



Application for Licence Amendment

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

Licence Number	L8861/2014/1
Licence Holder	Karratha Recycling Pty Ltd
ACN	163 991 106
File Number	DER2014/002439-1~5
Premises	Karratha Recycling Liquid Waste Facility Lot 111 Bedrock Turn and Lot 112 Exploration Drive GAP RIDGE WA 6714 Legal description: Lot 111 on Deposited Plan 75061 Certificate of Title Volume 2813 Folio 263; and Lot 112 on Deposited Plan 75062 Certificate of Title Volume 2813 Folio 264 As defined by the Premises map attached to the Revised Licence
Date of Report	02/08/2022
Decision	Revised licence granted

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A/MANAGER, WASTE INDUSTRIES

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

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1. Decision summary

Licence L8861/2014/1 is held by Karratha Recycling Pty Ltd (Licence Holder) for the Karratha Recycling Liquid Waste Facility (the Premises), located at Lot 111 Bedrock Turn and Lot 112 Exploration Drive, Gap Ridge.

This Amendment Report documents the assessment of potential risks to the environment and public health from proposed changes to the emissions and discharges during the operation of the Premises. As a result of this assessment, a Revised Licence has been granted.

2. Scope of assessment

2.1 Regulatory framework

In completing the assessment documented in this Amendment Report, the department 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

On 14 January 2022, the applicant submitted an application for an amendment to licence L8861/2014/1 under section 54 of the *Environmental Protection Act 1986* (EP Act). The application is for addition of controlled waste code N205 to the waste acceptance table on the licence, enabling the receipt of industrial waste treatment plant residues at the premises.

The amendment is sought as the applicant intends to receive industrial residues associated with petroleum engineering/drilling from Darwin based operations. Northern Territory doesn't recognise Controlled Waste code L150 (Industrial wash water contaminated with a controlled waste) and therefore the independent waste transporter is unable to transfer and dispose of it under this code. Whereas the waste meets the description of Controlled Waste code N205 (Industrial waste treatment plant residues), applicable in both jurisdictions.

Figure 1: Premises map

The premises is shown in the map below. The authorised N205 treatment area is labelled 'Proposed N205 Pond'.



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 *Guidance Statement: Risk Assessments* (DER 2017).

Potential emissions and impacts associated with the proposed N205 pond and associated waste streams are assessed in Works Approval W5806/2015/1 issued 19 March 2015 and Amendment Notice 3, issued 6 September 2018.

Environmental risk associated with N205 Controlled Waste receipt and treatment are assessed as follows.

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 Amendment Report are detailed in Table 1 below. Table 1 also details the proposed control measures the Licence Holder has proposed to assist in controlling these emissions, where necessary.

Table 1: Licence Holder controls

Emission	Sources	Potential pathways	Proposed controls
Odour	Liquid fraction of exploratory drill mud	Air/windborne pathway	Potentially odorous solids are removed prior to acceptance onsite.
Liquid waste	Spillage of liquid waste or overtopping of evaporation ponds	Direct discharge to land	<p>The pond is constructed using a 2 mm HDPE liner and has been bunded to prevent overtopping.</p> <p>A 500 mm freeboard will be maintained.</p> <p>The pond has capacity to contain stormwater resulting from a 1 in 20 year storm event of 24 hours duration.</p>
	Seepage of liquid waste from evaporation pond	Direct discharge to land and subsequent infiltration to groundwater	<p>The pond is constructed using a 2 mm HDPE liner with a compacted base of in-situ soil.</p> <p>The pond has been designed and constructed to achieve a separation distance of between 7-8m between the base of the HDPE liner and the highest wet season water table (based on historical records from on-site groundwater monitoring).</p> <p>The pond is lined in accordance with the specifications of WQPN 26 (Department of Water, August 2013).</p>

3.1.2 Receptors

In accordance with the *Guidance Statement: Risk Assessment* (DER 2017), the Delegated Officer has excluded employees, visitors and contractors of the Licence Holder's from its assessment. Protection of these parties often involves different exposure risks and prevention strategies, and is provided for under other state legislation.

Table 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 (*Guidance Statement: Environmental Siting* (DER 2016)).

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	2.9 km south-east of the Premises
Cievo Karratha Village	2.06 km north-east of the Premises
Residential Properties	2.95 km north-east 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 situated within this designated area
Pilbara Surface Water Area (RIWI Act 1914)	Premises situated within this designated area
Threatened ecological communities (TEC) <ul style="list-style-type: none"> Roebourne Plains gilgai grasslands 	850 m west of Premises
Surface water lines <ul style="list-style-type: none"> Seven Mile Creek Minor non perennial water courses 	660 m east of Premises



Figure 2: Distance to sensitive receptors

3.2 Risk ratings

Risk ratings have been assessed in accordance with the *Guidance Statement: Risk Assessments* (DER 2017) for those emission sources which are proposed to change 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 Licence Holder 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 Licence Holder'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 Licence Holder's controls are not deemed sufficient. Where this is the case the need for additional controls will be documented and justified in Table .

The Revised Licence L8861/2014/1 that accompanies this Amendment Report authorises emissions associated with the operation of the Premises i.e. liquid waste acceptance into the two additional evaporation ponds.

The conditions in the Revised Licence 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 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				
Acceptance of N205 liquid waste into pond 2 ('proposed N205 pond') for disposal by evaporation	Odour	Air/windborne pathway causing impacts to health and amenity.	Adjacent commercial premises. Stayover Kingfisher Village 2.9 km south east of Premises. Civeo Karratha Village 2.06 km north-east of Premises. Residential properties 2.95 km north-east of Premises.	Refer to Section 3.1	C = Moderate L = Unlikely Medium Risk	Y	Condition 1, 6, and 7	N/A
	Liquid waste	Spillage of liquid waste, overtopping of evaporation pond resulting in a discharge of liquid waste to the environment, with the potential to impact stormwater and/or groundwater (via subsequent infiltration).	Pilbara Groundwater and Surface water areas – Premises situated within defined areas. Threatened ecological community. Seven Mile creek 660 m east of Premises.	Refer to Section 3.1	C = Moderate L = Unlikely Medium Risk	Y	Condition 1, 2, 3, 9	N/A
	Liquid waste	Seepage of liquid waste to land from	Pilbara Groundwater and Surface water areas – Premises	Refer to Section 3.1	C = Moderate L = Unlikely	Y	Condition 1, 3, 8, and 9	N/A

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				
		evaporation ponds resulting in infiltration to groundwater	situated within defined areas. Threatened ecological community buffers within Premises area. Seven Mile creek 660 m east of Premises.		Medium Risk		Condition 16, 17 and 27	

Note 1: Consequence ratings, likelihood ratings and risk descriptions are detailed in the *Guidance Statement: Risk Assessments* (DER 2017).

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

4. Consultation

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

Table 4: Consultation

Consultation method	Comments received	Department response
City of Karratha advised of proposal 8 April 2022 via email.	<p>Karratha Recycling Pty Ltd have submitted an application for development approval for the construction of two additional evaporation ponds at the Karratha Recycling Liquid Waste Facility (reference: DA20159).</p> <p>The City advises that at this stage of assessment the proposal is considered to be generally in line with the relevant objectives of the City's Local Planning Scheme No.8 and the Gap Ridge Industrial Estate Structure Plan, and that Karratha Recycling have been granted Development Approval for the land use of 'Industry – Noxious', under DA20159 and DA14053 respectively.</p>	The Delegated Officer notes this advice and will notify the Licence Holder of its obligation to obtain all relevant planning approvals.
Licence Holder provided with draft amendment 16 June 2022.	Licence Holder advised DWER on 27 July 2022 that they had no comments on the draft amendment	N/A

5. Conclusion

Based on the assessment in this Amendment Report, the Delegated Officer has determined that a Revised Licence will be granted, subject to conditions commensurate with the determined controls and necessary for administration and reporting requirements. The Licence Holder is advised that it is required to obtain all relevant planning approvals from the City of Karratha.

5.1 Summary of amendments

Table provides a summary of the proposed amendments and will act as record of implemented changes. All proposed changes have been incorporated into the Revised Licence as part of the amendment process.

Table 5: Summary of licence amendments

Condition no.	Proposed amendments
Condition 6 Table 2	Inclusion of Controlled Waste Code N205 for industrial waste treatment plant residues and associated specifications.
Condition 7 Table 3	Update waste type in column 1 to include industrial waste treatment plant residues.

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 2013, *Water Quality Protection Notes 26 – Liners for containing pollutants, using synthetic liners*, Perth, Western Australia.

Appendix 1: Application validation summary

SECTION 1: APPLICATION SUMMARY						
Application type						
Works approval	<input type="checkbox"/>	Relevant works approval number:		None	<input type="checkbox"/>	
Licence	<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 checked="" type="checkbox"/>	Current licence number:	L8861/2014/1			
		Relevant works approval number:		N/A	<input type="checkbox"/>	
Registration	<input type="checkbox"/>	Current works approval number:		None	<input type="checkbox"/>	
Date application received		14/01/2022				
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 Bedrock Turn and Lot 112 Exploration Drive GAP RIDGE WA 6714 Lot 111 on Plan 75061 – Volume 2813, Folio 263 Lot 112 on Plan 75061 – Volume 2813, Folio 264				
Local Government Authority		City of Karratha				
Application documents						
HPCM file reference number:		DER/2014/002439-1				

Scope of application/assessment	
Summary of proposed activities or changes to existing operations.	Amendment of waste code for controlled waste acceptance from L150 (industrial wash waters contaminated with a controlled waste) to N205 (industrial waste treatment plant residues) in condition 6 of licence L8861 for waste acceptance in evaporation pond 2.

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
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	The newly constructed evaporation pond 3 is designed to contain 12 million litres of N205 liquid waste. There is no change to the overall assessed production and design capacity for the premises. The application states that the pond will hold a limit of 10 million litres.

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 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:
Has the applicant demonstrated occupancy (proof of occupier status)?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Certificate of title <input 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 checked="" type="checkbox"/> N/A <input type="checkbox"/>	Approval: Expiry date: If N/A explain why? No evidence of planning approval. Will flag with applicant

		on validation confirmation. To be sought during assessment. Will consult with council to determine whether further planning approval is required.
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
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
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:
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: Proclaimed Groundwater Area/Surface Water Area Has Regulatory Services (Water) been consulted? Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
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: P1 / P2 / P3 / N/A Are the proposed activities/landuse compatible with the PDWSA? Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
Is the Premises subject to any other Acts or subsidiary regulations (e.g. <i>Dangerous Goods Safety Act 2004</i> , <i>Environmental Protection (Controlled Waste) Regulations 2004</i> , <i>State Agreement Act xxxx</i>)	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Controlled waste legislation for the receipt, storage and treatment of numerous waste types as defined in the Controlled Waste Regs.
Is the Premises within an Environmental Protection Policy (EPP) Area?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	N/A
Is the Premises subject to any EPP requirements?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	N/A

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"/>	N/A
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