Government of Western Australia
Department of Water and Environmental Regulation

Decision Report

Application for Works Approval

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

Works Approval Number	W6782/2023/1
Applicant	Karratha Recycling Pty Ltd
ACN	163 991 106
File number	DER2022/000678
Premises	Karratha Recycling Liquid Waste Facility Lot 120 and Lot 121 on DP 424552 GAP RIDGE WA 6714 As defined by the coordinates in Schedule 2 of the works approval
Date of report	8 March 2024
Proposed Decision	Works approval granted

Steve Checker

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STEPHEN CHECKER
MANAGER WASTE INDUSTRIES
REGULATORY SERVICES
an officer delegated under section 20 of the *Environmental Protection Act 1986* (WA)

Table of Contents

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 W6782/2023/1 has been granted.

Applicant to note: The applicant intends to treat industrial wastewater to an acceptable standard to be used for dust suppression offsite.

Independent of the acceptability of the treated water for this purpose, the Department's Controlled Waste Branch have advised that treated industrial wastewater received at the Premises as a controlled Waste, is likely to still be considered a controlled waste following treatment. Controlled wastes may only lawfully be received for irrigation at licensed Prescribed Premises (likely Category 61). Therefore, any offsite use of treated wastewater for dust suppression may cause the receiving premises to be considered a prescribed premises as per Schedule 1 of the Environmental Protection Regulations 1987.

The applicant is advised to contact the Department's Controlled Waste Branch with regard to the requirements for determination as to whether specific liquid wastes are considered controlled waste following treatment.

Pending outcomes of the above, the applicant should contact the Department regarding the licensing requirements for any proposal for offsite reuse of treated wastewater

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 9 December 2022, the applicant submitted an application for a works approval to the department under section 54 of the *Environmental Protection Act 1986* (EP Act).

The Delegated Officer considered that further information was required to validate the application. This was provided to DWER on 13 January 2023.

Following a review of the additional information provided, the Delegated Officer considered that sufficient information had been provided to validate the application and commence with the risk assessment.

The application is for the installation of a Oleology filtration unit at the existing Karratha Recycling Liquid Waste Facility, which operates under Licence L8861/2014/1. The Oleology filtration unit will treat industrial wastewater to an acceptable standard for discharge purposes, with the treated water to be used for dust suppression offsite (**note advice under decision summary above**). The unit will be supplied as a containerised system with fully automatic and

autonomous operation and will be integrated into the existing processes for liquid waste treatment at the Karratha Recycling Liquid Waste Facility.

The premises relates to category 61 and assessed production / design capacity (P&DC) under Schedule 1 of the *Environmental Protection Regulations 1987 (EP Regulations)* which are defined in works approval W6782/2023/1. The infrastructure and equipment relating to the premises category and any associated activities which the department has considered in line with the *Guideline: Risk Assessments (DWER 2020)* are outlined in works approval W6782/2023/1.

2.3 Industrial water treatment process

The Oleology filtration unit utilises a variety of MyCelx patented filtration media, enabling gradual reduction of typical water contaminants such as solids, hydrocarbons, emulsions, metals, organics, and semi-soluble and soluble contaminants, including PFAS. An overview of the filtration unit components is provided in Figure 11.

The filtration process will be set up to have the capability to draw water from evaporation pond four, which contains industrial wash waters (Controlled waste codes L100 and L150). Holding tanks will be installed to store the treated water.

Raw water from evaporation pond four will be pH corrected through a dosing pump by an automated pH monitor and mixed in-line within a static mixing chamber. The water will then be flocked for the reduction and removal of suspended solids, total dissolved solids (TDS) and surfactants. The flocked water is settled through a settling tank system, and clarified water is then drawn from the final tank by the filter pump and pumped through a sequence of filters, comprising of Regenerable (back-washable) media, MyCelx Filtration and Advanced Oxidation Process filtering (AOP). Each stage of the filtration process is designed to treat specific contaminants.

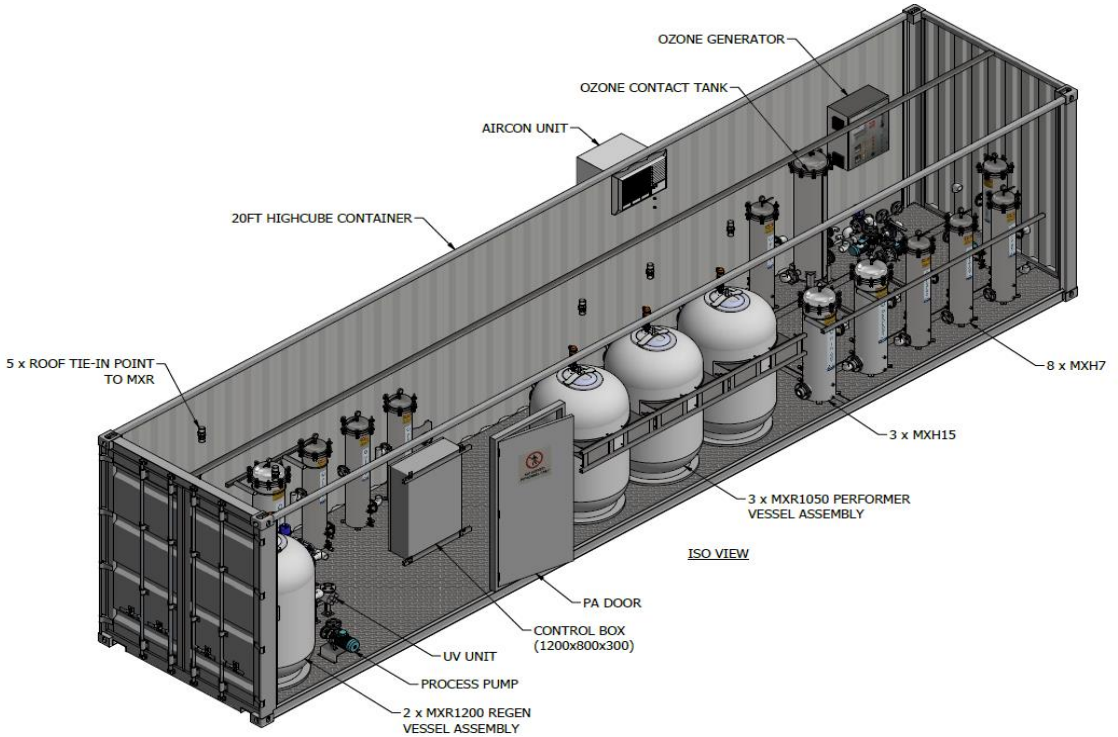

Figure 1: Oleology filtration unit components

Treatment Description

The following information in relation to the Oleology filtration process has been summarised from the application:

The treatment system is designed for the treatment of the L150 pond wastewater (medium exposure risk levels) which can be used for dust suppression and industrial cooling water.

The various exposure risk levels according to the Guidelines for the Non-potable uses of recycled water in western Australia are:

1. High Risk – Demands the highest quality of water for end-use, necessitating rigorous barriers, safeguards, and monitoring regimes.
2. Medium Risk – Represents moderate risk, typically reduced from a high-risk category through the implementation of barriers and safeguards.
3. Low Risk – Poses minimal risk to human health, involving limited contact.
4. Extra Low Risk – Posses negligible risk.

The treatment stages are designed to meet these guidelines. The sub-stages of each treatment strategy implemented in the treatment scheme are illustrated below (Figure 2).

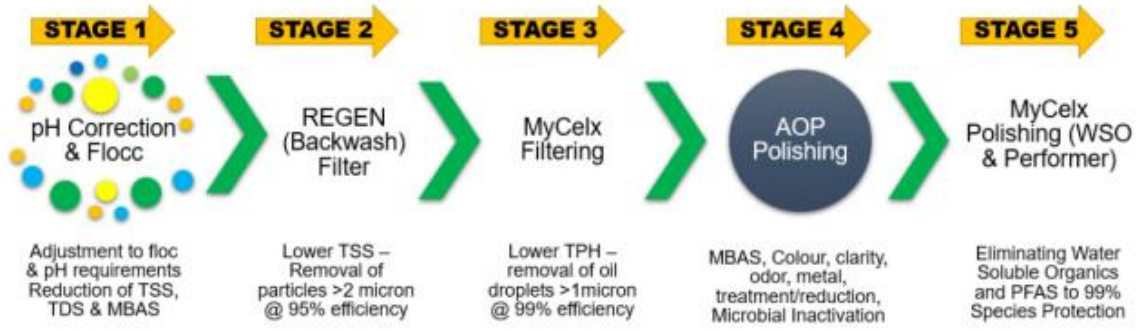

Figure 2: Process flow diagram

Stage 1: pH Correction and Flocculation

pH correction is the initial stage of the process, occurring as water is pumped from the L150 pond into an above-ground dirty water holding tank. An inlet raw water pH probe is placed before water enters the holding tank. Depending on the raw pH value, an automated dosing system activates, introducing the appropriate chemical (lime) to rectify the pH level.

This crucial step involves fine-tuning the acidity or alkalinity of the water to align it within the desired range or compliance values. Incorrect pH levels can lead to corrosiveness and have adverse effects on the treatment processes. The subsequent flocculation step is also linked to pH correction. The purpose of flocculation is to encourage small, suspended particles within the water to aggregate into larger, easily removable clumps or flocs.

This facilitates their efficient removal during sedimentation. The effectiveness of flocculation chemicals (alum) is contingent on maintaining a specific pH level. To achieve this, a recirculation pump operates in recirculation mode, continually dosing chemicals until the pH falls within the target range of 5.5-8.5. Once the desired pH level is attained and recorded by

the pH probe within the dirty water tank, the same recirculation pump redirects the water to the next tank.

Here, settling time is provided for flocculation, allowing the removal of solids. During this transfer, flocculation chemicals are dosed online, and the liquid is subjected to a mixer with vanes that ensure a homogeneous blend with the flocculation chemical. This not only guarantees optimal mixing but also minimizes the amount of flocculant chemical required to prevent excessive dosing. For remote monitoring and data accuracy, readings for both raw water pH and treated water pH, as well as the levels of pH correction and flocculant chemicals, are continuously monitored.

Stage 2: MXR-UV-MXR

After allowing for sufficient settling time during the flocculation process and the removal of solids from the water, the treated water proceeds to the second stage, where it is directed through the MyCelx Regenerable Media (MXR). In the initial filtration stage, the water sample is passed through the MXR.

The MXR regen media is specifically engineered to target and capture solids, oily solids, and other contaminants present in the water. This media possesses a backwash feature, facilitating the rejuvenation of the media once it reaches saturation, thus enabling it to continue its water processing function. This inherent characteristic ensures the media's longevity, which can be extended over several years with appropriate maintenance.

The primary objective behind incorporating the MXR regen media is to alleviate the load on downstream filtration cartridges, as these cartridges are consumable components. By maintaining the regen media in optimal condition, we can significantly reduce the consumption of these cartridges. Following the passage through the regen media, the water undergoes treatment in a UV light unit. This step serves the critical purpose of disinfecting and inactivating microorganisms present in the water.

After the UV light treatment, water is reintroduced and directed through the MXR once more. Placing the MXR after the UV treatment is aimed at capturing any microorganisms that may have survived the UV light exposure, as well as any remaining solids that may have passed through the initial MXR stage. The MXR is a regenerable media with backwashing capabilities, facilitating the removal of captured contaminants and solids. This comprehensive approach minimizes the strain on the filtration system and ensures the delivery of treated water meeting specified quality standards.

Stage 3: MyCelx Filtering Scheme (MXH)

After the removal of solids and contaminants, treated water progresses to the next stage, where it undergoes thorough filtration, utilizing specially designed cartridges tailored to target residual solids, soluble hydrocarbons, stable emulsions, and other contaminants. This process involves the utilization of independent MyCelx cartridge filtration, which employs a progressive filtering approach ranging from 5 microns down to 1 micron followed by HRM Hydrocarbon Removal Matrix (HRM) and Emulsion Breaker (EB).

The initial phase of this filtration sequence is executed by the OLEOLOGY filter, featuring filtration capacities at both 5- and 1-micron levels. This filter proves highly effective in eliminating suspended substances and fine particulate matter from the water. Subsequently, the water flows through the HRM and EB cartridges, each engineered to address specific contamination challenges. All of these filtration housings are integrated with pressure

transmitters, designed to operate with a predefined setpoint in the Programmable Logic Controller (PLC).

Once the pressure reading attains the specified setpoint, an automated backwash function is initiated, serving the purpose of expelling the captured contaminants from the filtration media. This proactive backwash functionality not only extends the operational lifespan of the filters but also ensures their sustained efficiency and effectiveness in maintaining water quality for the downstream processing scheme. Consequently, this integrated system optimizes filter performance, minimizing downtime, and preserving their long-term functionality.

Stage 4: Ozone

Upon the successful completion of the preceding stage, the water advances to a strategically positioned break tank equipped with a Guided Wave Radar (GWR) level sensor. The utilization of GWR technology allows for precise monitoring and communication of the water level within the break tank. When the predetermined water level is achieved, this triggers the automatic shutdown of the pump, initiating the commencement of the ozone treatment process.

Ozone, a formidable oxidizing agent, is deployed to address a diverse array of contaminants present within the water. The water within the tank is subjected to a recirculation process through a recirculation pump. Simultaneously, a distinct loop is employed to introduce ozone into the recirculation system.

The ozone treated water flows through a contact tank before returning to the break tank. This ozone treatment operation operates seamlessly within a fully automated framework, complemented by the integration of an Oxidation Reduction Potential (ORP)probe.

Ozone treatment is engineered to target a wide spectrum of contaminants, notably encompassing Methylene Blue Active Substances (MBAS), bacteria, nitrogen compounds, ammonia, algae, dissolved metals, and odorous compounds. It is imperative to note that the removal of contaminants extends beyond those mentioned.

Stage 5: MyCelx Polishing

This is the last stage of the treatment process. It is specifically engineered to target Per- and Polyfluoroalkyl Substances (PFAS) and achieve non-detectable levels as required under PFAS NEMP 2.0.

In conjunction with PFAS removal, this stage also addresses the removal of other contaminants, broadening its scope to enhance overall water quality.

After this stage the treated water will be directed to the clean water holding tank for further analysis.

Expert Advice: The Delegated Officer referred the application and supporting documents to the Department's Controlled Waste and Contaminated Sites Branch for comment. A summary of the advice is as follows

1. *(Controlled Waste) Any proposal to dispose of treated controlled liquid waste offsite for dust suppression, may cause the receiving premises to be considered a prescribed premises as per Schedule 1 of the Environmental Protection Regulations 1987 – most likely for the following category:*

   *Category 61: premises on which liquid waste produced on other premises (other than sewerage waste) is stored, reprocessed, treated or **irrigated**..*

2. *(Contaminated Sites) The department is aware of other remediation projects which have utilised water treatment systems based on Oleology's MyCelx technology to remove PFAS from impacted water. These systems have been successful in reducing PFAS concentrations to concentrations below the 99% species protection level for freshwater ecosystems (essentially nondetect levels in ultratrace analysis). The filtration train outlined in the reviewed documents is similar to the systems CS has observed in other successful remediation projects, so it seems reasonable to expect that the proposed design is suitable to achieve the required level of PFAS removal.*
3. *(Contaminated Sites) The report on the bench-top trial carried out by Oleology provides good supporting evidence for the effectiveness of the treatment process. While there is a progressive decrease in PFAS concentrations through the treatment train, the majority of PFAS removal appears to occur within the first stage of MXR 'polishing'. If the full-scale system achieves the same degree of PFAS removal as the bench-top trial, the treated water may be suitable for reuse in dust suppression and would not likely pose an unacceptable risk to the environment.*

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 1Table 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	*Movement of vehicles*	*Air / windborne pathway*	*Water Cart used on site*
Noise	*Movement of vehicles* *Installation of Oleology water filtration unit*	*Air / windborne pathway*	*All Oleology systems are fully factory assembled and tested prior to dispatch to site.* *All installation activities onsite will occur Monday to Friday between 0700 and 1800.* *The main equipment to be used will be a; crane, bobcat / small loader.*
Spills	*Installation of Oleology water filtration unit*	*Seepage to soil and groundwater*	*Additional spill kits will be provided so that any hydrocarbon spillages from the construction/installation activities are mopped up immediately.* *Any spill material will be placed in the sludge drying bed area.* *The UD Regulations and general provisions of the EP Act[1] will apply to operations onsite.*
Operation			

Emission	Sources	Potential pathways	Proposed controls
Dust	*Movement of vehicles*	*Air / windborne pathway*	*Water cart.* *Speed restrictions.*
Noise	*Operation of the Oleology treatment system*	*Air / windborne pathway*	*Sitting.* *Package plant so noise is limited.* *Noise resulting from the process will only be emitted from the process boosters pump, which will be located within a bunded area.* *The walls of the bund will function as noise suppression.*
Spills	*Operation of the Oleology treatment system treatment system*	*Seepage to soil, vegetation and groundwater*	*Associated chemicals (hydrogen peroxide) will comply with Australian Standards.* *Bunded storage area.*
Odour	*Operation of the Oleology treatment system*	*Air / windborne pathway*	*The Hydrogen Peroxides (H_2 O_2) produce an odour during mixing processes and normally disperses with a ten (10) meter radius of the plant.* *Employ tanks and containers which are sealed or closed and reduce odour.* *Properly treated wastewater should not produce significant odour.* *Inspections and maintenance.* *Online monitoring system for-* • *filter pressures;* • *pH;* • *turbidity;* • *water quality prior to discharge.*
Overtopping, tank failure	*Operation of the Oleology treatment system*	*Seepage to soil, vegetation and groundwater*	*Bunding dimension:* *30m x 8m x 0.5m giving a volume of 120m^3.* *Holding vessel capacity is 78m^3.* *The second bund dimension that will hold water for treatment (2 x 35m^3 tanks) will be constructed with three sides, and should there be any potential discharge the wastewater will flow back into the evaporation pond.* *The UD Regulations and general provisions of the EP Act[1] will apply to operations onsite.*
Stormwater	*Operation of the Oleology treatment system*	*Seepage to soil, vegetation, groundwater and overflow to surface water bodies*	*Bundings will be constructed to direct uncontaminated stormwater away.*

Note 1: *It is a legal requirement that discharges of waste to the environment that have caused or are likely to cause pollution, material environmental harm or serious environmental harm must be reported as soon as practicable to the Chief Executive Officer (CEO) of DWER. Section 72(1) of the EP Act provides that an occupier of the premises (which may include vehicles, vessels and other equipment) on or from which a discharge of waste has taken place, has a duty to notify the CEO of DER of the discharge of waste that has caused or is likely to cause pollution, material environmental harm, or serious environmental harm.*

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	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) • 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) • Roebourne Plains gilgai grasslands	850 m west of Premises
Surface water lines • Seven Mile Creek • Minor non perennial water courses	660 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 W6782/2023/1 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 for works authorised under the works approval to authorise emissions associated with the operation at the premises. 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.

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								
Placement of Oleology filtration unit and associated equipment including vehicle movements	*Dust*	*Air / windborne pathway causing impacts to health and amenity*	*Nearest residential premises 2.06km north - east*	*Refer to Section 3.1*	*C = Slight* *L = Unlikely* ***Low Risk***	*Y*	*N/A* *The Delegated Officer has considered the separation distance between the source and receptors as a guide to inform the risk of dust emissions as not foreseeable.* *Dust can be adequately regulated by section 49 of the EP Act.*	*N/A*
	Noise			*Refer to Section 3.1*	*C = Slight* *L = Unlikely* ***Low Risk***	*Y*	*N/A* *The Delegated Officer has considered the separation distance between the source and receptors as a guide to inform the risk of noise emissions as not foreseeable.* *Noise can be adequately regulated by the EP Noise Regs.*	*N/A*
	Spills	*Seepage to soil, vegetation and groundwater*	*Seven-mile creek 660m east, Groundwater >6m deep*	*Refer to Section 3.1*	*C = Slight* *L = Unlikely* ***Low Risk***	*Y*	*Spills can be regulated under the Environmental Protection (Unauthorised) Regulations 2004.*	*N/A*
Operation								
Operation of Oleology filtration unit Incl vehicle movements	*Dust*	*Air / windborne pathway causing impacts to health and amenity*	*Nearest residential premises 2.06km north - east*	*Refer to Section 3.1*	*C = Slight* *L = Unlikely* ***Low Risk***	*Y*	*N/A* *The Delegated Officer has considered the separation distance between the source and receptors as a guide to inform the risk of dust emissions as not foreseeable.* *Dust can be adequately regulated by section 49 of the EP Act.*	*N/A*
	Noise			*Refer to Section 3.1*	*C = Slight*	*Y*	*N/A* *The Delegated Officer has considered the separation*	*N/A*

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**				
					L = Unlikely ***Low Risk***		*distance between the source and receptors as a guide to inform the risk of noise emissions as not foreseeable.* *Noise can be adequately regulated by the EP Noise Regs.*	
	Odour			*Refer to Section 3.1*	*C = Slight* *L = Unlikely* ***Low Risk***	*Y*	*N/A* *The Delegated Officer has considered the separation distance between the source and receptors as a guide to inform the risk of noise emissions as not foreseeable.* *Odour is regulated under s49 of the EP Act*	*N/A*
	Spills	*Seepage to soil, vegetation and groundwater*	*Seven-mile creek 660m east, Groundwater >6m deep*	*Refer to Section 3.1*	*C = Slight* *L = Unlikely* ***Low Risk***	*Y*	*N/A* *Condition 2 Existing Licence L8861 requires the owner to recover or remove and dispose spills.* *Spills can be regulated under the Environmental Protection (Unauthorised) Regulations 2004.*	*NA*
	Sediment laden stormwater	*Overland runoff potentially causing ecosystem disturbance or impacting surface water quality*	*Seven-mile creek 660m east, Groundwater >6m deep*	*Refer to Section 3.1*	*C = Slight* *L = Unlikely* ***Low Risk***	*Y*	*Condition 3 Existing Licence L8861 which requires the licence holder to implement practical measures to prevent stormwater run-off becoming contaminated and to treat contaminated or potentially contaminated stormwater as necessary prior to being discharged from the premises.*	NA

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 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 27 March 2023	*None received*	*N/A*
Local Government Authority advised of proposal on 28 March 2023	*City of Karratha replied on 21 April 2023 confirming that:* *The City's EHO Team raise no objections to the proposed Works Approval (W6782/2023/1); and* *In accordance with City's Local Planning Scheme No.8, the proposed works relating to the installation of a filtration unit to treat industrial wastewater at the Karratha Recycling Liquid Waste Facility (within lot 120 and lot 121 on DP 424552 in Gap Ridge) will require Development Approval from the City.*	*Noted. Applicant advised.*
Department of Health (DoH) advised of proposal on 28 March 2023	*The Department of Health replied on 12 April 2023, confirming that approval is required for the recycled water scheme.*	*Noted. Applicant advised.*
Internal technical advice from Contaminated sites, Science and Planning team.	*Refer to appendix 3*	*Refer to appendix 3*
Internal advice from DWER Controlled Waste, Branch.	*Comments received are provided below:* *In terms of treated controlled waste being discharged offsite; If the treated waste is still considered controlled waste then it would be subject to the controlled waste regulations in that it needs to be transported by a licenced controlled waste carrier and then unloaded at a waste facility that is approved to accept that type of controlled waste.*	*Noted. Applicant advised*
Applicant was provided with draft documents on 7 December 2023.	*Applicant provided comments on 26 February 2024* *Refer to Appendix 1*	*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. Karratha Recycling Pty Ltd works approval application and supporting documentation.
2. Department of Environment Regulation (DER) 2016, *Guidance Statement: Environmental Siting*, Perth, Western Australia.
3. DER 2017, *Guidance Statement: Risk Assessments*, Perth, Western Australia.
4. DER 2015, *Guidance Statement: Setting Conditions*, Perth, Western Australia.
5. DWER, June 2019. *Guideline: Industry Regulation Guide to Licensing.* Department of Water and Environmental Regulation, Perth.
6. DWER, June 2019. *Guideline: Decision Making.* Department of Water and Environmental Regulation, Perth.

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

Condition	Summary of applicant's comment	Department's response
Front page cover	Typographical error noted. Correct assessed design capacity is 35,000 tonnes per annum.	Typo corrected. The Delegated Officer is aware that the filtration unit is designed to receive and treat a wastewater sewage inflow of up to 24 kL/hr.

Appendix 4: Application validation summary

SECTION 1: APPLICATION SUMMARY					
Application type					
Works approval	☒				
Licence	☐	Relevant works approval number:	WTBA	None	☐
		Has the works approval been complied with?		Yes ☐ No ☐	
		Has time limited operations under the works approval demonstrated acceptable operations?		Yes ☐ No ☐ N/A ☐	
		Environmental Compliance Report / Critical Containment Infrastructure Report submitted?		Yes ☐ No ☐	
		Date Report received:			
Renewal	☐	Current licence number:			
Amendment to works approval	☐	Current works approval number:			
Amendment to licence	☐	Current licence number:			
		Relevant works approval number:		N/A	☐
Registration	☐	Current works approval number:		None	☐
Date application received		9/12/2022			
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 120 Bedrock Turn (formerly Lot 111and part of lot 114) on DP 424552 – Volume 4027, Folio 393 Exploration Drive GAP RIDGE WA 6714 Lot 121 Bedrock Turn (formerly Lot 112 and part of lot 113) on DP 424552 – Volume 4027, Folio 394 Exploration Drive GAP RIDGE WA 6714			
Local Government Authority		City of Karratha			
Application documents					
HPCM file reference number:		DER2022/000678			
Key application documents (additional to application form):		*Signed WA application form* *DA application submitted to City of Karratha*			

	Supporting information- Wastewater disposal and Treatment Process *Further supporting information relating to ownership/proof of occupier status provided on 9/01/2022*
Scope of application/assessment	
Summary of proposed activities or changes to existing operations.	The Applicant is proposing to install a carbon filtration system to produce water acceptable for discharge. This water is to be used as construction water for dust suppression. This filtration process will be setup to have the capability to draw water from the L150 evaporation pond. Holding tanks will be installed to store the treated water and allow for any required quality testing. The treated water will be transferred to water trucks for spraying on site designated dust suppression areas.

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

Table 1: Prescribed premises categories

Prescribed premises category and description	Production or design capacity	Proposed changes to the production or design capacity (amendments only)
Category 61: Liquid waste facility	10,000 tonnes per annual period	*NA*

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 ☐ No ☒	Referral decision No: Managed under Part V ☐ Assessed under Part IV ☐
Does the applicant hold any existing Part IV Ministerial Statements relevant to the application?	Yes ☐ No ☒	Ministerial statement No: EPA Report No:
Has the proposal been referred and/or assessed under the EPBC Act?	Yes ☐ No ☒	Reference No:
Has the applicant demonstrated occupancy (proof of occupier status)?	Yes ☒ No ☐	Certificate of title ☐ General lease ☐ Expiry: Mining lease / tenement ☐ Expiry: Other evidence ☐ Expiry:
Has the applicant obtained all relevant planning approvals?	Yes ☒ No ☐ N/A ☐	Approval: Expiry date: If N/A explain why?
Has the applicant applied for, or have an existing EP Act clearing permit in relation to this proposal?	Yes ☐ No ☒	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 ☐ No ☒	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 ☐ No ☒	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 ☐ No ☒	Name: N/A Type: Has Regulatory Services (Water) been consulted? Yes ☐ No ☐ N/A ☐ Regional office:
Is the Premises situated in a Public Drinking Water Source Area (PDWSA)?	Yes ☐ No ☒	Name: N/A Priority: P1 / P2 / P3 / N/A Are the proposed activities/ landuse compatible with the PDWSA (refer to WQPN 25)? Yes ☐ No ☐ N/A ☒
Is the Premises subject to any other Acts or subsidiary regulations (e.g. *Dangerous Goods Safety Act 2004, Environmental Protection (Controlled Waste) Regulations 2004, State Agreement Act xxxx*)	Yes ☒ No ☐	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 ☐ No ☒	
Is the Premises subject to any EPP requirements?	Yes ☐ No ☒	
Is the Premises a known or suspected contaminated site under the *Contaminated Sites Act 2003*?	Yes ☐ No ☒	Classification: N/A / possibly contaminated – investigation required (PC–IR) / not contaminated – unrestricted use (NC–UU) / contaminated – restricted use (C–RU) / remediated for restricted use (RRU) / contaminated – remediation required (C–RR) / decontaminated (Decon) Date of classification: N/A

Direct interest stakeholders			
City of Karratha	Letter to be sent	Yes ☒	No ☐
Department of Health	Letter to be sent	Yes ☒	No ☒

SECTION 2: RECEPTORS	
The nearest town of Karratha	Is approximately 3 km (north-east) of the Premises.
Human receptors	**Distance from activity / prescribed premises**
Commercial Premises	Adjacent to the Premises
Stayover Kingfisher Village	1.4 km south-east 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 activity / prescribed premises**
Pilbara Groundwater Area (RIWI Act 1914) • 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 • Seven Mile Creek Minor non perennial water course	500 m east of Premises