# **Amendment Report**

# **Application for Licence Amendment**

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

Licence Number L6756/1996/11

Licence Holder Shire of Waroona

**File Number** 2010/002299-1

Premises Buller Road Refuse Disposal Site

702 Buller Road

WAROONA WA 6215

Legal description -

Lot 1701 on Plan 214632

As defined by the Premises map attached to the Revised

Licence

Date of Report 27 April 2023

**Decision** Revised licence granted

# SENIOR ENVIRONMENTAL OFFICER – WASTE INDUSTRIES REGULATORY SERVICES

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

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# 1. Decision summary

Licence L6756/1996/11 is held by the Shire of Waroona (Licence Holder) for the Buller Road Refuse Disposal Site (the Premises), located at 702 Buller Road, Waroona.

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, Revised Licence L6756/1996/11 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 <a href="https://dwer.wa.gov.au/regulatory-documents">https://dwer.wa.gov.au/regulatory-documents</a>.

### 2.2 Application summary

On 14 February 2023, the Licence Holder submitted an application to the department to amend Licence L6756/1996/11 under section 59 and 59B of the *Environmental Protection Act* 1986 (EP Act). The following amendment is being sought:

 An amendment to remove Category 61 Liquid Waste Facility from the licence as the acceptance of liquid waste at the premises ceased in July 2020 and all liquid waste treatment and storage ponds onsite were decommissioned in 2022.

Sampling of the dried sludge in the liquid waste ponds was undertaken on 25 February 2022 to determine its landfill classification and whether it could be disposed of into the Class II landfill on site. The sampling results confirmed the disposal of the material to the Class II facility to be appropriate as per Tables 3 and 4 of DWER's *Landfill Waste Classification and Waste Definitions 1996 (as amended 2019).* The results are summarised in Appendix 1 of this Amendment Report. Liquid waste pond infrastructure (consisting of concrete hardstand, pond liners and electrical cables) was also removed and disposed of into the landfill on site.

After removal of the liquid waste pond infrastructure, sampling of the remaining soil underneath the pond liners was undertaken from 12 May 2022 to 24 May 2022 to ensure that contamination of soils from the liquid waste ponds had not occurred. Following these results, the area was rehabilitated. The remaining void from the removal of the ponds was backfilled with materials from within the liquid waste pond compound, along with a small quantity of additional clean fill (yellow sand). The rehabilitated area is proposed to be utilised as a future storage area for materials required for the closure of the landfill at the site.

This amendment is limited only to the removal of Category 61 from the existing licence. No changes to the aspects of the existing licence relating to Category 64 have been requested by the Licence Holder.

# 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 operation which have been considered in this Amendment Report are detailed in

Table below.

Table 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
Leachate	Contaminants in the remaining soil underneath liquid waste pond infrastructure (due to liquid waste leaks from damaged pond liner etc.)	Seepage through soils to groundwater	Sampling of the remaining soil underneath the liquid waste pond infrastructure was undertaken from 12 May 2022 to 24 May 2022, to identify any substances in the soil present in concentrations above background levels, posing a risk of harm to human health or to the environment.

### 3.1.2 Receptors

In accordance with the *Guideline: Risk assessments* (DWER 2020), 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 (Guideline: Environmental siting (DWER 2020)).

Table 2: Sensitive human and environmental receptors and distance from prescribed activity

Human receptors	Distance from prescribed activity
Residential Premises	Appx. 200 m south-west, 425 m south south-west, and 934 m south south-east of the premises boundary
Environmental receptors	Distance from prescribed activity
Buller Nature Reserve	Adjacent to the southern boundary of the premises
Threatened Ecological Community (Banksia Dominated Woodlands of the Swan Coastal Plain)	Within and immediately adjacent to the premises boundary
Peel Harvey Environmental Protection Policy	Premises located within the policy area
Surface water body	Within and adjacent to the western boundary of the premises
Multiple use category wetland, palusplain	Adjacent to the eastern and western boundaries of

	the premises
Conservation category wetland, sumpland	Appx. 90 m north of the premises
Underlying Groundwater	Premises is located within the Murray Groundwater Area proclaimed under the Rights in Water and Irrigation Act 1914 (RIWI Act).
	Due to the presence of a surface water body on the premises and nearby wetlands, a shallow depth to groundwater is inferred.
	Groundwater bores (beneficial use) located appx. 900m south south-east of the premises boundary

#### 3.2 Soil validation results and criteria for assessment

Samples of the soils remaining underneath the liquid waste pond infrastructure were collected from 12 May 2022 to 24 May 2022 and analysed for metals, BTEX (benzene, toluene, ethylbenzene and xylenes), Total Recoverable Hydrocarbons, Monocyclic Aromatic Hydrocarbons and Polycyclic Aromatic Hydrocarbons (PAHs). The results from the analysis from 360 Environmental Pty Ltd were provided to DWER as part of this licence amendment and compared against the tabulated investigation and screening levels in Volume 2, Schedule B1, of the *National Environment Protection (Assessment of Site Contamination) Measure* 1999 as amended on 16 May 2013 (ASC NEPM).

The ASC NEPM delivers a National Framework to use in the assessment of sites for contamination, with Schedule B1 providing a *Guideline on investigation levels for soil and groundwater*.

Health investigation levels (HILs) were developed for metals and organic substances in soils to assist in assessing the risk to human health and are generally used in the first Tier 1 screening risk assessment stage of a site. HIL-D for commercial/industrial (shops, offices, factories and industrial sites) has been deemed the most appropriate to assess the soil sampling results against due to the location of the premises being far from public open spaces or residential areas. The sampling results and comparison against HIL-D are displayed in Table 4.

Health screening levels (HSL) for petroleum hydrocarbon contamination in soils have also been assessed. HSLs have been created for BTEX, naphthalene, and four carbon chain fractions. The four carbon chain fractions are modelled on those adopted in the *Canada-wide standard for petroleum hydrocarbons (PHC) in soil (CCME 2008)*. The fractions and their corresponding equivalent carbon range are listed in table 3 below:

Table 3: Carbon chain fractions and corresponding carbon range (ASC NEPM)

Fraction number	Equivalent carbon number range
F1	C <sub>6</sub> - C <sub>10</sub>
F2	>C <sub>10</sub> - C <sub>16</sub>
F3	>C <sub>16</sub> - C <sub>34</sub>
F4	>C <sub>34</sub> - C <sub>40</sub>

Soil HSLs are only applicable to petroleum hydrocarbon compound exposure via the dominant vapour inhalation exposure pathway. Compounds >C<sub>16</sub> are not of interest for vapour intrusion as they are not volatile. HSL-D for commercial/industrial has been deemed the most appropriate to compare the soil sampling results to and these are shown in Table 4.

Ecological Investigation Levels (EILs) were developed for metals and organic substances for the assessment of risks to terrestrial ecosystems. EIL-D for commercial/industrial has been deemed the most appropriate to assess the soil sampling results against and these are shown in Table 5.

Table 4: Comparison of residual soil sampling results and health-based investigation levels (HILs and HSLs)

Chemical	Health-based	investigation	levels (	mg/kg)												
	Commercial/	HSL-D Vapour Instrusion	LOR	Sample ID: NN Wall W	Sample ID: NN Wall E	Sample ID: NN Base	Sample ID: NM Wall S	Sample ID: NM Base 1	Sample ID: NM Base 2 Date:	Sample ID: SM Wall W	Sample ID: SM Wall E	Sample ID: SM Base	Sample ID: SS Wall W	Sample ID: SS Wall E	Sample ID: SS Base N	Sample ID: SS Base S
	industrial HIL- D	(sand 0 m to <1 m)		Date: 12/05/2022	Date: 13/05/2022	Date: 14/05/2022	Date: 15/05/2022	Date: 16/05/2022	17/05/2022	Date: 18/05/2022	Date: 19/05/2022	Date: 20/05/2022	Date: 21/05/202	Date 22/05/2022	Date: 23/05/2022	Date: 24/05/2022
Metals and Inor	ganics															
Arsenic	3 000		5	<2	<2	<2	6	<2	<2	3.9	3.3	<2	3.3	<2	<2	2.2
Beryllium	500		2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Boron	300 000		50	<5	<5	<5	<5	<5	<10	<5	<5	<5	<5	<5	<5	<5
Cadmium	900		1	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Chromium	3 600		1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt	4 000		2	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Copper	240 000		5	<5	<5	<5	<5	<5	13	<5	<5	<5	<5	<5	<5	<5
Lead	1 500		5	<2	<2	<2	7.3	2.7	3.5	6.3	5.7	2.3	4.1	3.6	3.7	3.9
Manganese	60 000		5	<5	<5	<5	6.3	6.6	7.5	10	8.4	<5	5.7	<5	<5	<5
Mercury (inorganic)	730		0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methyl mercury	180		-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nickel	6 000		2	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Selenium	10 000		5	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Zinc	400 000		5	<5	<5	<5	<5	9.5	21	<5	<5	<5	<5	<5	<5	<5
Cyanide	1 500		-	-	-	-	-	-	-	-	-	-	-	-	-	-
BTEXN																
Toluene		NL	0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene		NL	0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Xylenes		230	0.5	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Napthalene		NL	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Benzene		3	0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Recoveral	ble Hydrocarbons	5	_										_			
F1		260	20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
F2		NL	25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25

<sup>-</sup> Means that the chemical was not tested for.

LOR: Limit of Reporting

NL: "Non Limiting" - means that there is no limit on the screening level for the assessment as the derived soil HSL number for the petroleum hydrocarbon would be larger than what is physically attainable.

Table 5: Comparison of soil sampling results and ecological investigation levels (EILs)

Chemical	Ecological investigation levels (mg total contaminant/kg)														
	Commercial/ industrial EIL - D	LOR	Sample ID: NN Wall W Date: 12/05/2022	Sample ID: NN Wall E Date: 13/05/2022	Sample ID: NN Base Date: 14/05/2022	Sample ID: NM Wall S Date: 15/05/2022	Sample ID: NM Base 1 Date: 16/05/2022	Sample ID: NM Base 2 Date: 17/05/2022	Sample ID: SM Wall W Date: 18/05/2022	Sample ID: SM Wall E Date: 19/05/2022	Sample ID: SM Base Date: 20/05/2022	Sample ID: SS Wall W Date: 21/05/2022	Sample ID: SS Wall E Date 22/05/2022	Sample ID: SS Base N Date: 23/05/2022	Sample ID: SS Base S Dare: 24/05/2022
Arsenic	160	5	<2	<2	<2	6	<2	<2	3.9	3.3	<2	3.3	<2	<2	2.2
DDT	640	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Napthalene	370	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Lead	1 800	5	<2	<2	<2	7.3	2.7	3.5	6.3	5.7	2.3	4.1	3.6	3.7	3.9

<sup>-</sup> Means that the chemical was not tested for.

LOR: Limit of Reporting

# 3.3 Key findings

The Delegated Officer has reviewed the results of soil sampling against the criteria for assessment and has for the purposes of the risk assessment found:

- 1. The soil sampling results from the remaining soils underneath the liquid waste ponds are well within the ASC NEPM investigation levels for soil, with many below the Limit of Reporting (LOR) and therefore, do not indicate a risk to human or ecological health.
- 2. The levels of some substances (particularly metals) were found to be much higher in the dried sludge samples taken from the liquid waste ponds in comparison to the residual soils underneath the ponds (dried sludge sample results are shown in Appendix 1). Based on this information, the Delegated Officer considers it unlikely that residual soils would have been contaminated from the operation or decommissioning of the liquid waste ponds.
- 3. There are 10 groundwater monitoring bores onsite and sampling is undertaken by 360 Environmental Pty Ltd in accordance with the monitoring conditions of the licence. Groundwater sampling is also required to include Quality Assurance and Quality Control samples in accordance with DWERs Assessment and Management of Contaminated Sites Guideline and the ASC NEPM due to the site being classified as "Possibly contaminated further investigation required" under the *Contaminated Sites Act 2003*. Any site contamination will be identified, assessed, and managed through the Contaminated Sites process.

# 3.4 Risk ratings

Risk ratings have been assessed in accordance with the *Guideline: Risk Assessments* (DWER 2020) 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 incomplete 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 6.

The Revised Licence L6756/1996/11 that accompanies this Amendment Report authorises emissions associated with the operation of the Premises.

The conditions in the Revised Licence have been determined in accordance with *Guidance Statement: Setting Conditions* (DER 2015).

Table 6: Risk assessment of potential emissions and discharges from the Premises during operation

Risk Event					Risk rating <sup>1</sup>	Licence Holder's		Justification for	
Source/Activities	Potential Potential pathways and impact		Receptors	Licence Holder's controls	C = consequence L = likelihood	controls sufficient?	Conditions <sup>2</sup> of licence	additional regulatory controls	
Operation									
Contaminants in the remaining soil underneath liquid waste pond infrastructure (due to liquid waste leaks from damaged pond liner etc.)	Leachate (from rainfall events)	Seepage through soils to groundwater leading to degradation of the beneficial uses of groundwater and ecosystem disturbance	Groundwater users Wetlands Groundwater dependent ecosystems	Refer to Section 3.1	C = Moderate L = Rare <b>Medium Risk</b>	Y	N/A Conditions 1, 3 and 19 have been updated Removal of conditions 4, 8, and 14(b)	N/A	

Note 1: Consequence ratings, likelihood ratings and risk descriptions are detailed in the Guideline: Risk assessments (DWER 2020).

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

**Table 7: Consultation** 

Consultation method	Comments received	Department response			
Licence Holder provided with draft amendment on 14 April 2023	The Licence Holder advised on 17 April 2023 that they wished to waive the consultation period and for the Department to proceed with granting the licence 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.

# 5.1 Summary of amendments

Table 8 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 8: Summary of licence amendments** 

Condition no.	Proposed amendments
Prescribed premises category description table	Deletion of Category 61
1	Amendment to remove liquid waste from the waste acceptance table (Table 1).
3	Amendment to remove liquid waste and corresponding process requirements from the waste processing table (Table 2).
4	Condition and Table 3 deleted as no longer applicable with the removal of Category 61.
8	Condition deleted as no longer applicable with the removal of Category 61
5 - 21	Renumbered due to deletion of conditions 4, 8 and 14(b)
14	14(b) "all wastewater sampling is conducted in accordance with AS/NZS 5667.10" deleted as no longer applicable. Condition renumbered to 12.
16	Renumbered to 14. Table 5 renumbered to Table 4
18	Renumbered to 16 and updated to contemporary format.
20	Renumbered to 18 and updated to contemporary format. Table 6 renumbered to Table 5.

21	Renumbered to 19. Table 7 renumbered to Table 6. Notification requirement in relation to desludging of the liquid waste ponds and biofilter deleted.
Definitions	Table 8 renumbered to Table 7. Definitions for Anaerobic/Disposal Pond, Anniversary Date, AS/NZS 5667.10, final effluent storage pond, freeboard, grease trap waste, liquid waste biofilter, septage treatment ponds, and septage waste deleted as no longer applicable.
Figure 1	Amended to reflect the decommissioning of the liquid waste ponds.

### 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.
- 4. DWER 2021, Guideline: Assessment and management of contaminated sites, Perth, Western Australia
- 5. National Environmental Protection (Assessment of Site Contamination) Measure 1999 (NSW)

# **Appendix 1: Sampling results**

					Sample ID	MN1	MN2	MN3	MS1	MS2	S1	S2	SS1	SS2	SS3	SS4
					Sample Date	25/02/2022	25/02/2022	25/02/2022	25/02/2022	25/02/2022		25/02/2022	25/02/2022	25/02/2022	25/02/2022	25/02/2022
	Type Analysis	Soil L22-Fe56943	Soil L22-Fe56944	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil L22-Fe56952	Soil				
	ory Reference No.	LZZ-Fe0b943	LZZ-Fe36944	LZZ-Fe06940	LZZ-Fe3b94b	LZZ-Fe0b94/	LZZ-Fe06948	L22-Fe3694	: L22-Fe06900	LZZ-Fe0b90	LZZ-Fe3693Z	L22-Fe56953				
	Co	ontaminant	Level Concentra	itions	Mean + 1											
Analytes	Units	CL1Class I/II	CL3 Class III	CL4 Class IV	Standard Deviation											
Inorganics																
% Moisture	%				1.90	1.7	3.3	0.5	0.5	1.8	0.5	0.5	0.5	0.5	0.5	0.5
Metals																
Aluminium <sup>a</sup>	mg/kg	50,000	100,000	200,000	6689	10000	8700	4900	1800	3200	960	1000	2300	2700	2600	2200
Arsenic	mg/kg	500	5,000	20,000	2.8	4.4	3.4	1	1	2.1	1	1	1	1	1	1
Barium *	mg/kg	50,000	100,000	200,000	128.9	190	210	50	32	71	2.5	2.5	5.5	2.5	2.5	5.5
Beryllium	mg/kg	100	1,000	4,000	1.0	1	1	1	1	1	1	1	1	1	1	1
Boron *	mg/kg	50,000	100,000	200,000	15.2	19	16	5	8	20	2.5	2.5	5	7.1	5.9	5.9
Cadmium	mg/kg	100	1,000	4,000	0.6	1	0.6	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Cobalt a	mg/kg	50,000	100,000	200,000	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Chromium	mg/kg				30.2	47	35	27	2.5	8.6	*	2.5	5.3	5.4	2.5	2.5
Chromium (hexavalent)	mg/kg	500	500	2,000	0.5	0.5		0.5	0.5	0.5	0.5	0.5	0.5	0.5		0.5
Lead	mg/kg	1,500	15,000	60,000	26.0	46	22	17	14	20	2.5	2.1	3.9	3.6	3.3	3.7
Manganese	mg/kg	50,000	100,000	200,000	99.3	120	130	62	37	100	*	5.3	7.4	6.4	5.7	6
Mercury	mg/kg	75	750	3,000	0.3	0.5	0.2	0.05	0.05	0.05	*	0.05	0.05	0.05	0.05	0.05
Molybdenium	mg/kg	1,000	10,000	40,000	5.2	8.9	2.5	2.5	2.5	2.5	*	2.5	2.5	2.5	2.5	2.5
Nickel	mg/kg	3,000	30,000	120,000	31.1	48	22	42	2	7.1	*	2	2	2	2	2
Selenium	mg/kg	50	500	2,000	1.6	2.5	1	1	1	1	*	1	1	1	1	1
Silver	mg/kg	180	1,800	7,200	1.0	1	1	1	1	1	*	1	1	1	1	1
Vanadium	mg/kg	50,000	100,000	200,000	19.0	24	23	23	2.5	5	*	2.5	2.5	5.2	2.5	2.5
Non-Chlorinated Organic Compounds																
Benzene	mg/kg	0.2	2	20	0.08	0.1	0.1	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Ethylbenzene	mg/kg	60	600	6,000	0.08	0.1	0.1	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
meta- & para-Xylene	mg/kg				0.16	0.2	0.2 0.1	0.1 0.05	0.1 0.05	0.1 0.05	0.1 0.05	0.1 0.05	0.1	0.1 0.05	0.1 0.05	0.1 0.05
ortho-Xylene Toluene	mg/kg mg/kg	160	1,600	16.000	0.08	0.1 0.1	0.1	0.05	0.05	0.05	0.05	0.05	0.05 0.05	0.05	0.05	0.05
Total Xylene	mg/kg	120	1,000	12,000	0.06	0.1	0.1	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05

<sup>a</sup> CL values derived as % by weight.
CL1 Class I, CL2 Class II, CL3 Class III and CL4 Class IV are the concentration limits for waste classification. CL values determined as: Class I = HIL Commercial Industrial, Clas II = Class I, Class III = 10 x Class IV = 100 x Class I
ASLP values determined as: Class I = 10 x Australian Drinking Water Health Guideline (ADWG) value, Class II = 10 x Class I, Class IV = 100 x Class I

Class IV = 100 x Class I

Acronyms: CL = Concentration Limit

ASLP = Leachable Concentration

mbgl = meters below ground level LOR = Limit of Reporting

mg/kg = milligrams per kilograms

mg/L = milligrams per litre

---- = No guideline value has been developed for this analyte.

Figure 1: Summary of liquid waste pond dried sludge testing from samples collected 22 February 2022

# **Appendix 2: Application validation summary**

SECTION 1: APPLICATION SUMMARY							
Application type							
Works approval							
Licence		Relevant works approval number:		Non e			
		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	$\boxtimes$	Current licence number:	L6756/1996/11	3756/1996/11			
		Relevant works approval number:		N/A			
Registration		Current works approval number:		Non e			
Date application received		14 February 2023					
Applicant and Premises details	S						
Applicant name/s (full legal name/s)		Shire of Waroona					
Premises name		Buller Road Refuse Disposal Site					
Premises location		702 Buller Road					
		WAROONA WA 6215					
Local Covernment Authority		Being Lot 1701 on Plan 214632 Shire of Waroona					
Local Government Authority Shire of Waroona  Application documents							
HPCM file reference number:		2010/002299-1					
THE OWN THE TELEFICION HUITIDES.		Licence Amendment Buller Road Refuse Disposal Site					
Key application documents (additional to application form):		L6756/1996/11 Supporting Information					

#### Scope of application/assessment Licence amendment for the removal of Category 61 Liquid Waste Facility from the licence as the premises stopped accepting liquid waste in July 2020 and all liquid waste Summary of proposed activities or treatment and storage ponds on site have now been changes to existing operations. decommissioned. Category number/s (activities that cause the premises to become prescribed premises) Table 1: Prescribed premises categories Proposed changes to the Prescribed premises category Assessed production or and description design capacity production or design capacity (amendments only) Category 61 Liquid waste facility: Removal of prescribed 850 tonnes per year premises on which liquid waste premises category as no produced on other premises longer required (other than sewerage waste) is stored, reprocessed, treated, or irrigated. Category 64: Class II or III N/A 10,000 tonnes per year putrescible landfill site: premises on which waste (as determined by reference to the waste type set out in the document entitled "Landfill Waste Classification and Waste Definitions 1996" published by the Chief Executive Officer and as amended from time to time) is accepted for burial. Legislative context and other approvals Has the applicant referred, or do they Referral decision No: intend to refer, their proposal to the Yes □ No ⊠ Managed under Part V ⊠ EPA under Part IV of the EP Act as a significant proposal? Assessed under Part IV Does the applicant hold any existing Ministerial statement No: N/A Part IV Ministerial Statements Yes □ No ⊠ EPA Report No: N/A relevant to the application? Has the proposal been referred Reference No: N/A and/or assessed under the EPBC Yes □ No ⊠ Act?

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? Not required
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: N/A Licence/permit No: N/A 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: Murray Groundwater Area Type: Proclaimed Groundwater Area Has Regulatory Services (Water) been consulted? Yes □ No □ N/A ☒ Regional office: Kwinana Peel
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	Yes ⊠ No □	Environmental Protection (Controlled Waste) Regulations 2004 – Septage and grease trap waste treated in the ponds was controlled waste K210 and K110

Agreement Act xxxx)		
Is the Premises within an Environmental Protection Policy (EPP) Area?	Yes ⊠ No □	Located in the Peel Harvey Protection Policy Area
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: possibly contaminated – investigation required (PC–IR)  Date of classification: 26/10/2022