Amendment Report

Application for Licence Amendment

Part V Division 3 of the Environmental Protection Act 1986

Licence Number L5979/1993/11

Licence Holder City of Kalgoorlie-Boulder

File Number 2012/006907-1

Premises Yarri Road Refuse Facility

Yarri Road

KALGOORLIE WA 6430

Lot 251 on Plan 190202

Date of Report 3 September 2021

Decision Revised licence granted

Steve Checker
MANAGER WASTE INDUSTRIES
REGULATORY SERVICES

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

Table of Contents

1.	Decis	ecision summary1				
2.	Scope	e of assessment	1			
	2.1	Regulatory framework	1			
	2.2	Application summary	1			
	2.3	Consolidation of Licence	1			
3.	Risk a	assessment	.2			
	3.1	Source-pathways and receptors	2			
		3.1.1 Emissions and controls	2			
		3.1.2 Receptors	4			
	3.2	Risk ratings	2			
4.	Consi	ultation	.4			
5.	Concl	usion	.4			
	5.1	Summary of amendments	4			
Refe	rences	S	.7			
App	endix 2	2: Application validation summary	.8			
Table	2: Lice	ences consolidated in this amendment	1			
Table	3: Lice	ence Holder controls	4			
Table	e 4: Ser	sitive human and environmental receptors and distance from prescribed activity	.4			
		k assessment of potential emissions and discharges from the Premises during	3			
Table	e 6: Cor	nsultation	4			
Table	7: Sun	nmary of licence amendments	4			
Table	e 8: Cor	nsolidation of licence conditions in this amendment	4			
Figur	e 1: Dis	stance to sensitive receptors	1			

1. Decision summary

Licence L5979/1993/11 is held by the City of Kalgoorlie-Boulder (Licence Holder) for the Yarri Road Refuse Facility (the Premises), located on at Lot 251 on Plan 190202, Yarri Road, KALGOORLIE WA 6430.

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 L5979/1993/11 has been granted.

The Revised Licence issued as a result of this amendment consolidates and supersedes the existing Licence previously granted in relation to the Premises. The Revised Licence has been granted in a new format with existing conditions being transferred, but not reassessed, to the new format.

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 https://dwer.wa.gov.au/regulatory-documents.

2.2 Application summary

On 04 June 2021, the Licence Holder submitted an application to the department to amend L5979/1993/11 under section 59 and 59B of the *Environmental Protection Act 1986* (EP Act). The amendment is seeking to allow the use of a homogenous blend of mulched green waste and soil or other inert incombustible material to a ratio of 1:1 (by volume) for use as daily cover and intermediate capping material (prior to future landfill stages). The intent of this activity is to decrease the overall fire risk on site by reducing the volume of stockpiled mulched greenwaste and additionally assist the beneficial reuse of mulched green waste onsite.

The Licence Holder also requested approval for the acceptance and storage (for later removal offsite) of small amounts of aerosol paints to assist with the management of social issues within the City. The Delegated Officer considers the acceptance of liquid paints has components for both Category 62 and Category 61. The quantity does not meet licencing requirements for Category 61 and therefore the category has not been added to the licence. As the Delegated Officer considers the risk of accepting up to 20 tonnes of paint per year to be negligible and not requiring a separate risk assessment, the acceptance of hazardous household waste (limited to paint only) prior to offsite removal has been added to the amended licence.

2.3 Consolidation of Licence

As part of this amendment package the department has consolidated the licence by incorporating changes made under the Amendment Notices as summarised in Table 1.

Table 1: Licences consolidated in this amendment

Instrument Issued		Summary of approval		
L5979/1993/11	29/04/2016	Licence amendment to extend expiry date to 2036		
L5979/1993/11	14/03/2019	Amendment Notice 1 to allow for the construction of two putrescible waste cells (10 and 11) and five tyre monofils (1, 2, 3, 4 and 5)		

Instrument	Issued	Summary of approval
L5979/1993/11	3/09/2021	Licence amended to allow the use of homogenous blended mulched greenwaste and soil/inert material as daily cover and intermediate capping material.
		Acceptance and storage of minor quantities of paints.
		This licence amendment also includes a consolidation of all previous licence amendments and an update to the new format licence.

The obligations of the Licence Holder have not changed in consolidating the licence. The department has not undertaken any additional risk assessment of the Premises related to previous Amendment Notices.

In consolidating the licence, the CEO has:

- updated the format and appearance of the Licence;
- deleted the redundant AACR form set out in schedule 1 of the previous licence and advise the Licensee to obtain the form from the department's website;
- revised licence condition's numbers, and removed any redundant conditions and realigned condition numbers for numerical consistency; and
- corrected clerical mistakes and unintentional errors.

The full consolidation of licence conditions as they relate to this Revised Licence are detailed in Section 5.1. Previously issued Amendment Notices will remain on the department's website for future reference and will act as a record of the department's decision making.

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.

Previous advice provided by the Department of Fire and Emergency Services (DFES) for a similar amendment application for South Hedland Landfill (L6917/1997/1), DFES had no objection to the use of the proposed alternative cover material provided the mixture is completely homogenous, so that there are no localised concentrations of combustible material (e.g. green waste) and all combustible material which may either burn or self-heat (spontaneous combustion) is diluted as specified with other inert material (such as soil) so as to negate the potential hazard. This advice has been considered when assessing this application.

The Delegated Officer considers the acceptance of up to 20 tonnes/year of liquid paints has components of both Category 62 and Category 61. The quantity requested does not meet licencing requirements for Category 61 and therefore the category has not been added to the licence. As the Delegated Officer considers the risk of acceptance up to 20 tonnes of paint per year to be negligible and not requiring a detailed risk assessment, the acceptance of hazardous household waste (limited to paint only) prior to offsite removal has been added to the amended licence.

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 2 below. Table 2 also details the proposed control measures the Licence Holder has proposed to assist in controlling these emissions, where necessary.

Table 2: Licence Holder controls

Emission	Sources	Potential pathways	Proposed controls
Odour		Air/windborne pathway	N/A
Contaminated runoff		Overland flow Low rainfall environment.	
	Use of alternate cover material: Shredded greenwaste mixed to a ratio of 1:1 with clean fill/ inert incombustible material	Air/windborne pathway	Fire risk reduced by 1:1 mixing of greenwaste with inert non-combustible material.
Fire			Site operates under a Safety Management System which includes Emergency Response Plan covering fire management. Activity is deemed to reduce fire risk on site by reducing volume of greenwaste stockpiled.
			There are always fire extinguishers and a water cart onsite. The local fire station is approximately 5 km from the premises.
Windblown waste			Greenwaste is screened at the weighbridge with contaminated greenwaste disposed in the active landfill cell, and only clean greenwaste stockpiled and then mulched

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 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 activity / prescribed premises
Residential premises	~3.7 km south west of the premises boundary
Tourist park	~3.3 km south west of the premises boundary
Ninga Mia Village – Aboriginal town-based reserve	~2 km south west of the premises boundary
Compass groundwater draw points associated with other prescribed premises'	Multiple ~3.3 km south and south-south west of the premises boundary drilled to well depth of ~20 m

Environmental receptors	Distance from activity / prescribed premises
	The premises is within the RIWI Proclaimed Groundwater Area
Underlying groundwater (non-potable purposes)	Salinity >35000mg/L
pulposso)	Groundwater depth in the region ranges from 18 mbgl – 85 mbgl
	Minor non-perennial watercourse immediately adjacent eastern boundary of the premises;
Surface water lines – unnamed minor watercourses	Minor non-perennial watercourse ~580m west of the premises boundary; and approximately 9 other unnamed minor non-perennial watercourses within a 5km radius of the premises boundary.
Surface water body Gidji Lake and White Flag Lake systems	~10 – 20 km west, north-west of the premises boundary
Threatened and priority flora	~12 known populations of threatened and priority flora within 20 km radius of the premises boundary
Threatened and priority fauna	~9 known species of threatened and priority fauna within 15 km radius of the premises boundary
TECs -Emu Land System – P3	~25 km north west of the premises boundary

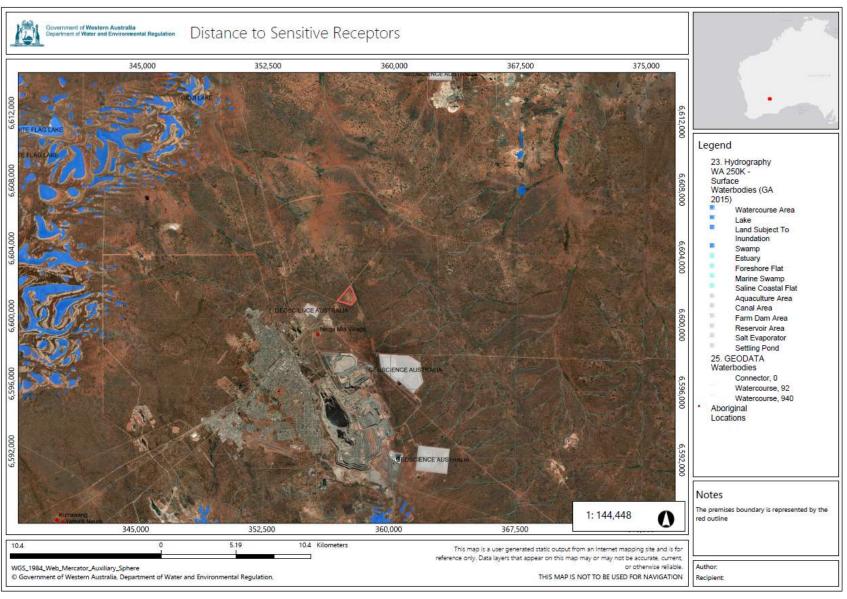


Figure 1: Distance to sensitive receptors

3.2 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 4.

The Revised Licence L5979/1993/11 that accompanies this Amendment Report authorises emissions associated with the operation of the Premises i.e. the use of homogenously blended mulched greenwaste with soil/ inert materials for cover material and intermediate capping material.

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

Table 4. Risk assessment of potential emissions and discharges from the Premises during operation

Risk Event	Risk Event				Risk rating ¹	Licence		Justification for
Source/Activities	Potential emission	Potential pathways and impact	Receptors	Licence Holder's controls	C = consequence L = likelihood	Holder's controls sufficient?	Conditions ² of licence	additional regulatory controls
	Odour	Air/windborne pathway causing impacts to health and amenity	Ninga Mia Village	Refer to Section 3.1	C = Minor L = Rare Low Risk	Y	N/A	The Delegated officer considers the distance to receptor sufficient at mitigating the risk
	Contaminated runoff	Overland runoff potentially causing ecosystem disturbance or impacting surface water quality			C = Minor L = Unlikely Medium Risk	Y	N/A	The Delegated officer considers the existing licence conditions sufficient at mitigating the risk
Use of alternate cover material: Shredded greenwaste mixed to a ratio of 1:1 with clean fill/ inert incombustible material	Fire	Air/windborne pathway causing impacts to health and amenity	Minor non- perennial watercourses Ninga Mia Village Threatened fauna and flora		C = Moderate L = Unlikely Medium Risk	Y	Condition 7 amended to allow mulched greenwaste mixed homogenously to a ration of 1:1 (by volume) with clean fill or other inert incombustible material.	Condition that the mixture must be homogenously mixed as per DFES advice. Condition that the clean fill or other inert material must be incombustible as stated in the application to ensure the risk of fire is mitigated.
	Windblown waste		C = Slight L = Unlikely Low Risk	Y	N/A	The Delegated officer considers the existing licence conditions and applicant controls sufficient at mitigating the risk		

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

Table 5: Consultation

Consultation method	Comments received	Department response
Licence Holder was provided with draft amendment on 08 August 2021	No Comments received	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 6 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 6: Summary of licence amendments

Condition no.	Proposed amendments
6	Include the use of mulched greenwaste mixed homogenously to a ratio of 1:1 (by volume) with clean fill or other inert incombustible material as cover material.
2, Table 1	Addition of household hazardous waste to the waste acceptance table
4, Table 2	Addition of household hazardous waste to the waste processing table

Table 7: Consolidation of licence conditions in this amendment

Existing condition	Condition summary	Revised licence condition	Conversion notes
N/A	Licence layout and format	N/A	Revised to current licensing format.
N/A	Prescribed Premises Category table	N/A	Revised to current licensing format.
Introduction	Preamble	N/A	Redundant and removed from licence – updated to current licensing format
1.1.1 1.1.2	Interpretation and definitions	N/A Interpretation section, Definitions and Table 1	Redundant condition. Revised to current licensing format.
1.1.3	Australian or other standard	N/A Interpretation section, Definitions and Table 9	Redundant condition. Revised to current licensing format.

Existing condition	Condition summary	Revised licence condition	Conversion notes
1.1.4	Reference to code of practice	N/A Interpretation section, Definitions and Table 9	Redundant condition. Revised to current licensing format.
1.2.1	Stormwater run-off	Condition 12	New numbering
1.3.1	Limit exceedances	Condition 1	
1.3.2 and Table 1.3.1	Waste Acceptance	Condition 2 and Table 1	New numbering and updated format
1.3.3	Waste removal/ quarantine	Condition 3	New numbering
1.3.4 and Table 1.3.2	Waste processing	Condition 4 and Table 2	New numbering and updated format
1.3.5	Land management	Condition 5	New numbering
1.3.6 and Table 1.3.3	Cover requirements	Condition 6 and Table 3	New numbering, updated format and amended cover requirements
1.3.7	Security measures	Condition 7	New numbering
1.3.8	Windblown waste	Condition 13	
1.3.9	Windblown waste	Condition 14	
1.3.10	Fire	Condition 15	
1.3.11	Vermin	Condition 20	
1.3.12	Fire	Condition 16	
1.3.13	Fire	Condition 17	
1.3.14	Fire	Condition 18	
1.3.15	Tyres	Condition 21	
1.3.16	Fire	Condition 19	
1.3.17 and Table 1.3.4	Works – Infrastructure and equipment requirements	Condition 8 and Table 4	New numbering and updated format
1.3.18	Exceptions to Condition 1.3.17	Condition 9	New numbering
1.3.19	Notification of works completed	Condition 10	
1.3.20	Notification of departure of Condition 1.3.17	Condition 11	
2.1.1	General monitoring – collection standards	Condition 22	

Existing condition	Condition summary	Revised licence condition	Conversion notes
2.1.2	General monitoring – timeframes	Condition 23	
2.1.3	General monitoring – calibration	Condition 24	
2.1.4	General monitoring – Calibration notification	Condition 25	
2.2.1 and Table 2.2.1	Monitoring of inputs and outputs	Condition 26 and Table 5	New numbering and updated format
2.3.1 and Table 2.3.1	Monitoring of ambient groundwater quality	Condition 27 and Table 6	
3.1.1	Records – general	Condition 28	New numbering
3.1.2	AACR	Condition 29	
3.1.3	Complaints	Condition 30	
3.1.4	Records – contaminated solid waste and special waste type 1 and 2	Condition 31	
3.1.5	Records rejected loads	Condition 32	
3.2.1 and Table 3.2.1	Annual Environmental Report	Condition 33 and Table 7	New numbering and updated
3.2.2	AER	Condition 34	New numbering
3.3.1 and Table 3.3.1	Notification requirements	Condition 35 and Table 8	New numbering and format
Schedule 1: Maps	Premises map	Schedule 1: Maps	New naming convention, updated map and addition of updated site layout maps
Schedule 2 Reporting & notifications	Annual Audit Compliance Report Form N1 Notification	N/A	Redundant attachment. Deleted from Licence Forms accessed at www.dwer.wa.gov.au

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 2020, June 2019. Guideline: Industry Regulation Guide to Licensing. Department of Water and Environmental Regulation, Perth
- 5. DWER, June 2019. Guideline: Decision Making. Department of Water and Environmental Regulation, Perth.

Appendix 2: Application validation summary

SECTION 1: APPLICATION SUMMARY (as updated from validation checklist)						
Application type						
Works approval						
Licence		Relevant works approval number:		None		
		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:	L5979/1993/11	11		
		Relevant works approval number:		N/A		
Registration		Current works approval number:		None		
Date application received	•	04/06/2021				
Applicant and Premises details						
Applicant name/s (full legal name/s)		City of Kalgoorlie-Boulder				
Premises name		Yarri Road Refuse Facility				
Premises location		Lot 251 on Plan 190202, Yarri Road KALGOORLIE WA 6430				
Local Government Authority		City of Kalgoorlie-Boulder				
Application documents						
HPCM file reference number:		2012/006907-1				
Key application documents (additional to application form):		Application Form Site Plan Map				
Scope of application/assessment						

Summary of proposed activities or changes to existing operations.

Licence amendment to allow for the use of mulched green waste blended with soil or other inert incombustible material 1:1 (by volume) as daily cover and intermediate capping material (prior to future landfill stages

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		
Category 57: Used tyre storage (general): premises (other than premises within category 56) on which used tyres are stored.	2,500 tyres at any time		
Category 62: Solid waste depot: premises on which waste is stored, or sorted, pending final disposal or re-use.	10,000 tonnes per annual period		
Category 64: Class II or III 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.	150,000 tonnes per annual period		

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 □ No ⊠	Referral decision No: Managed under Part V Assessed under Part IV
Does the applicant hold any existing Part IV Ministerial Statements relevant to the application?	Yes □ No ⊠	Ministerial statement No: EPA Report No:
Has the proposal been referred and/or assessed under the EPBC Act?	Yes □ No ⊠	Reference No:
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?

	T	1
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: Licence/permit No: 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: Goldfields Groundwater Area Type: Proclaimed Groundwater Area Has Regulatory Services (Water) been consulted? Yes □ No □ N/A ☒ Regional office: Goldfields
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 Agreement Act xxxx)	Yes □ No ⊠	
Is the Premises within an Environmental Protection Policy (EPP) Area?	Yes □ No ⊠	
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?		Classification: Awaiting Classification Date of classification: N/A
	Yes ⊠ No □	