



Licence Number	L7021/1997/15
Licence Holder	City of Karratha
Registered business address	City of Karratha Welcome Road KARRATHA WA 6714
Date of amendment	13 January 2017
Prescribed Premises	Category 57: Used tyre storage (general); Category 61: Liquid waste facility Category 62: Solid waste depot Category 64: Class II or Class III putrescible landfill site.
Premises	Seven Mile Waste Disposal Facility Seven Mile Road GAP RIDGE WA 6714 Being Lot 85 on Plan 180017 and Lot 552 on Plan 71049

Amendment

The Chief Executive Officer (CEO) of the Department of Environment Regulation (DER) has amended the above Licence in accordance with section 59 of the *Environmental Protection Act 1986* as set out in this Amendment Notice.

Date signed: 13 January 2017

Steve Checker
Manager Licensing (Waste Industries)

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

Amendment Notice

This Notice is issued under section 59 of the *Environmental Protection Act 1986* (EP Act) to amend Licence Number L7021/1997/15 (Licence) issued under the EP Act for a Prescribed Premises. This notice of amendment is given under section 59B(9) of the EP Act

Amendment Description

DER received an application for a licence amendment on 16 November 2016 requesting approval to accept and discharge oily saline water into Evaporation Pond 7 (Pond 7) at the Landfill's Liquid Waste Facility (LWF). Wastewater containing hydrocarbons and salts received at other waste treatment facilities (mainly from the oil and gas industry) is treated to remove organic compounds via a carbon filter process. The resulting wastewater from the process is saline water with residual amounts of hydrocarbons remaining. This wastewater is not classified as a Controlled Waste. The City intend to accept between 100 – 600 kilolitres (kL) per month for an indefinite period.

The wastewater will be delivered to the Landfill in licensed liquid waste tankers. The City will use a high volume stationary pump to discharge the saline water from the tankers directly into Pond 7. Pond 7 is lined with a 2.0mm thick High Density Polyethylene (HDPE) plastic liner and has an operating capacity of 9,450kL.

Decision

The discharge of the saline oily water into Pond 7 will not require an increase in the capacity of the LWF (116,500 tonnes per year). There are also no increased or altered emissions associated with the evaporation of saline oily water. The Delegated Officer considers that there may be potential for over topping of oily saline water of Pond 7 and potential for an increase in odour.

Amendment History

Instrument	Issued	Amendment
L7021/1997/15	13/01/2017	Amendment Notice 1 Disposal of saline oily water into Pond 7

Amendment

1. Condition 1.3.1 of the licence is amended by the by the insertion of the red text shown in underline below:

The Licensee shall only accept waste on to the Premises if:

- (a) it is of a type listed in Table 1.3.1;
- (b) the quantity accepted is below any quantity limit listed in Table 1.3.1; and
- (c) it meets any specification listed in Table 1.3.1.

Table 1.3.1: Waste acceptance			
Waste	Waste Code	Quantity Limit	Specification ¹
Clean Fill	N/A	Combined total limit of 120 000 tonnes per annual period	None specified.
Contaminated Solid Waste	N/A		Must meet the acceptance criteria for Class II landfill.
Inert Waste Type 1	N/A		None specified.
Inert Waste Type 2	T140 (used tyres)		Tyres and plastic only.
Putrescible Waste (including green waste)	N/A		None specified.
Solid Hazardous Waste	B100, D220, D221, N100 N160		Limited to acids in solid form, lead and lead compounds, used lead acid batteries, engine oil filters, aerosol cans, empty drums and Quarantine Waste.
Liquid Hazardous Waste	J100, <u>J120</u> , J170, L100, L150 N205		Limited to waste oil, oily wastes (e.g. from oil filters), industrial wash water
Special Waste Type 1	N220	Combined total limit of 116 500 tonnes per annual period	Cement bonded asbestos only. No fibrous asbestos shall be accepted.
Special Waste Type 2	R100, R120, R130, R140		Biomedical / clinical waste that is not radioactive ² .
Liquid waste (Septage waste, Sewerage waste, waste from grease traps)	K110, K130, K210		Biological waste (septage and grease trap waste only). Tankered into the premises and discharged in one of the three receiving ponds.

2. Condition 1.3.3 of the licence is amended by the by the insertion of the red text shown in underline below:

The Licensee shall ensure that wastes accepted onto the Premises are only subjected to the processes set out in Table 1.3.2 and in accordance with any process limits described in that Table

Table 1.3.2: Waste processing		
Waste type(s)	Process	Process limits ^{1,2}
All	Disposal of waste by landfilling	<ul style="list-style-type: none"> Shall only take place within designated landfill trenches or cells; No waste shall be temporarily stored or landfilled within 35m from the boundary of the premises; and The separation distance between the base of the landfill and the highest groundwater level shall not be less than 3m.
Clean Fill	Receipt, handling and disposal by landfilling (solid hazardous wastes only)	None specified.
Contaminated Solid Waste		None Specified.
Liquid and Solid Hazardous Wastes		<ul style="list-style-type: none"> DrumMuster products must be triple rinsed prior to acceptance on the premises; and Waste oil, paint, vehicle batteries must be stored in a fully enclosed bunded area/container. <u>J120 saline oily water may be disposed of via evaporation</u>

Table 1.3.2: Waste processing		
Waste type(s)	Process	Process limits ^{1,2}
	Receipt handling and <u>disposal via evaporation</u> or storage prior to disposal offsite (liquid hazardous waste)	<p><u>into Pond 7.</u></p> <p><u>Acceptance of Quarantine Waste</u></p> <ul style="list-style-type: none"> complete and sign the original waste transport certificate, noting in writing, any discrepancies between waste declared and waste received; ensure quarantine waste is buried in accordance with the AQIS; keep a log of quarantine waste accepted at the premises including, but not limited to transport details, waste generator, waste description and volume, time and date of burial and in the case of deep burials, location of the burial site indicated by GPS co-ordinates and burial depth; ensure that the disposal areas are not excavated or uncovered during subsequent landfill operations; restrict access to the landfill area where quarantine waste is buried to authorised personnel only during disposal; and make information available for viewing or copying by a DER officer during any inspection of the premises.
Inert Waste Type1		None specified.
Inert Waste Type 2 - Tyres	Receipt, handling, storage prior to re-use or disposal by landfilling	Refer to conditions 1.3.13 – 1.3.16.
Putrescible Waste	Receipt, handling and storage prior to disposal	None specified.
	Disposal by Burning	<p>Only green waste is to be burnt on site. Green waste shall only be burnt if;</p> <ul style="list-style-type: none"> It has been dried and seasoned for at least 2 months before burning; it takes place in a designated burning area at least 25m from the boundary of any active disposal areas; it takes place in trenches or windrows; it takes place only when an adequate supply of water is available to effectively manage the burning process; and it is free of any contaminant.
Special Waste Type 1 (asbestos waste)	Receipt, handling and disposal by landfilling	<ul style="list-style-type: none"> Only to be disposed of into a designated asbestos disposal area within the landfill; Not to be deposited within 2m of the final tipping surface of the landfill; and No works shall be carried out on the landfill that could lead to a release of asbestos fibres.
Special Waste Type 2 (Biomedical and Clinical Waste)		<ul style="list-style-type: none"> Only to be disposed of into a designated biomedical waste disposal area within the landfill; Not to be deposited within 2m of the final tipping surface of the landfill; and No works shall be carried out on the landfill that could

Table 1.3.2: Waste processing		
Waste type(s)	Process	Process limits ^{1,2}
		lead to biomedical wastes being excavated or uncovered.
Liquid waste (Septage waste, Sewerage waste, waste from grease traps)	Physical, biological and chemical treatment	<ul style="list-style-type: none"> pH to be maintained at 6.5 to 9.

3. Condition 1.3.17 of the licence is amended by the removal of the red text shown in strikethrough and insertion of the red text shown in underline below:

The Licensee shall ensure that waste material is only stored and/or treated within vessels or compounds provided with the infrastructure detailed in Table 1.3.4

Table 1.3.4: Containment infrastructure		
Vessel or compound	Material	Requirements
Pond 1 (Aerated Receiving Pond)	Wastewater	Clay lined to achieve a permeability of 10^{-9} m/s or less (or equivalent)
Pond 2 (Aerated Receiving Pond)	Wastewater	Clay lined to achieve a permeability of 10^{-9} m/s or less (or equivalent)
Pond 3 (Aerated Receiving Pond)	Wastewater	Clay lined to achieve a permeability of 10^{-9} m/s or less (or equivalent)
Pond 4 (Sedimentation Pond)	Treated Wastewater	Clay lined to achieve a permeability of 10^{-9} m/s or less (or equivalent)
Ponds 5, 6 & 7 <u>5 & 6</u> (Evaporation/infiltration ponds)	Treated wastewater	HDPE lined to achieve a permeability of 10^{-9} m/s or less (or equivalent)
<u>Pond 7 (Evaporation/infiltration pond)</u>	<u>Treated wastewater and oily saline water</u>	<u>HDPE lined to achieve a permeability of 10^{-9} m/s or less (or equivalent)</u>

Risk Assessment

Table 3. Risk assessment for construction of the mobile crushing and screening plant

			Potential Emissions	Potential Receptors	Potential Pathway	Potential Impacts	Material Risk	Reasoning
Source	Category 61: Acceptance of saline oily water for evaporation	Acceptance of saline oily water for evaporation	Odour: Discharge of saline oily into Pond 7	Gap Ridge accommodation village (approx. 1500m from premises)	Air: Transport through air then transfer through respiratory system	Human health/amenity impacts	No	The Delegated Officer considers the distance to human receptors to be too great for health or amenity impacts to occur.
			Potential spill or discharge of oily saline water	Groundwater beneath the Premises is 7.5mbgl.	Land infiltration to groundwater	Contamination of groundwater impacting groundwater ecosystems.	No	The Delegated Officer considers the depth to groundwater to be significant enough to mitigate risks of potential groundwater contamination. Groundwater at the premises is hypersaline and no known beneficial use of groundwater in the area is noted. Spill kits are located throughout the landfill in case of a potential discharge.