Amendment Report

Application for Licence Amendment

Part V Division 3 of the Environmental Protection Act 1986

Licence Number L9167/2018/1

Licence Holder City of Busselton

File Number 2011/007003-1~10

Vidler Rd Putrescibles Landfill Site

Western Cape Drive,

NATURALISTE WA 6281

Legal description -

Lot 8 on Diagram 66799

As depicted in Schedule 1 of the Revised Licence

Date of Report 9 July 2024

Decision Revised licence granted

Grace Heydon

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

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1. Decision summary

Licence L9167/2018/1 is held by the City of Busselton (Licence Holder) for the Vidler Rd Putrescibles Landfill site (the Premises), located at Lot 8 on Diagram 66799 Naturaliste WA 6281.

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 L9167/2018/1 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 https://dwer.wa.gov.au/regulatory-documents.

2.2 Application summary

On 27 September 2023, the Licence Holder submitted an application to the department to amend Licence L9167/2018/1 under section 59 and 59B of the *Environmental Protection Act* 1986 (EP Act). The following amendments are being sought:

 Increase production/design capacity from 6,000 tonnes per year to 8,000 tonnes per year, to accommodate the increased need of depositors within the growing catchment of the City of Busselton.

This amendment is limited only to changes to Category 61 activities from the Existing Licence. No changes to the aspects of the existing Licence relating to Category 62, 64 and 13 have been requested by the Licence Holder.

Table 1 below outlines the proposed changes to the existing Licence.

Table 1: Proposed design or throughput capacity changes

Category	Current design / throughput capacity	Proposed design / throughput capacity	Description of proposed amendment
61	Up to 6,000 tonnes per year	Up to 8,000 tonnes per year	Requesting an increase in throughput capacity based on anticipated volumes being received.

The Licnece Holder included a request to add Category 61A onto the licence to include a storage area for up to 75 tonnes of mattresses per year. The quantity of mattresses to be received at the premises falls below the production capacity for Category 61A, so this category will not be added to the licence. Mattresses will, however, be added as a waste type approved for acceptance at the premises under existing Category 62, with associated conditions as necessary in the licence for management of this waste.

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 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

Sources	Emission	Potential pathways	Proposed controls	
Processing of	Dust			
mattresses	Noise	Air/windborne	No specific controls listed.	
Acceptance and storage of increased liquid waste volume	Odour	pathway	Existing controls on the licence mitigate the risk of dust.	
Storage of			Mattresses will be deposited onto a hardstand at the domestic drop-off area then transported to the lined waste cell for storage and processing.	
mattresses Acceptance and storage of increased liquid waste volume	Leachate	Seepage to soils and groundwater	No specific controls listed relating to the liquid waste acceptance and storage but the liquid waste ponds are all lined and managed to avoid leachate.	
			Existing conditions on licence mitigate the risk of leachate from acceptance and storage of liquid waste.	
Acceptance and	Potentially contaminated stormwater	Overland flow	Full water balance was completed by Green Values Australia which included annual rainfall values concluded the premises is able to accept up to 8,000 tonnes per annual period.	
storage of increased liquid waste volume			Existing stormwater conditions on licence.	
waste volume	Liquid waste from overtopping	Overland flow	The capacity of the liquid waste ponds is 13,085 m³, a full water balance was completed by Green Values Australia which concluded the premises is able to accept up to 8,000 tonnes per	

Sources	Emission	Potential pathways	Proposed controls
			annual period.
			Existing conditions on licence mitigate the risk of overtopping from acceptance and storage of liquid waste.
Processing of mattresses	Windblown waste	Air/windborne pathway	Mattresses will be processed within the lined landfill cell area. The site is fenced to manage windblown waste from the existing activities.
			Existing conditions on the licence mitigate the risk of windblown waste
	Fire – smoke Air/windborne pathway		Storage limited to up to 600 mattresses at any one time.
	Fire – firewater	Overland flow	Mattresses will be deposited onto a hardstand at the domestic drop-off area then transported to the lined waste cell for storage and processing.
Storage of mattresses			10,000 L water tanker on the back of a hook lift truck and a 800 L tanker on the back of a ute are available in the event of a fire.
			No controls listed relating to fire water. Existing controls on the licence require contaminated stormwater be diverted to a sump or otherwise retained on site.
			Existing conditions on the licence provide controls in the event of a fire on the site.

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 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 prescribed activity		
Residential Premises	~ 529 m south west;		
	~ 572 m south west;		

	~ 751 m west;
	~ 773 m south east;
	~ 842 m south southwest;
	~ 899 m southwest; and
	~ 955 m southwest of the crushing activities.
Solitaire Homestead – Holiday accommodation and wedding venue	~ 1 km east, south-east of the proposed crushing activities
Residential Premises	~ 529 m south west;
	~ 572 m south west;
	~ 751 m west;
	~ 773 m south east;
	~ 842 m south southwest;
	~ 899 m southwest; and
	~ 955 m southwest of the crushing activities.
Environmental receptors	Distance from prescribed activity
Native Vegetation	Immediately to the north and west of the premises boundary
National Park	~ 900 m west of the premises boundary
Threatened Fauna -Forest red-tailed black cockatoo; -Baudin's Cockatoo; -Western Ringtail Possum; -Carnaby's Cockatoo; South-western Brush-tailed Phascogale	17 recorded sightings within 1.5 km of the premises boundary
Threatened and priority flora	5 recorded sightings within 1.5 km of the premises boundary
Threatened Ecological Communities (TEC) Buffer Zones	
- Melaleuca lanceolata forests (P2)	~ 1.44 km southwest of the premises boundary
- Meelup Granites (Vulnerable)	~ 1.69 km east south-east of the premises
- Swan Coastal Plain Paluslope Wetlands (P1)	boundary ~ 2.05 km southeast of the premises boundary
- Banksia Dominated Woodlands of the	~ 2.73 km east of the premises boundary
Swan Coastal Plain IBRA Region (P3)	

	~ 1.6 km south of the premises boundary
RIWI Act 1914 – Surface Water Area	Within the Cape to Cape North Proclaimed Surface Water Area
RIWI Act 1914 – Groundwater Area	Within the Busselton – Capel Proclaimed Groundwater Area
Groundwater	Existing Premises groundwater bores Bore B: 3.95mbgl

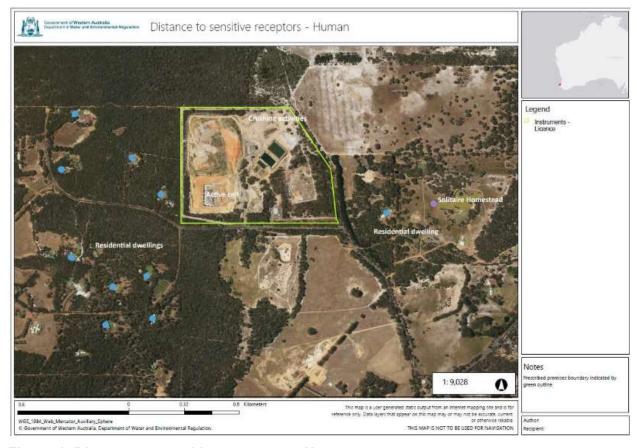


Figure 1: Distance to sensitive receptors - Human

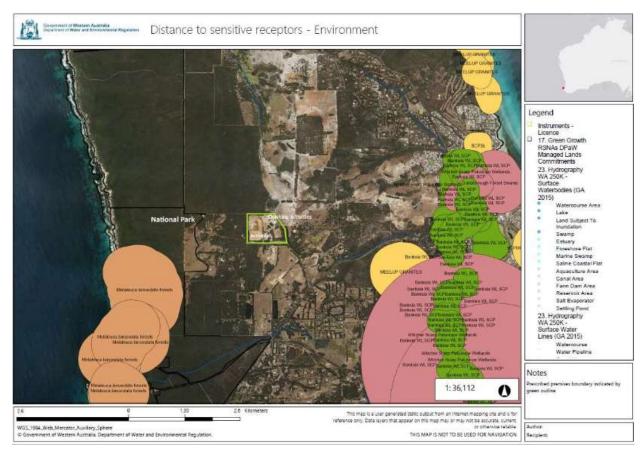


Figure 2: Distance to sensitive receptors – Environment

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 L9167/2018/1 that accompanies this Amendment Report authorises emissions associated with the operation of the Premises i.e. waste acceptance and processing.

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 rating ¹	Licence				
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	Justification for additional regulatory controls
	Odour	Air/windborne pathway causing impacts to health and amenity	Residential premises		C = Slight L = Possible Low Risk	Y	N/A	N/A The Delegated Officer is satisfied that odour will not be greatly increased as a result of additional liquid waste acceptance.
Acceptance of	Leachate	Groundwater affecting downgradient users and groundwater dependent vegetation	Residential premises Native vegetation	Refer to Section 5.1	C = Minor L = Rare Low Risk	Y	Condition 6, Table 3, a-f	N/A The Delegated Officer considers the existing licence conditions sufficient to mitigate the risk of leachate from the increased volume of liquid waste.
increased liquid waste volume	Liquid waste discharge from overtopping	Overland runoff potentially causing ecosystem disturbance or impacting surface water quality	tentially causing osystem premises sturbance or pacting surface Surface water Section 5		C = Minor L = Unlikely Medium Risk	Y	Condition 6, Table 3, a-f	N/A The Delegated Officer considers the water balance sufficient to handle the increased volume of liquid waste and the existing licence conditions are sufficient to mitigate the risk of overtopping.
	Potentially contaminated stormwater	Overland flow potentially causing ecosystem disturbance or impacting surface water	Residential premises Surface water		remises	C = Minor L = Rare Low Risk	Y	Condition 31
Acceptance and processing of mattresses	Dust	Air/windborne pathway causing impacts to health	Residential premises		C = Slight L = Unlikely Low Risk	Y	Condition 25	N/A The Delegated Officer considers the existing licence conditions sufficient to mitigate the risk of dust from the premises
	Noise	and amenity			C = Slight	N/A	N/A	N/A The Delegated Officer is satisfied that noise

Risk Event	Risk Event					Licence		
Source/Activities	Potential emission	Potential pathways and impact	Receptors	Licence Holder's controls	C = consequence L = likelihood	C = consequence controls	Conditions ² of licence	Justification for additional regulatory controls
					L = Unlikely Low Risk			will not be greatly increased as a result of mattress processing on site.
	Windblown waste				C = Slight L = Possible Low Risk	Y	Condition 5, Table 2, o & p Condition 32 and 33	The Delegated Officer considers the combination of applicant controls and existing licence conditions is sufficient to mitigate the risk of windblown waste resulting from mattress processing. Additional conditions have been added to facilitate new activity on the Licence.
	Fire - Smoke and fire washwater	Air/windborne pathway causing impacts to health and amenity; Overland flow and infiltration to groundwater	Residential premises Surface water Native vegetation		C = Moderate L = Unlikely Medium Risk	Y	Condition 1, Table 1, Putrescible Waste; Condition 5, Table 2, m & n; Condition 34 and 35	N/A The Delegated Officer considers the existing licence conditions are sufficient to mitigate the risk of smoke and fire washwater on the premises.
	Leachate	Groundwater affecting downgradient users and groundwater dependent vegetation	Residential premises Native vegetation		C = Minor L = Rare Low Risk	Y	Condition 5, Table 2, n Condition 6, Table 3, d-f	The Delegated Officer considers the applicant controls combined with existing licence conditions is sufficient to mitigate the risk of leachate resulting from the acceptance and processing of mattresses. Additional conditions have been added to facilitate new activity on the Licence.

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
Application advertised on the department's website (07/06/2024)	None received	N/A
Other Stakeholders (Mt. Duckworth residents) advised of proposal (07/06/2024)	Comments received 5/7/2024. See Appendix 1	See Appendix 1
Licence Holder was provided with draft amendment on 20/06/2024	Licence Holder waived comment period on 20/06/2024	NA

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
Cover Page	Prescribed premises category table updated to reflect increased Category 61 capacity from 6,000 tonnes per year to 8,000 tonnes per year
Condition 1, Table	Specification for Putrescible Waste has been updated to include the acceptance of up to 75 tonnes per year.
Condition 1, Table	Quantity limit for Liquid Waste updated from 6,000 tonnes per year to 8,000 tonnes per year
Condition 5, Table 2	Process limits for Putrescible Waste updated to include conditions relating to the processing of mattresses and to limit the number of mattress stored on site at any one time to 600.

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. Green Values Australia 2024, *Technical Memorandum*, Prepared by ABEC Environmental Consultants on behalf of the City of Busselton March 2024.

Appendix 1: Summary of Stakeholder comments on application

Summa	ry of Stakeholder comment	Department's response		
Concern related to the risk of overflow into unlined areas from the existing seepage ponds during periods of heavy rains. The residents are concerned about the porous nature of the underlying geological formation and underground water systems flowing both south west (to Yallingup and Smiths beaches) and north west (to Meelup and Eagle Bay beaches) and believe this presents an unacceptable risk for the existing volume of liquid waste permitted under the license. Request: a) the procedures to be undertaken by the operator to control spills or loss of waste outside the ponds containment area be made available to be available for public review; b) the Operator be required to install a bore close to and directly down gradient from the septage ponds and regularly test the underground water quality form this bore, and		The risk that increasing liquid waste acceptance poses to the groundwater was assessed in the risk assessment table (Table 4) via leachate and potential overtopping as low and medium risk respectfully. The capacity of the liquid waste ponds is 13,085 m3 as presented in a full water balance completed to support the application, indicating there is sufficient capacity to contain the 8,000 tonnes per annual period of liquid waste and stormwater inputs without the ponds overtopping. Additionally, the ponds are constructed in a manner to mitigate leachate emissions to underlying soil and groundwater. The Delegated Officer considers that existing conditions on the licence are therefore adequate for the ongoing management of the ponds with the increased annual waste acceptance. Since existing conditions have been deemed sufficient, the installation of an additional bore will not be required. Licence conditions include controls for the management of the ponds to prevent spills, with the licence being publicly available. Licence conditions also require the Licence Holder to maintain records of waste		
	the sources of the received liquid waste to understand where the waste is coming from and the distances this waste is travelling to this WMF.	accepted to the premises. However, it is not within DWER's regulatory remit to enforce that the Licence Holder make these records publicly available.		
Concer	n relating to odours from the increased acceptance of liquid waste.	The Delegated Officer considers that the current conditions on the licence sufficient to mitigate odour emissions from the increased liquid waste acceptance.		
stakeho	n relating to health issues potentially presented by bird transfer. The lders note that the Licence Holder is seeking to address with an ion for a bird culling licence and are unsure of any progress with this	DWER does not have any authority relating to the potential bird culling licence mentioned. It is recommended to follow this up directly with the Licence Holder.		
Noting t site and Reques	n relating to the risk of fire from the storage of up to 600 mattresses. hat the fire fighting on site is limited and only 12,000 litres of water on claims of a recent mattress fire occurring on site. ting the Department give consideration to reduce the maximum number esses able to be stored prior to processing.	The risk of fire was assessed in Table 4 and determined to be medium risk. The Deelgated Officer considers that the risk for fire from mattress acceptance and storage is able to be mitigated by existing conditions on the licence and the applicant's proposed controls.		

Appendix 2: Application validation summary

SECTION 1: APPLICATION SUMMARY (as updated from validation checklist)						
Application type						
Amendment to licence		Current licence number:	Amendment to licence			
		Relevant works approval number:		N/A	Relevant works approval number:	
Date application received		27/09/2023				
Applicant and Premises details	5					
Applicant name/s (full legal name/s)		City of Busselton				
Premises name		Dunsborough Waste Facility / Vidler Road Putrescibles Landfill				
Premises location		48 Western Cape Drive, Naturaliste WA 6281 Lot 8 on Diagram 66799, Certificate of Title Volume 1679 Folio 592				
Local Government Authority		City of Busselton				
Application documents						
HPCM file reference number:		2011/007003-2~10				
Key application documents (additional to application form):		Map Supporting document				
Scope of application/assessment						
Summary of proposed activities or changes to existing operations.		Licence amendment				
	or	Increase production/design capacity from 6,000 tonnes per year to 8,000 tonnes per year – liquid waste				
		And				
		Addition of storage area for the storage and processing to 600 mattresses at one time		rocessing of up		

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	Proposed changes to the production or design capacity		
Category 61: Liquid waste facility: premises on which liquid waste produced on other premises (other than sewerage waste) is stored, reprocessed, treated or irrigated.	Up to 6,000 tonnes per year	Up to 8,000 tonnes per year		
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	No change proposed		
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, as amended from time to time) is accepted for burial.	Up to 35,000 tonnes per year	No change proposed		
Category 13: Crushing of building material: premises on which waste building or demolition material (for example, bricks, stones or concrete) is crushed or cleaned.	50,000 tonnes per annual period	No change proposed		
Category 61A: Solid waste facility: premises (other than premises within category 67A) on which solid waste produced on other premises is stored, reprocessed, treated or discharged onto land.	N/A	Up to 600 mattresses (75 tonnes per year)		
Legislative context and other approvals				
Has the applicant referred, or do the intend to refer, their proposal to the EPA under Part IV of the EP Act a significant proposal?	e Vas 🗆 Na 🖂	Referral decision No:		

significant proposal?

Managed under Part V ⊠ Assessed under Part IV \square

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 □	
Has the applicant obtained all relevant planning approvals?	Yes □ No □ N/A ⊠	Approval: Expiry date:
Has the applicant applied for, or have an existing EP Act clearing permit in relation to this proposal?	Yes □ No ⊠	No clearing is proposed.
Has the applicant applied for, or have an existing CAWS Act clearing licence in relation to this proposal?	Yes □ No ⊠	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 ⊠	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 □	Cape to Cape North Surface Water Area; and Busselton-Capel Groundwater Area Type: Proclaimed Groundwater Area and Surface Water Area Has Regulatory Services (Water) been consulted? Yes No N/A Regional office: South West
Is the Premises situated in a Public Drinking Water Source Area (PDWSA)?	Yes □ No ⊠	N/A

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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)		
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: possibly contaminated – investigation required (PC–IR)
	Yes ⊠ No □	Date of classification: 21 October 2010