elcoseal Geosynthetic Clay Liners (GCL). Elcoseal GCL has been used in the existing ponds at the Premises and has a permeability of 2.8×10^{-11} m/s, which is below the required maximum allowable permeability of 1×10^{-9} m/s as outlined in Department of Water, Water Quality Protection Notice 27 (WQPN 27).

In correspondence dated 10 July 2024 the applicant confirmed that both the anaerobic and aerobic ponds had been constructed prior to granting of the Works Approval. As this may be a breach of the *Environmental Protection Act 1986* (EP Act) the matter has been referred to DWER Assurance branch for appropriate enforcement action(s). Accordingly, this works approval will now only consider the proposed drying bed which has not been constructed, and the applicant will need to seek approval to operate the two ponds through an amendment to Licence L8861/2014/1.

The drying bed will be 70 m x 30 m in size and will be designed as a wedge style bay with a raised entrance point at one end ramping down to a depth of approximately 1m at the other end. The entire bed will have raised bunds to contain material and prevent external stormwater runoff entering the bed.

The drying bed will be used to store pond sludge sourced from the existing ponds when the respective pond is desludged. All resultant desludged solid waste will be removed from the Premises and sent to a suitably licensed facility for disposal.

The applicant has advised that the drying bedwell also have a spray seal and asphalt layer to allow machinery to be able to drive in and clear the bed once and sludge material has dried.

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 W6929/2024/1. 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 works approval W6929/2024/1.

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 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
Construction			
Dust	Construction of drying bed Machinery movements	Air / windborne pathway	Size of construction activity is small so limited dust exposure. Water Cart on-site.
Noise	Construction of drying bed Machinery movements	Air / windborne pathway	All onsite machinery fitted with mufflers. Compliance with <i>Environmental Protection (Noise) Regulations 1997</i> (Noise Regs).
Operation			
Dust	Operation of drying bed Machinery movements	Air / windborne pathway	Water cart on site. Restricted vehicle speed due to size of Premises.
Noise	Operation of drying bed Machinery movements	Air / windborne pathway	Compliance with the <i>Environmental Protection (Noise) Regulations 1997</i> (Noise Regulations). Size of premises restricts vehicle speeds.
Odour	Operation of drying bed Machinery movements	Air / windborne pathway	No changes to Existing Licence Waste acceptance or processes. Potentially odorous solids are removed prior to acceptance onsite.
Leachate / Seepage	Seepage of liquid waste from drying bed	Seepage to soil and groundwater	Drying bed GCL Liner constructed to meet not less than 1 x 10 ⁻⁸ m/s permeability. The drying bed will also have a spray seal and asphalt layer to allow machinery to be able to drive in and clear the pit once and sludge material has dried.

Emission	Sources	Potential pathways	Proposed controls
			The pond is lined in accordance with the specifications of WQPN 27. Depth to groundwater 6 – 10 mbgl.
Contaminated Stormwater	Overflow from drying bed	Direct discharge to land or surface water	Drying bed will be bunded to exclude ingress of 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 2 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
Commercial Premises	Adjacent to the Premises
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 mapped within this designated area
Pilbara Surface Water Area (RIWI Act 1914)	Premises mapped within this designated area
Threatened ecological communities. Roebourne Plains gilgai grasslands	Premises mapped within this area
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 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 W6929/2024/1 that accompanies this decision report authorises construction only. 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 to Existing Licence L8861/2014/1 to authorise emissions associated with the ongoing operation of the premises post construction of the two new ponds and drying bed. A risk assessment for the operational phase has been included in this decision report, however licence conditions will not be finalised until the department assesses the licence application. The applicant will need to demonstrate that the two ponds and drying bed were constructed to suitable standards (through the submission of a Construction Quality Assurance Report) prior to authorising operations under the Licence Amendment.

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 works approval / licence	Justification for additional regulatory controls
Sources / activities	Potential emission	Potential pathways and impact	Receptors	Applicant controls				
Construction								
Construction of Drying bed 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 Low Risk	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.
	Noise		Civeo Karratha Village 2.2 km northeast of Premises Residential properties 3 km northeast of Premises	Refer to Section 3.1	C = Slight L = Unlikely Low Risk	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 noise emission impacts is not foreseeable. Noise emissions will be adequately regulated under the Noise Regulations.
Operation								
Operation of Drying bed 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 Low Risk	Y	N/A Existing Licence condition 12 regulates dust emissions.	N/A
	Noise		Civeo Karratha Village 2.2 km northeast	Refer to Section 3.1	C = Slight L = Unlikely Low Risk	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

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Risk events					Risk rating ¹ C = consequence L = likelihood	Applicant controls sufficient?	Conditions ² of works approval / licence	Justification for additional regulatory controls
Sources / activities	Potential emission	Potential pathways and impact	Receptors	Applicant controls				
			of Premises Residential properties 3 km northeast of Premises					that the risk of noise emission impacts is not foreseeable. Noise emissions are adequately regulated under the Noise Regulations.
	Odour			Refer to Section 3.1	C= Moderate L = Unlikely Medium Risk	Y	Existing Licence conditions 6 and 7.	The Existing Licence will need to be amended post construction activities to authorise operation of the (ponds and) drying Bed.
	Leachate / Seepage	Liquid waste infiltration to groundwater through the base of the evaporation drying ponds	Pilbara Groundwater and Surface water areas – Premises situated within defined areas.	Refer to Section 3.1	C = Moderate L = Unlikely Medium Risk	Y	Existing Licence conditions 6, 7 and 8.	The Existing Licence will need to be amended post construction activities to authorise operation of the (ponds and) drying bed.
	Sediment laden stormwater	Overland runoff potentially causing ecosystem disturbance or impacting surface water quality	Threatened ecological community. Seven Mile creek 660 m east of Premises.	Refer to Section 3.1	C = Moderate L = Unlikely Medium Risk	Y	Existing Licence condition 3	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 1 provides a summary of the consultation undertaken by the department.

Table 1: Consultation

Consultation method	Comments received	Department response
Application advertised on the department's website on 22 May 2024	None received	N/A
Local Government Authority advised of proposal on 22 May 2024	<p>The City of Karratha replied on 6 June 2024.</p> <p>The City of Karratha acknowledges the correspondence on 22/05/2024 from Department of Water and Environmental Regulation for Category 61- Liquid waste facility.</p> <p>Regarding the above, the City of Karratha provides the following comments:</p> <ul style="list-style-type: none"> • The City has received a development application (DA24-041) for 'Industry – Noxious' Additions for a new curing pond: <ul style="list-style-type: none"> ▪ The pond is located in the NW corner of the lot and is proposed to measure 70m (L) x 30m (W). ▪ Application is currently under assessment with the application being at an external referral. ▪ Development Approval is pending a full assessment. ▪ Further noted that the curing pond subject of the DA is located in a portion of the subject site (Lot 120 Pindan Road) which has recently been amalgamated into the previous Lot 112 Pindan Road. ▪ This DA will seek to extend the 'Industry – Noxious' land use across the entirety of the new Lot 120 Pindan Road. • Dust must be taken into consideration during the construction phase. 	<p>The Delegated officer notes that development approval is currently under assessment by the City of Karratha.</p> <p>It is the responsibility of the applicant to ensure all relevant approvals are in place prior to undertaking the proposed activities at the premises.</p>

Applicant was provided with draft documents on 15 July 2024	<p>The Applicant was required to comment on the draft documents and submit outstanding information.</p> <p>The Applicant responded on 23 July 2024, providing the required information and advising that there were no comments on the draft Works Approval and Decision Report.</p>	Noted
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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: Application validation summary

SECTION 1: APPLICATION SUMMARY (as updated from validation checklist)				
Application type				
Works approval	<input checked="" type="checkbox"/>			
Licence	<input type="checkbox"/>	Relevant works approval number:		None <input type="checkbox"/>
		Has the works approval been complied with?	Yes <input type="checkbox"/> No <input type="checkbox"/>	
		Has time limited operations under the works approval demonstrated acceptable operations?	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>	
		Environmental Compliance Report / Critical Containment Infrastructure Report submitted?	Yes <input type="checkbox"/> No <input type="checkbox"/>	
		Date report received:		
Renewal	<input type="checkbox"/>	Current licence number:		
Amendment to works approval	<input type="checkbox"/>	Current works approval number:		
Amendment to licence	<input type="checkbox"/>	Current licence number:		
		Relevant works approval number:		N/A <input type="checkbox"/>
Registration	<input type="checkbox"/>	Current works approval number:		None <input type="checkbox"/>
Date application received	12/04/2024			
Applicant and premises details				
Applicant name/s (full legal name/s)	Karratha Recycling Pty Ltd			
Premises name	Karratha Recycling Liquid Waste Facility			
Premises location	Lot 111 and 112 Pindan Road Gap Ridge Karratha WA 6714			
Local Government Authority	City of Karratha			
Application documents				
HPCM file reference number:	DER2024/000156			
Key application documents (additional to application form):	Application Form			
Scope of application/assessment				
Summary of proposed activities or changes to existing operations.	Works approval Construction of a Lined Drying Bed			

SECTION 1: APPLICATION SUMMARY (as updated from validation checklist)

Category number/s (activities that cause the premises to become prescribed premises)

Table 1: Prescribed premises categories

Prescribed premises category and description	Assessed production or design capacity	Proposed changes to the production or design capacity (amendments only)
Category 35: Asphalt manufacturing - premises on which hot or cold mix asphalt is produced using crushed or ground rock aggregates mixed with bituminous or asphaltic materials for use at a place or premises other than those premises.	40,000 tonnes per annual period	No Changes
Category 36: Bitumen manufacturing: premises on which bitumen is mixed or prepared for use at places or premises other than those premises	20,000 tonnes per annual period	No Changes
Category 61: Liquid waste facility: premises on which liquid waste produced on other premises (other than sewerage waste) is stored, reprocessed, treated or irrigated.	130,000 tonnes per annual period	No Changes
Category 61A: Solid Waste Facility: premises (other than premises within category 67A) on which solid waste produced on other premises is stored, reprocessed, treated or discharged onto land	20,000 tonnes per annual period	No Changes

Legislative context and other approvals

Has the applicant referred, or do they intend to refer, their proposal to the EPA under Part IV of the EP Act as a significant proposal?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Referral decision No: Managed under Part V <input checked="" type="checkbox"/> Assessed under Part IV <input type="checkbox"/>
Does the applicant hold any existing Part IV Ministerial Statements relevant to the application?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Ministerial statement No: EPA Report No:
Has the proposal been referred and/or assessed under the EPBC Act?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Reference No:

SECTION 1: APPLICATION SUMMARY (as updated from validation checklist)		
Has the applicant demonstrated occupancy (proof of occupier status)?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Certificate of title <input checked="" type="checkbox"/> General lease <input type="checkbox"/> Expiry: Mining lease / tenement <input type="checkbox"/> Expiry: Other evidence <input type="checkbox"/> Expiry:
Has the applicant obtained all relevant planning approvals?	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>	Approval: Expiry date: Application advises in section 7.5 DA Approval in final stages with City of Karratha
Has the applicant applied for, or have an existing EP Act clearing permit in relation to this proposal?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	CPS No: N/A No clearing is proposed.
Has the applicant applied for, or have an existing CAWS Act clearing licence in relation to this proposal?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Application reference No: N/A Licence/permit No: N/A No clearing is proposed.
Has the applicant applied for, or have an existing RIWI Act licence or permit in relation to this proposal?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Application reference No: Licence/permit No: Licence / permit not required.
Does the proposal involve a discharge of waste into a designated area (as defined in section 57 of the EP Act)?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Name: N/A Type: N/A Has Regulatory Services (Water) been consulted? Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/> Regional office: N/A
Is the Premises situated in a Public Drinking Water Source Area (PDWSA)?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Name: N/A Priority: N/A Are the proposed activities/ landuse compatible with the PDWSA (refer to <u>WQPN 25</u>)? Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>
Is the Premises subject to any other Acts or subsidiary regulations (e.g. <i>Dangerous Goods Safety Act 2004, Environmental Protection (Controlled Waste) Regulations 2004, State Agreement Act xxx</i>)	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	<i>Environmental Protection (Controlled Waste) Regulations 2004.</i> <i>Environmental Protection (Unauthorised Discharges) Regulations 2004.</i>

SECTION 1: APPLICATION SUMMARY (as updated from validation checklist)		
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"/>	
Is the Premises a known or suspected contaminated site under the <i>Contaminated Sites Act 2003</i> ?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Classification: N/A Date of classification: N/A