



## Application for Licence Amendment

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

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<b>Choose an item.</b>	L7639/2000/8
<b>Licence Holder</b>	Western Resource Recovery Pty Ltd
<b>ACN</b>	099 144 180
<b>File Number</b>	2012/003338-1~2
<b>Premises</b>	Western Resource Recovery 113 Ewing Street WELSHPOOL WA 6106  Legal description – Lot 278 on Plan 3033  As defined by the premises map attached to the revised licence
<b>Date of Report</b>	07 June 2022
<b>Proposed Decision</b>	Revised licence granted

**Stephen Checker**  
**MANAGER WASTE INDUSTRIES**

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

## Table of Contents

<b>1. Decision summary .....</b>	<b>1</b>
<b>2. Scope of assessment .....</b>	<b>1</b>
2.1 Regulatory framework .....	1
2.2 Application summary .....	1
<b>3. Risk assessment.....</b>	<b>1</b>
3.1 Source-pathways and receptors .....	2
3.1.1 Emissions and controls .....	2
3.1.2 Receptors.....	3
3.2 Risk ratings.....	5
3.3 Detailed risk assessment for storage of PFAS containing waste.....	8
3.3.1 PFAS waste storage .....	8
<b>4. Consultation .....</b>	<b>9</b>
<b>5. Conclusion .....</b>	<b>9</b>
5.1 Summary of amendments.....	9
<b>References .....</b>	<b>11</b>
<b>Appendix 1: Application validation summary.....</b>	<b>12</b>

Table 1: Proposed capacity changes .....	1
Table 2: Licence holder controls .....	2
Table 3: Sensitive human and environmental receptors and distance from prescribed activity .	3
Table 4. Risk assessment of potential emissions and discharges from the premises during operations .....	6
Table 5: Packaged waste storage area dimensions .....	8
Table 6: Consultation .....	9
Table 7: Summary of licence amendments .....	10

Figure 1: Distance to human and environmental receptors from premises boundary (pink).....	4
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## 1. Decision summary

Licence L7639/2000/8 is held by Western Resource Recovery Pty Ltd (licence holder) for Western Resource Recovery (the premises), located at 113 Ewing Street, Welshpool.

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 L7639/2000/8 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.

## 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 1 February 2022, the licence holder submitted an application to the department to amend licence L7639/2000/8 under section 59 and 59B of the *Environmental Protection Act 1986* (EP Act). The following amendments are being sought:

- Amend the current premises description to capture the entirety of Lot 278 on plan 3033123 to align with current operations;
- Incorporate the existing concrete bunded area (where oil storage tanks were previously located) into the licence for controlled waste storage; and
- Include PFAS contaminated solid and liquid waste into the waste acceptance table.

Table 1 below outlines the proposed changes to the existing licence

**Table 1: Proposed capacity changes**

Category	Current throughput capacity	Proposed throughput capacity	Description of proposed amendment
Category 61: Liquid waste facility: premises on which liquid waste produced on other premises (other than sewage waste) is stored, reprocessed, treated or irrigated	55,000 tonnes per annum	55,000 tonnes per annum	No change
Category 62: Solid waste depot: premises on which waste is stored, or sorted, pending final disposal or re-use	550 tonnes per annum	550 tonnes per annum	No change

## 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**

Emission	Sources	Potential pathways	Proposed controls
Liquid waste spills	Failure or accidental rapture of containers or tanks containing waste	Overland flow and seepage to soils and groundwater	<p>PFAS contaminated liquids and solids shall be stored within an area of bunded concrete hardstand (PFAS storage) as identified on the site plan</p> <p>Should there be a spillage from a package containing PFAS waste then the bund shall be cleaned, and all liquid tested to determine for the presence of PFAS</p> <p>If present, then the spill cleanup liquids will be taken off-site as PFAS waste, and disposed of at a suitable treatment facility</p>
Contaminated stormwater runoff	Storage and handling of wastes onsite	Overland flow and seepage to soils and groundwater	<p>Stormwater captured within the bund will not be discharged via stormwater infrastructure on site</p> <p>Collected stormwater is to be pumped into the onsite effluent treatment facility and discharged to the sewer</p>
Toxic smoke and particulates	Accidental fire on premises	Airborne pathway/wind	<p>All wastes stored onsite must be stored and processed in a manner that prevents incompatible wastes mixing</p> <p>Separation distance to sensitive residential receptors</p>
Firefighting washwaters	Firefighting activities in response to accidental fire on premises	Overland flow and seepage to soils and groundwater	<p>Packaged wastes are stored outside on bunded concrete hardstanding.</p> <p>Bunded concrete hardstanding constructed with blind sump to facilitate collection of accumulated runoff</p>

### 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)). Figure 1 illustrates the relative distance from the premises to these receptors.

**Table 3: Sensitive human and environmental receptors and distance from prescribed activity**

Receptor ID	Human receptors	Distance from prescribed activity
H1	Light industrial premises (Ewing and Radium Streets, Welshpool)	Immediately adjacent to northern (industrial units,) eastern (industrial units) and southern (Horizon West Bus Charters) premises boundaries
H2	Radium Street Lunch Bar, 2/126-128 Radium Street, Welshpool	Approximately 140m southeast of eastern premises boundary
H3	Bentley Residential Area (Merian Close, Bentley)	Approximately 420 m south-west of the southern premises boundary
H4	Queens Park Residential Area (Mills Street, Queens Park)	Approximately 500m southeast of the southern premises boundary - down hydraulic gradient
Receptor ID	Environmental receptors	Distance from prescribed activity
E1	Water Corp Storm Water Catchment, to the rear of 133 Welshpool Rd, Welshpool	Immediately abutting northern premises boundary
E2	Water Corporation compensating basin between Radium Street and Mills Road, Queens Park	Approximately 300m east of premises boundary- down hydraulic gradient





**Figure 1: Distance to human and environmental receptors from premises boundary (pink).**



## 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 L7639/2000/8 that accompanies this Amendment Report authorises emissions associated with the operation of the Premises i.e. receipt, handling, Treatment, storage, and storage of liquid and solid wastes.

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 operations**

Risk Event					Risk rating¹ C = consequence L = likelihood	Licence holder's controls sufficient?	Conditions² of licence	Justification for additional regulatory controls
Source/Activities	Potential emission	Potential pathways and impact	Receptors	Licence holder's controls				
Operation								
Receipt, handling, consolidation, and temporary storage of PFAS contaminated Liquid & Solid wastes	Liquid waste spills	Overland flow, stormwater network and infiltration to soil resulting in potential impacts to groundwater users and impacts on the biological diversity and ecosystem function of wetlands	Compensation basins and groundwater users	Refer to Section 5.1	C = Minor L = Unlikely <b>Medium Risk</b>	Y	Conditions 1 and 7	N/A
	Contaminated stormwater	Overland flow, stormwater network and infiltration to soil resulting in potential impacts to groundwater users and impacts on the biological diversity and ecosystem function of wetlands	Compensation basins and groundwater users	Refer to Section 5.1	C = Moderate L = Unlikely <b>Medium Risk</b>	Y	Conditions 1 and 7	N/A



Risk Event					Risk rating <sup>1</sup> C = consequence L = likelihood	Licence holder's controls sufficient?	Conditions <sup>2</sup> of licence	Justification for additional regulatory controls
Source/Activities	Potential emission	Potential pathways and impact	Receptors	Licence holder's controls				
	Firefighting washwaters and contaminated runoff	Overland flow, Stormwater network and infiltration to soil resulting in potential impacts to groundwater users and impacts on the biological diversity and ecosystem function of wetlands	Compensation basins and groundwater users	Refer to Section 5.1	C = Moderate L = Rare <b>Medium Risk</b>	Y	Condition 1	N/A
	Uncontrolled Fire (smoke)	Air /airborne/wind dispersion resulting in human health impacts (smoke inhalation, noxious particulates)	Adjacent industrial and commercial premises	Refer to Section 5.1	C = Moderate L = Rare <b>Medium Risk</b>	Y	Condition 1	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.

## 3.3 Detailed risk assessment for storage of PFAS containing waste

### 3.3.1 PFAS waste storage

The PFAS National Environmental Management Plan Version 2 (PFAS NEMP) establishes a practical basis for nationally consistent environmental guidance and standards for managing PFAS contamination. The plan has been developed by all jurisdictions and recognises the need for implementation of best practice regulation through individual jurisdictional mechanisms. It represents a how-to guide for the investigation and management of PFAS contamination and waste management. Section 10 of the PFAS NEMP prescribes stockpiling, storage, and containment infrastructure requirements for the storage of PFAS based on proposed duration of storage.

The licence holder has advised that PFAS wastes would generally be stored onsite for a period of less than three months. However, in some instances temporary storage of waste for a duration of up to 6 months may be required. As such the premises is considered a temporary storage facility (from 48 hours to 6 months). The requirements for temporary liquid waste storage are “*Self-bunded containment vessels covered, with lockable access, on impervious, bunded hardstand, with effective stormwater controls (e.g., diversion drains, banks, etc.)*”. These requirements have been incorporated into the amended licence.

The PFAS NEMP outlines that “*PFAS-contaminated materials, particularly liquids, should be stored above ground in appropriately bunded storage areas or in containment vessels such as covered intermediate bulk containers (IBCs) and isotainers in bunded areas. The bunds or bunded tanks must be of low permeability and of a sufficient size to retain a major spill, including capacity for stormwater runoff<sup>60</sup>. The essential criterion is to ensure all PFAS remains completely contained*”. Further, “*Unless otherwise required by the relevant regulators, the capacity of the containment bunding should be at least 100% of the planned storage capacity plus 25% of the storage capacity up to 10 000 L, together with 10% of the storage capacity between 10 000 L and 100 000 L, and 5% above 100 000 L*”.

The dimensions of the packaged waste storage area, which includes the PFAS storage area, are set out in table below.

**Table 5: Packaged waste storage area dimensions**

Specification	Measurement
Bund height	120 mm
Bund wall thickness	200 mm
Total surface area	856.25 m <sup>2</sup>
Total bunded area volume	102.75 m <sup>3</sup>

Based on the bunded area volume of 102.75m<sup>3</sup>, the maximum volume of PFAS waste which should be stored within the PFAS storage area is 73.63m<sup>3</sup>.

## 4. Consultation

Table 6 provides a summary of the consultation undertaken by the department.

**Table 6: Consultation**

Consultation method	Comments received	Department response
City of Canning provided with application referral on (20/04/2022)	<p><i>With regards to the subject matter, please see the below comments.</i></p> <ul style="list-style-type: none"><li><i>The removal of the tank farm and use of the area for the storage of contaminated wastes until it can be removed from site does not require planning approval.</i></li><li><i>Odour complaints have been received from the site since it commenced operations, last received 31 October 21- therefore if the waste is potentially odorous, controls should be required especially if storage containers are not air tight.</i></li><li><i>The waste was specified to be received in bulk or packaged form, however it is not certain what the bulk form entails, if this includes bulk loose wastes i.e. tipper trucks, will these operation only occur within the bunded areas highlighted to contain any runoff/leachate etc.</i></li></ul>	<p>Noted.</p> <p>Definitions of <i>bulk</i> and <i>packaged</i> wastes inserted into licence as part of amendment</p>
Licence Holder was provided with draft amendment on (25/05/2022)	N/A	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 7 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 7: Summary of licence amendments**

Condition no or section	Proposed amendments
Premises details	Premises amended to entirety of Lot 278 on Plan 3033 113 Ewing Street, Welshpool WA 6160
Former Conditions 6 and 7	Wet oxidation plant construction requirements deleted
All	Condition numbering and in-text references updated
7	Condition amended to reflect onsite handling of potentially contaminated stormwater
19	Reference to Form N1 removed
Definitions	Definitions of 'bulk', 'hardstand', 'packaged', and 'PFAS NEMP' inserted
Schedule 1, Figure 2	Figure updated to current site layout
Schedule 2	N1 Reporting & notification forms removed
Appendix A: Waste acceptance, processing, and storage table	Table reformatted
	<p>Plating and Heat Treatment, Acids and Alkalis - Quantity limit amended to reflect receipt of solid and liquid waste forms, consistent with other waste types</p> <p><i>"Combined premises total of 55,000 tonnes per annum of all liquid wastes accepted, and combined premises total of 550 tonnes per annual period for all solid wastes accepted"</i></p>
	Per- and polyfluoroalkyl substances (PFAS) contaminated materials, including waste PFAS containing products and contaminated containers inserted along with approved process and infrastructure requirements



## 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. Department of Agriculture, Water, and the Environment (2020) *PFAS National Environmental Management Plan Version 2.0', Heads of EPA Australia and New Zealand 2020'*.

## Appendix 1: Application validation summary

SECTION 1: APPLICATION SUMMARY					
<b>Application type</b>					
Amendment to licence	<input checked="" type="checkbox"/>	Current licence number:	L7639/2000/8		
		Relevant works approval number:		N/A	<input checked="" type="checkbox"/>
Date application received		01/02/2022			
<b>Applicant and Premises details</b>					
Applicant name/s (full legal name/s)		Western Resource Recovery Pty Ltd			
Premises name		Western Resource Recovery			
Premises location		113 Ewing Street WELSHPOOL WA 6106			
Local Government Authority		City of Canning			
<b>Application documents</b>					
HPCM file reference number:		2012/003338-1~2			
Key application documents (additional to application form):		Application & Attachment 3B/6B			
<b>Scope of application/assessment</b>					

Summary of proposed activities or changes to existing operations.	<p>Licence amendment</p> <p>1.To amend the current WRR licence to incorporate the whole of lot 278 on plan 3033123 thus ensuring alignment with site operations/activities on site</p> <p>2.Incorporate the existing concrete bunded area where oil storage tanks were previously located into the WRR licence to allow for use as a controlled waste/package waste storage area</p> <p>3.Amend licence to <u>include the waste code M270 PFAS Contaminated Liquid Waste in packages</u></p> <p>As part of this amendment request, there will be no changes to prescribed premises category descriptions or annual capacities. In addition, this licence amendment requires no changes, modifications or development of infrastructure</p> <p>The licence amendment application seeks to update the legal description of the premises from Part Lot 278 on <u>Plan 3033 to Lot 278 on Plan 3033</u></p>
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**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 (amendments only)
Category 61: Liquid waste facility: premises on which liquid waste produced on others premises (other than sewage waste) is stored, reprocessed, treated or irrigated.	55,000 tonnes per annual period.	No change proposed
Category 62: Solid waste depot: premises on which waste is stored, or sorted, pending final disposal or re-use.	550 tonnes per annual period	No change proposed

**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 <input type="checkbox"/> No <input type="checkbox"/>	Referral decision No: Managed under Part V <input checked="" type="checkbox"/> Assessed under Part IV <input type="checkbox"/>
Does the applicant hold any existing Part IV Ministerial Statements relevant to the application?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Ministerial statement No: EPA Report No:
Has the proposal been referred and/or assessed under the EPBC Act?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Reference No:

Has the applicant demonstrated occupancy (proof of occupier status)?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Certificate of title <input type="checkbox"/> General lease <input type="checkbox"/> Expiry: Mining lease / tenement <input type="checkbox"/> Expiry: Other evidence <input type="checkbox"/> Expiry:
Has the applicant obtained all relevant planning approvals?	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>	Approval: Expiry date: If N/A explain why? Existing premises
Has the applicant applied for, or have an existing EP Act clearing permit in relation to this proposal?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	No clearing is proposed.
Has the applicant applied for, or have an existing CAWS Act clearing licence in relation to this proposal?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	No clearing is proposed.
Has the applicant applied for, or have an existing RIWI Act licence or permit in relation to this proposal?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	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 <input type="checkbox"/> No <input checked="" type="checkbox"/>	Name: N/A Type: - Has Regulatory Services (Water) been consulted? Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/> Regional office: Swan Avon
Is the Premises situated in a Public Drinking Water Source Area (PDWSA)?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Name: N/A Priority: N/A Are the proposed activities/landuse compatible with the PDWSA (refer to <u>WQPN 25</u> )? Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>
Is the Premises subject to any other Acts or subsidiary regulations (e.g., <i>Dangerous Goods Safety Act 2004</i> , <i>Environmental Protection (Controlled Waste) Regulations 2004</i> , <i>State Agreement Act xxxx</i> )	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Listed controlled waste facility
Is the Premises within an Environmental Protection Policy (EPP) Area?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	



Is the Premises subject to any EPP requirements?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Is the Premises a known or suspected contaminated site under the <i>Contaminated Sites Act 2003</i> ?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	