



Application for Works Approval

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

Works Approval Number	W6759/2022/1
Applicant	Cleanaway Co Pty Ltd
ACN	127 853 561
File number	DER2022/000600
Premises	Karratha Liquid Waste Treatment Plant and Waste Transfer Station Lot 126 Warlu Road COOYA POOYA WA 6714 Legal description Lot 126 on Plan 183297 As defined by the premises maps attached to the issued works approval
Date of report	22 February 2023
Decision	Works approval granted

Abbie Crawford

A/MANAGER, WASTE INDUSTRIES

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

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1. Decision summary

This decision report documents the assessment of potential risks to the environment and public health from emissions and discharges during the construction and operation of the premises. As a result of this assessment, works approval W6759/2022/1 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

Cleanaway Co Pty Ltd operates the Karratha Liquid Waste Treatment Plant and Waste Transfer Station under Licence L8332/2009/3. The premises serves as a liquid and solid waste storage and treatment facility. Waste may be stored and/or processed before being sent to alternative authorised premises or directed, as treated liquid waste, to high density polyethylene lined evaporation basins.

On 28 October 2022 the applicant submitted an application for a works approval to the department under section 54 of the *Environmental Protection Act 1986* (EP Act) to construct a fourth evaporation pond for containment of liquid wastes at the premises under Category 61.

The premises relates to the categories and assessed design capacities under Schedule 1 of the *Environmental Protection Regulations 1987* (EP Regulations) which are defined in works approval W6759/2022/1. 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 W6759/2022/1.

The applicant has advised they do not intend on increasing the volume of waste accepted at the premises, therefore there are no proposed changes to Category 61 and Category 61A activities from the previously assessed Existing Licence L8332/2009/3, as outlined in Table 1.

Table 1: Approved production capacity

Category	Assessed production 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.	40,000 tonnes per annual period
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.	40,000 tonnes per annual period

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 and operation which have been considered in this decision report are detailed in Table 2 below. Table 2 also details the control measures the applicant has proposed to assist in controlling these emissions, where necessary.

Table 2: Proposed applicant controls

Sources	Emission	Potential pathways	Proposed controls
Construction of evaporation pond 4	Noise	Air / wind dispersion	Usual working hours of 07:00 to 17:00 Monday to Friday, however subject to change if necessary Targets and limits as defined in the <i>Environmental Protection (Noise) Regulations 1997</i> .
	Dust	Air / wind dispersion	Use of water cart to wet down roads Vehicles to drive at low speeds Cease activities causing dust until adequate dust management is implemented or weather conditions improve.
Operation of evaporation pond 4	Odour	Air / wind dispersion	Odours are existing emissions from three existing evaporation ponds and this application does not request to increase the currently approved throughput. Investigate the source of excessive odour and potentially lime-dose the pond to adjust the liquid waste pH. Cease receiving excessively odorous liquid wastes if a particular waste stream is identified as being the cause of excessive odours.
	Seepage of liquid wastes	Subsurface seepage	Installation of a 2 mm HDPE synthetic liner. During low volumes or when emptied, liner will be inspected for damage and repaired. Licence L8332/2009/3 requires monitoring of ambient groundwater quality.
	Overtopping of pond	Overland flow	Maintenance of a minimum freeboard of 500 mm creating a storage volume of 1,700 m ³ . Management of liquid waste quantity within the pond, via removal and redirection to other existing ponds or ceasing acceptance of liquid waste.

Sources	Emission	Potential pathways	Proposed controls
			Immediate cleanup of any spills.
	Spills of hydrocarbons and chemicals	Overland flow Subsurface seepage	There will be no hydrocarbon or chemical storage at the premises. Immediate clean up of any spills.
	Contamination of stormwater	Overland flow	Natural landscape diversion of stormwater runoff away from ponds. Retaining minimum liquid wastes within ponds when high rainfall events are forecast.

3.1.2 Receptors

In accordance with the *Guideline: Risk Assessment* (DWER 2020), the Delegated Officer has excluded the applicant's employees, visitors, and contractors from its assessment. Protection of these parties often involves different exposure risks and prevention strategies, and is provided for under other state legislation.

Table 3 and Figure 1 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 3: Sensitive human and environmental receptors and distance from prescribed activity

Human receptors	Distance from prescribed activity
Residential premises	The nearest town of Karratha is 6.4 km north east of the Premises.
Environmental receptors	Distance from prescribed activity
<i>Rights in Water and Irrigation Act 1914</i> - Proclaimed groundwater area	Located within the Pilbara Groundwater Area
<i>Rights in Water and Irrigation Act 1914</i> - Proclaimed surface water area	Located within the Pilbara Surface Water Area



Figure 1: Premises boundary

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Figure 2: Premises layout and location of evaporation pond 4

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 4.

Works approval W6759/2022/1 that accompanies this decision report authorises construction and time-limited operations. The conditions in the issued works approval, as outlined in Table 4 have been determined in accordance with *Guidance Statement: Setting Conditions* (DER 2015).

An amendment to existing licence L8332/2009/3 is required following the time-limited operational phase authorised under the works approval to authorise emissions associated with the ongoing operation of evaporation pond #4. 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 4: Risk assessment of potential emissions and discharges from the premises during construction, commissioning and operation

Risk events					Risk rating ¹ C = consequence L = likelihood	Applicant controls sufficient?	Conditions ² of works approval	Justification for additional regulatory controls
Sources / activities	Potential emission	Potential pathways and impact	Receptors	Applicant controls				
Construction								
Construction of evaporation pond 4	Noise	Air / wind dispersion	Residential premises 6.4km north	Refer to Section 3.1	C = Slight L = Rare Low Risk	Yes	N/A	Given the low risk no regulatory controls are required. Further management of noise is provided by the <i>Environmental Protection (Noise) Regulations 1997</i> .
	Dust	Air / wind dispersion		Refer to Section 3.1	C = Slight L = Rare Low Risk	Yes	N/A	Given the low risk no regulatory controls are required.
Operation (including time-limited-operations operations)								
Operation of evaporation pond 4	Odour	Air / wind dispersion	Residential premises 6.4km north	Refer to Section 3.1	C = Moderate L = Unlikely Medium Risk	Yes	N/A	The Delegated Officer considers that since there is no increase to annual approved throughput of 40,000 tonnes per annum, that odour emissions are not likely to cause impacts. No regulatory controls are required.
	Seepage of liquid wastes	Subsurface seepage	Pilbara Groundwater Area	Refer to Section 3.1	C = Moderate L = Unlikely Medium Risk	Yes	Conditions1 and 7	The Delegated Officer notes the risk of seepage is directly related to the effectiveness of the controls put into place during construction, and for ongoing operational maintenance, to ensure the evaporation pond is free of leaks and defects. As such, the Delegated Officer shall apply infrastructure construction requirements to

Risk events					Risk rating ¹ C = consequence L = likelihood	Applicant controls sufficient?	Conditions ² of works approval	Justification for additional regulatory controls
Sources / activities	Potential emission	Potential pathways and impact	Receptors	Applicant controls				
								the Works Approval. Existing licence conditions are sufficient for ongoing operational activities, therefore the Delegated Officer shall impose equivalent conditions on the Works Approval to permit time limited operation of the evaporation pond 4.
	Overtopping of pond	Overland flow	Pilbara Surface Water Area	Refer to Section 3.1	C = Moderate L = Unlikely Medium Risk	Yes	Conditions 1 and 7	The Delegated Officer notes the risk of overtopping of the pond is directly related to the effectiveness of the controls put into place for ongoing operational maintenance, to ensure the evaporation pond is not over filled. As such, the Delegated Officer shall apply infrastructure construction requirements to the Works Approval. Existing licence conditions are sufficient for ongoing operational activities, therefore the Delegated Officer shall impose equivalent conditions on the Works Approval to permit time limited operation of the evaporation pond 4.
Operation of evaporation pond 4	Spills of hydrocarbons and chemicals	Overland flow Subsurface seepage	Pilbara Surface Water Area Pilbara Groundwater Area	Refer to Section 3.1	C = Slight L = Rare Low Risk	Yes	Condition 7	The Delegated Officer considers the controls proposed by the Applicant are sufficient to prevent impacts from spills occurring under most circumstances. As this risk is mitigated by adequate implementation of these Applicant controls, the Delegated Officer shall enforce these controls operational conditions on the Works Approval, and subsequent Licence. Further management of spills is provided

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Risk events					Risk rating ¹ C = consequence L = likelihood	Applicant controls sufficient?	Conditions ² of works approval	Justification for additional regulatory controls
Sources / activities	Potential emission	Potential pathways and impact	Receptors	Applicant controls				
								by the <i>Environmental Protection (Unauthorised Discharges) Regulations 2004</i> .
	Contamination of stormwater	Overland flow	Pilbara Surface Water Area	Refer to Section 3.1	C = Moderate L = Unlikely Medium Risk	Yes	Conditions 1 and 7	The Delegated Officer notes the risk of stormwater contamination is directly related to the effectiveness of the controls put into place during construction, and for ongoing operational maintenance, to ensure stormwater does not get contaminated and run off site. As such, the Delegated Officer shall apply infrastructure construction requirements to the Works Approval. Existing licence conditions are sufficient for ongoing operational activities.

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 6 January 2023.	No submissions received	N/A
Local Government Authority advised of proposal on 4 January 2023.	An email was received from the City of Karratha on 5 January 2023 advising that: "In accordance with City's Local Planning Scheme No.8 the proposed works relating to the construction of the additional fourth pond on the site will require development approval from the City".	This information is noted and the Applicant is advised that it is responsible for obtaining all relevant approvals prior to commencing construction.
Applicant was provided with draft documents on 7 February 2023.	Applicant email received on 21/02/2023 with updated dimensions for the proposed evaporation pond.	Department updated the relevant Draft Conditions and Decision Report Figures and Tables with the updated Evaporation Pond dimensions on 21/02/2023. The change in pond size does not impact the risk assessment.

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					
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	28 October 2022				
Applicant and Premises details					
Applicant name/s (full legal name/s)	Cleanaway Co Pty Ltd				
Premises name	Karratha Liquid Waste Treatment Plant and Waste Transfer Station				
Premises location	Lot 126 Warlu Road COOYA POOYA WA 6714				
Local Government Authority	City of Karratha				
Application documents					
HPCM file reference number:	DER2022/000600				
Key application documents (additional to application form):	New evaporation pond works approval application supporting documentation				
Scope of application/assessment					
Summary of proposed activities or changes to existing operations.	<p>Works approval</p> <p>Construction of a 4th evaporation pond at existing licensed premises L8332/2009/3.</p> <p>No increase to approved production/design capacity</p>				

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 61 Liquid waste facility: premises on which liquid waste produced on other premises (other than sewerage waste) is stored, reprocessed, treated or irrigated.	40,000 tonnes per annual period	N/A
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.	40,000 tonnes per annual period	N/A

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"/>	
Does the applicant hold any existing Part IV Ministerial Statements relevant to the application?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Has the proposal been referred and/or assessed under the EPBC Act?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Has the applicant demonstrated occupancy (proof of occupier status)?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	General lease <input checked="" type="checkbox"/>
Has the applicant obtained all relevant planning approvals?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>	
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"/>	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"/>	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"/>	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"/>	
Is the Premises situated in a Public Drinking Water Source Area (PDWSA)?	Yes <input type="checkbox"/> No <input checked="" 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 type="checkbox"/> No <input checked="" type="checkbox"/>	
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"/>	