Amendment Report

Department initiated Amendment

Part V Division 3 of the Environmental Protection Act 1986

Licence Number L6964/1997/11

Licence Holder City of Armadale

File Number DER2016/001003-1~10

Premises City of Armadale Landfill and Recycling Facility

145 - 147 Hopkinson Road

HILBERT WA 6112

Legal description -

Lot 600 on Deposited Plan 400460

Certificate of Title Volume 2828 Folio 800

Date of Report 18 August 2023

Decision Revised licence granted

MANAGER WASTE INDUSTRIES REGULATORY SERVICES

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

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1. Decision summary

The Delegated Officer has determined to make amendments to Licence L6964/1997/11. The amendments are required as a result of the assessment of an application for Works Approval W6814/2023/1. The assessment determined that landfill cover requirements and groundwater monitoring in the existing licence required amendments.

This Amendment Report documents the amendments made pursuant to section 59 and 59(B) of the *Environmental Protection Act 1986* (EP Act).

The decision report for the existing licence will remain on the department's website for future reference and will act as a record of the department's decision making.

2. Scope of assessment

2.1 Regulatory framework

In amending the licence, the department 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 Amendment summary

Licence L6964/1997/11 is held by the City of Armadale (Licence Holder) for the City of Armadale Landfill and Recycling Facility (the Premises), located at 145 - 147 Hopkinson Road, Hilbert.

The Premises relates to the categories and the assessed design capacity under Schedule 1 of the Environmental Protection Regulations 1987 (EP Regulations) which are defined in existing Licence L6964/1997/11.

On 11 August 2023, the department initiated an amendment to Licence L6964/1997/11. The amendment is the resulting from the assessment of an application for Works Approval W6814/2023/1. The assessment determined that cover requirements in the licence were contradicting the capping works proposed under Works Approval W6814/2023/1. A risk assessment conducted as part of the works approval application also determined that changes to groundwater monitoring under the licence were required.

Details of the capping works and a risk assessment relating to leachate impacts to groundwater are contained in the Decision Report for Works Approval W6814/2023/1 (DWER 2023).

3. Consultation

The Licence Holder was provided with the draft Amendment Report on 17 August 2023.

On 18 August 2023 the Licence Holder waived the comment period.

4. Conclusion

Based on this Amendment Report, the Delegated Officer has determined that an amended licence will be granted, subject to conditions commensurate with the determined controls and necessary for administration and reporting requirements.

4.1 Summary of amendments

Table 1 below provides a summary of the proposed amendments and will act as a record of implemented changes. All proposed changes have been incorporated into the revised licence as part of the amendment process.

Table 1: Summary of licence amendments

Condition no.	Proposed amendments							
4: Table 3 (cover	The following changes to the requirements in Table 3 were made:							
requirements)	Waste type	Timescale	Material	Depth				
	Inert Waste Type 1				At least 4000 500 mm, including at least 300 mm of compacted clay cover.			
	Inert Waste Type 2 (excluding tyres)	Final Intermediate	Clean fill and clay	including				
	Putrescible Waste							
16	The following changes to condition 16 were made:							
	The licence holder must;							
	(a) monitor groundwater for concentrations of the identified parameter(s) in accordance with Table 6;—and							
	(b) ensure all sample analysis is undertaken by laboratories with current NATA accreditation for the relevant parameters, unless otherwise specified in Table 6; and							
	(c) repair and maintain all monitoring bores as required, to ensure they are free from blockages and in good working order to allow representative groundwater samples to be taken.							
16: Table 6	The following changes to the requirements in Table 6 were made:							
	Monitoring well location	Parameter	Unit	Frequency	Method			
	Field measurements							
	SP1; SP2; and	Standing water level (SWL) ¹	m AHD and m BGL	Biannually	Spot sample,			
		pH ¹	-					
	SP3;	Electrical conductivity ¹	μs/cm	(April to May and	in accordance with AS/NZS			
	SP1-S, SP1-I, SP2-S, SP2-I, SP3-S, SP3-I, P1-S, P1-I, P2-S, P2-I, P3-S and P3-I, as	Oxidation-reduction potential ¹	mV	September to October)	5667.1 and AS/NZS 5667.11			
	shown in Schedule 1: Figure	Temperature ¹	°C					
		Dissolved oxygen ¹	mg/L					
	General water quality parameters							
	SP1; SP2; and- SP3; SP1-S, SP1-I, SP2-S, SP2-I, SP3-S, SP3-I, P1-S, P1-I, P2-S, P2-I, P3-S and P3-I, as shown in Schedule 1: Figure 3	Total dissolved solids	_		Spot sample, in accordance with AS/NZS 5667.1 and AS/NZS 5667.11			
		Major cations (Ca, Mg, Na K)	<mark>1,</mark>					
		Major anions (CI, SO4, CO ₃ , HCO ₃)						
		Total organic carbon		Biannually (April to May				
		Methane	mg/L	and September to				
		Total phosphorus		October)				
		Total nitrogen						
		Total Kjeldahl nitrogen						
		Ammonium-nitrogen	_					
		Nitrate + nitrite-nitrogen						
	Metals (dissolved)							

Licence: L6964/1997/11

Condition no.	Proposed amendments						
	SP1; SP2; and SP3; SP1-S, SP1-I, SP2-S, SP2-I, SP3-S, SP3-I, P1-S, P1-I, P2-S, P2-I, P3-S and P3-I, as shown in Schedule 1: Figure 3	Arsenic	mg/L	Biannually (April to May and September to October)	Spot sample, in accordance with AS/NZS 5667.1 and AS/NZS 5667.11		
		Cadmium					
		Chromium					
		Copper					
		Ferrous iron					
		Manganese					
		Nickel					
		Lead					
		Zinc					
	Hydrocarbons						
	SP1-S, SP1-I, SP2-S, SP2-I, SP3-S, SP3-I, P1-S, P1-I, P2-S, P2-I, P3-S and P3-I, as shown in Schedule 1: Figure 3	BTEX (benzene, toluene, ethylbenzene, xylene)	mg/L	Biannually (April to May and September to October)	Spot sample, in accordance with AS/NZS 5667.1 and AS/NZS 5667.11		
		Total recoverable hydrocarbons					
17	Condition 17 which required the recording of all monitoring activity under condition 16 was identified as redundant and removed. The condition was duplicating a requirement already contained in the licence through condition 22(c)(now 21(c)).						
Definitions	Definitions added for: AS/NZS 5667.1, BTEX, Ca, Cl, CO ₃ , HCO ₃ , K, Mg, Na and SO ₄ .						
Schedule 1: Figure 3	Updated to new figure showing the location of bores SP1-S, SP1-I, SP2-S, SP2-I, SP3-S, SP3-I, P1-S, P1-I, P2-S, P2-I, P3-S and P3-I.						

References

1. Department of Water and Environmental Regulation (DWER) 2023, *Decision Report W6814/2023/1*. Issued 18 August 2023. DWER reference: DWERDT822850.