



Amendment Notice 3

Licence Number	L8861/2014/1
Licence Holder	Karratha Recycling Pty Ltd
ACN	163 991 106
File Number:	DER2014/002439
Premises	Karratha Recycling Liquid Waste Facility Exploration Drive GAP RIDGE WA 6714 Legal description – Lot 111 and 112 on Plan 75061
Date of Amendment	6 September 2018

Amendment

The Chief Executive Officer (CEO) of the Department of Water and Environmental Regulation (DWER) has amended the above Licence in accordance with section 59 of the *Environmental Protection Act 1986* (EP Act), as set out in this Amendment Notice. This Amendment Notice constitutes written notice of the amendment in accordance with section 59B(9) of the EP Act.

Steve Checker

MANAGER WASTE INDUSTRIES

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

Amendment Notice

This amendment is made pursuant to section 59 of the *Environmental Protection Act 1986* (EP Act) to amend the Licence issued under the EP Act for a prescribed premises as set out below. This notice of amendment is given under section 59B(9) of the EP Act.

The following guidance statements have informed the decision made on this amendment:

- *Guidance Statement: Regulatory Principles* (July 2015)
- *Guidance Statement: Setting Conditions* (October 2015)
- *Guidance Statement: Land Use Planning* (February 2017)
- *Guidance Statement: Licence Duration* (August 2016)
- *Guidance Statement: Decision Making* (February 2017)
- *Guidance Statement: Risk Assessment* (February 2017)
- *Guidance Statement: Environmental Siting* (November 2016)

Amendment description

On 31 May 2018 Karratha Recycling Pty Ltd (Licence Holder) lodged an application to amend Licence L8861/2014/1 to enable the acceptance of additional liquid wastes under three controlled waste categories at the Karratha Recycling Liquid Waste Facility:

- K130: sewage waste from reticulated sewerage systems;
- L100: car and truck wash waters; and
- L150: industrial wash water contaminated with a controlled waste.

The Premises currently receives K110 waste from grease traps and K210 septage wastes. The addition of K130 sewage waste from reticulated sewerage systems is intended not as a regular delivery, however as a backup for sewerage systems that have failures or require maintenance and need to reduce volume prior to this occurring. Processing of K130 wastes would be aligned with that of K110 and K210 in the existing facility.

The Premises currently receives D300 high-saline industrial wash waters as direct deposit to the evaporation ponds. The addition of L100 car and truck wash waters is from excess runoff from car and truck wash bays after oil/water separation. L150 industrial wash waters contaminated with a controlled waste is from industrial facilities and includes mostly stormwater runoff and wash water from industrial processes. Processing of L150 wastes would be aligned with that of D300 in the existing facility.

The proposed amendment does not modify the current approved premises production or design capacity of 70,000 tonnes per annum for the Category 61 liquid waste facility.

Amendment history

Table 1 provides the amendment history for L8861/2014/1

Table 1: Licenses and Works Approvals issued for the Premises

Instrument	Issued	Amendment
W5538/2013/1	20/02/2014	New Works Approval for construction of a liquid waste facility
L8861/2014/1	22/02/2015	New Licence
W5579/2014/1	06/03/2015	New Works Approval for construction of an asphalt plant
W5806/204/1	19/03/2015	New Works Approval for expansion of the liquid waste facility
L8861/2014/1	30/07/2015	Licence Amendment to include Category 35 asphalt manufacturing
L8861/2014/1	07/02/2018	Amendment Notice 1 to include Controlled Waste type D300 high saline industrial wash waters
L8861/2014/1	18/05/2018	Amendment Notice 2 to increase design capacity for Category 61 liquid waste from 20,000 tonnes to 70,000 tonnes per annum.
L8861/2014/1	24/08/2018	Amendment Notice 3 to include Controlled Wastes types K130 sewage waste from reticulated sewerage systems; L100 car and truck wash waters; and L150 industrial wash water contaminated with a controlled waste.

Location and receptors

Table 2 below lists the relevant sensitive land uses in the vicinity of the Prescribed Premises which may be receptors relevant to the proposed amendment.

Table 2: Receptors and distance from activity boundary

Residential and sensitive premises	Distance from Prescribed Premises
Accommodation Village	2.05km north east
Residential receptors (Madigan Estate)	2.7km north east

Table 3 below lists the relevant environmental receptors in the vicinity of the Prescribed Premises which may be receptors relevant to the proposed amendment.

Table 3: Environmental receptors and distance from activity boundary

Environmental receptors	Distance from Prescribed Premises
Groundwater	Between 7.3-10 metres below ground level, flowing in a northerly direction toward Nickol Bay.
Threatened Ecological Community (TEC)	Premises is within a TEC buffer zone
7 mile creek	500m east

Risk assessment

Table 4 below describes the Risk Events associated with the amendment consistent with the *Guidance Statement: Risk Assessments*. The table identifies whether the emissions present a material risk to public health or the environment, requiring regulatory controls

Table 4: Risk assessment for proposed amendments during operation

Risk Event						Consequence rating	Likelihood rating	Risk	Reasoning
Source/Activities		Potential emissions	Potential receptors	Potential pathway	Potential adverse impacts				
Cat 61 Liquid waste facility	Acceptance and treatment of K130 sewage waste from reticulated sewerage systems	Odour	Accommodation Village 2.05km away	Air/wind dispersion	Amenity impacts	Slight	Possible	Low	<p>The Delegated Officer noted that the nearest sensitive receptor is more than 2km from the premises and notes that no odour complaints have been received by DWER regarding the premises.</p> <p>The Delegated Officer considers any odour emissions can be regulated under S49 of the EP Act.</p>
		Discharge to land Spillage of septage waste and overtopping of pond embankments to the environment	Groundwater Between 7.3-10 mbgl.	Infiltration to groundwater through underlying soils	Contamination of land and underlying groundwater	Minor	Unlikely	Medium	<p>The capacity of the additional evaporation pond is 22,400m³. The Licence Holder has also outlined that they intend to allow 500mm freeboard (19,200m³) the total capacity of the LWF is now 37,000m³. The yearly evaporation rate for the area is 3.3m.</p> <p>The Delegated Officer considers a spill of partially treated wastewater to the environment as minor due to the depth to groundwater in the area. The Delegated Officer considers the 500mm freeboard will mitigate the risk of spillage to a medium risk.</p>

	Acceptance of L100 car and truck wash waters and L150 industrial wash water contaminated with high-saline industrial wash waters (D300) directly into the evaporation pond	Discharge to Land: high-saline wash waters which may be contaminated with other industrial chemicals	Groundwater	Seepage due to overflow or damage to liner	Impacts to groundwater quality	Minor	Unlikely	Medium	Groundwater may be impacted due to the hypersaline quality of the wash waters, however due to the distance to groundwater and the HDPE lining of the evaporation pond impacts may only occur in unlikely circumstances of a spill or liner failure.
			On-site soils and neighbouring properties	Direct emission, overflow or seepage	Impacts to soil quality	Slight	Rare	Low	The area surrounding the premises is industrial, including a waste depot which is registered as potentially contaminated. Any impacts are likely to be slight and a rare occurrence in the event of a spill or liner failure.
			Threatened Ecological Community	Direct emission or overflow	Impacts to ecological community	Slight	Rare	Low	The area surrounding the premises is industrial with no native flora or fauna present. Any impacts are likely to be slight and a rare occurrence in the event of a spill or liner failure.
		Odour: high-saline wash waters which may contain odourous contaminants	Nearest residential premises	Air	Amenity impacts	Slight	Unlikely	Low	Industrial wash waters are not generally considered to be odourous. In the event that an odourous load is accepted, the Delegated Officer considers there is significant distance to the nearest residential receptor to ensure low risk of odour impacts.

Decision

The Delegated Officer has determined that the additional waste categories pose a medium risk to groundwater and a low risk to other potential receptors. The Delegated Officer notes the additional waste categories are consistent with waste categories previously approved for acceptance at the Liquid Waste Facility. This amendment does not increase the volume of liquid waste to be accepted at the premises.

The Delegated Officer has determined that controls currently on the licence relating to management of ponds (including 500mm freeboard), containment infrastructure requirements and monitoring requirements are sufficient to mitigate any potential environmental or public health impacts.

The Delegated Officer considers that the controlled waste code 'L150 industrial wash waters contaminated with a controlled waste' would potentially enable the acceptance of wash waters containing the full range of controlled waste including highly toxic wastes. Restrictions have therefore been placed on this waste type to permit only the acceptance of wash waters contaminated with already permitted waste types and hydrocarbons.

The Delegated Officer has approved the licence amendment.

Licence Holder's comments

The Licence Holder was provided with the draft Amendment Notice 3 on 21 August 2018. The Licence Holder advised on 23 August 2018 he has no comments on the proposed draft and would like to waive the remaining comment period.

Amendment

- Table 1.3.1 within condition 1.3.2 of the Licence is amended by insertion of the red text shown in underline below:

Table 1.3.1: Waste acceptance			
Waste type	Waste Code	Quantity limit	Specification ¹
Sewage	N/A	70,000 tonnes per annual period (combined)	Liquid waste receipt in tankers. Discharged to primary treatment pond
Septage waste (Sewage) – domestic wastes from apparatus for the treatment of sewage	K210		
Waste from grease traps	K110		
<u>Sewage waste from reticulated sewerage system</u>	<u>K130</u>		Liquid waste receipt in tankers. Discharged to evaporation pond only
High-saline industrial wash waters	D300		
<u>Car and truck wash waters</u>	<u>L100</u>		
<u>Industrial wash water contaminated with a controlled waste</u>	<u>L150</u>		<ul style="list-style-type: none"> <u>L150 limited to wastes contaminated only with D300, K110, K130, K210, L100, J100, J120, J130, J180 controlled wastes.</u> Liquid waste receipt in tankers. Discharged to evaporation pond only. Liquid waste receipt in tankers. Discharged to evaporation pond only.
Processed RAP	N/A	20,000 tonnes per annual period	<p>The Licensee shall ensure that Processed RAP does not contain any of the following materials:</p> <ul style="list-style-type: none"> Granular pavement materials, clay, soil or organic matter Bricks, concrete, glass or building materials; or Laterite asphalt, tar based products, geotextile fabrics, raised pavement markers or surface treatments such as high friction surfacings or green or red pavement markings

Note 1: Additional requirements for the acceptance of controlled waste are set out in the *Environmental Protection (Controlled Waste) Regulations 2004*

2. Table 1.3.2 within condition 1.3.3 of the Licence is amended by insertion of the red text shown in underline below:

Table 1.3.2: Waste processing		
Waste type	Process	Process limits
Sewage	Receipt in tankers; physical, biological and chemical treatment	Primary treatment (Pond 1 and 2): <ul style="list-style-type: none"> - Water depth to sludge shall be greater than 0.4 m or equivalent and sludge depth on ponds to be less than 1m or equivalent; - pH of wastewater to be maintained at 6.5 to 9; and - Scum/rags to have less than 5% coverage across pond surfaces. Secondary treatment (Pond 3 and 4): <ul style="list-style-type: none"> - Water depth to sludge shall be greater than 0.4 m or equivalent and sludge depth on ponds to be less than 1m or equivalent; - pH of wastewater to be maintained at 6.5 to 9; Treatment of waste shall be at or below the treatment capacity of 20,000 <u>70,000</u> tonnes per annual period.
Septage waste (Sewage) – domestic wastes from apparatus for the treatment of sewage		
Waste from grease traps		
<u>Sewage waste from reticulated sewerage system</u>		
High-saline industrial wash waters	<u>Receipt in tankers for direct disposal to Pond 4 or Pond 5 for evaporation</u>	Treatment of waste shall be at or below the treatment capacity of 20,000 <u>70,000</u> tonnes per annual period.
<u>Car and truck wash waters</u>		
<u>Industrial wash water contaminated with a controlled waste</u>		
Sewage sludge resulting from onsite liquid waste treatment	Drying out of ponds; Storage prior to landfill disposal	300 m ³ at any one time prior to landfill disposal off-site
Processed RAP	Asphalt manufacturing	500 tonnes at any time

Appendix 1: Key documents

	Document title	In text ref	Availability
1	Licence L8861/2014/1 Karratha Recycling Liquid Waste Facility	L8861/2014/1	accessed at www.dwer.wa.gov.au
2	Amendment Notice 1 L8861/2014/1 Karratha Recycling Liquid Waste Facility	L8861/2014/1	DWER records (A1612390)
3	Amendment Notice 2 L8861/2014/1 Karratha Recycling Liquid Waste Facility	L8861/2014/1	DWER records (A1678768)
4	DER, July 2015. <i>Guidance Statement: Regulatory Principles</i> . Department of Environment Regulation, Perth.	DER 2015a	accessed at www.dwer.wa.gov.au
5	DER, October 2015. <i>Guidance Statement: Setting Conditions</i> . Department of Environment Regulation, Perth.	DER 2015b	
6	DER, August 2016. <i>Guidance Statement: Licence Duration</i> . Department of Environment Regulation, Perth.	DER 2016a	
7	DER, November 2016. <i>Guidance Statement: Risk Assessments</i> . Department of Environment Regulation, Perth.	DER 2016b	
8	DER, November 2016. <i>Guidance Statement: Decision Making</i> . Department of Environment Regulation, Perth.	DER 2016c	