



Application for Licence Amendment

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

Licence Number	L9235/2020/2
Licence Holder	Shire of Harvey
File Number	DER2020/000053
Premises	Richardson Road Putrescible Landfill Site 623 Richardson Road UDUC, WA, 6220 Legal description – Part of Lot 6 on Deposited Plan 55535 As defined by the coordinates in Schedule 2 of the Revised licence
Date of Report	18 August 2023
Decision	Revised licence granted

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**A/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

Licence L9235/2020/2 is held by the Shire of Harvey (licence holder) for Richardson Road Putrescible Landfill Site (the premises), located at 623 Richardson Road, Uduc.

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 L9235/2020/2 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 Amendment summary

On 18 April 2023, the licence holder submitted an application to the department to amend licence L9235/2020/2 under section 59 and 59B of the *Environmental Protection Act 1986* (EP Act). The premises has been licensed as a landfill since 1997 and has also been operating as a combined community transfer station, however, this has not previously been reflected on the licence. The amendment being sought is to include Category 61A and Category 62 onto the licence to reflect current operations on the premises.

This amendment is limited only to adding Category 61A and 62 activities from the existing licence. No changes to the aspects of the existing licence relating to Category 64 have been requested by the licence holder.

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

Table 1: Proposed throughput capacity changes

Category	Current throughput capacity	Proposed throughput capacity
61A (Solid waste facility)	N/A	1,500 tonnes per annual period
62 (Solid waste depot)	N/A	5,000 tonnes per annual period
64 (Class II putrescible landfill)	5,000 tonnes per annual period	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
Dust	Waste acceptance, handling and storage	Air/windborne pathway	No proposed controls.
Noise	Waste acceptance, handling and storage	Air/windborne pathway	No proposed controls.
Odour	Acceptance, handling and storage of putrescible waste	Air/windborne pathway	<ul style="list-style-type: none"> Putrescible waste to be stored on site for less than 72 hours; and Putrescible waste transferred from push pit to skip bin by the end of the day.
Litter	Waste acceptance, handling and storage	Windborne pathway	Litter fencing installed around the premises.
Leachate / contaminated stormwater	Waste acceptance, handling and storage	Seepage to soils and groundwater	<ul style="list-style-type: none"> Putrescible waste stored on area previously used for landfilling; Putrescible waste unloaded into sloped push pit; Putrescible waste transferred from push pit to skip bin by the end of the day; and Putrescible waste to be stored on site for less than 72 hours.
Pests / vermin	Acceptance, handling and storage of putrescible waste	Biological pathway	<ul style="list-style-type: none"> Putrescible waste transferred from push pit to skip bin by the end of the day; and Putrescible waste to be stored on site for less than 72 hours.
Fire / smoke	Waste acceptance, handling and storage	Air/windborne pathway	<ul style="list-style-type: none"> Fire extinguishers and fire blankets are located at the facility; Environmentally hazardous materials to be stored in accordance with the Code of Practice for the Storage of Dangerous Goods; and Storage of batteries in accordance

Emission	Sources	Potential pathways	Proposed controls
			with Australian Battery Recycling Initiative (ABRI) Best Practice Guidelines.
Refrigerant leaks	Acceptance, handling and storage of end-of-life refrigerators	Air/windborne pathway	<ul style="list-style-type: none"> Refrigerants to be recovered in accordance with the Ozone Protection and Synthetic Greenhouse Gas Management Act 1989 by an operator that holds a restricted Refrigerant Recovery licence; and Fridges and freezers only to be transferred to scrap metal stockpile once refrigerant has been recovered and power cords removed.
Release of chemical and / or biological contamination	Mulch product quality	Direct contact of product by consumers and the receiving environment	<ul style="list-style-type: none"> Mulch is solarised prior to being taken by consumers; and Consumers are informed of the risks associated with the product prior to receipt.

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
Rural properties / homesteads	A number of rural properties and homesteads within a 1.5 km radius in all directions around the premises. Closest properties approximately 530 m and 550 m south and south-east of the premises boundary.
Agricultural premises	Immediately adjacent on the western and eastern boundaries of the premises.
Environmental receptors	Distance from prescribed activity
Geomorphic wetlands	<ul style="list-style-type: none"> Unnamed conservation sumpland – within the northern section of the premises boundary extending past north of the premises. Unnamed resource enhancement sumpland – within the western portion of the premises. Unnamed multiple use sumpland adjacent to the west of the premises.

	<ul style="list-style-type: none"> • Unnamed multiple use palusplain – approximately 140 m to the south-east of the premises.
Wellard Nature Reserve	Approximately 1.2 km to the north-east of the premises boundary.
South West Coastal Groundwater Area	Premises within area. Groundwater approximately 2 m bgl.
Harvey Irrigation District and Brunswick River and Tributaries – RIWI Act Surface Water Areas and Irrigation District	Approximately 600 m to the south-east of the premises boundary.
Threatened Ecological Communities – Banksia Dominated Woodlands of the Swan Coastal Plain	Within and surrounding premises boundary.
<p>Threatened fauna</p> <ul style="list-style-type: none"> - Carnaby's cockatoo (<i>Calyptorhynchus latirostris</i>) - Forest red-tailed black cockatoo (<i>Calyptorhynchus banksii naso</i>) - South-western brush tailed phascogale (<i>Phascogale tapoatafa wambenger</i>) - Quenda, southwestern brown bandicoot (<i>Isoodon fusciventer</i>) 	Found within 3 km of the premises.

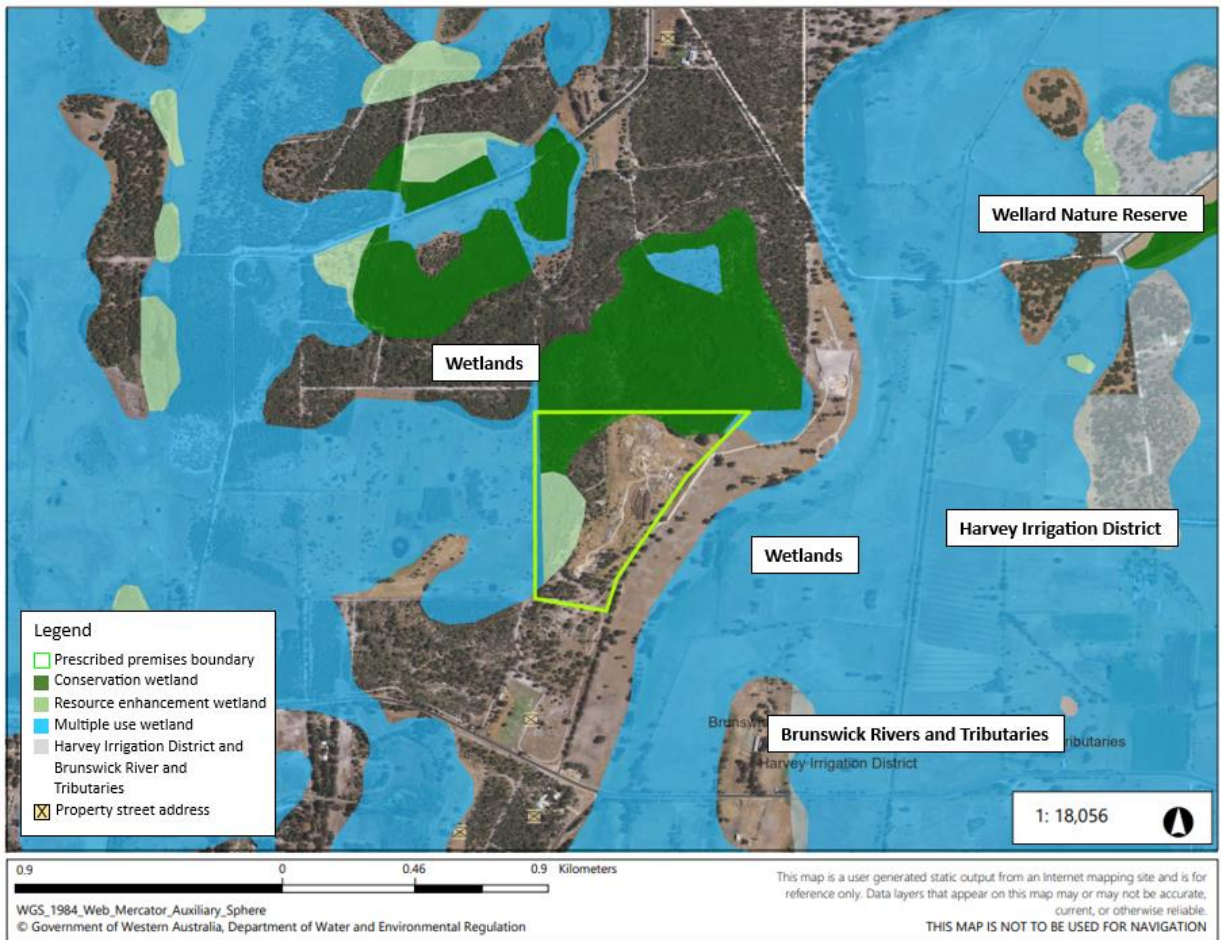


Figure 1: Distance to sensitive receptors

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 in-complete 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 L9235/2020/2 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 4. Risk assessment of potential emissions and discharges from the premises during operation

Risk Event					Risk rating ¹	Licence holder's controls sufficient?	Conditions ² of licence	Justification for additional regulatory controls
Source/Activities	Potential emission	Potential pathways and impact	Receptors	Licence holder's controls	C = consequence L = likelihood			
Operation								
Waste acceptance, handling and storage	Dust	Air/windborne pathway causing impacts to health and amenity	Agricultural premises immediately adjacent to premises Rural properties within a 1.5 km radius Threatened flora / fauna within premises and immediately adjacent	Refer to Section 3.1	C = Slight L = Unlikely Low Risk	N	Existing conditions: Condition 8	The delegated officer considers that dust emissions are effectively regulated by existing licence conditions and by the general provisions of the EP Act.
	Noise			Refer to Section 3.1	C = Slight L = Unlikely Low Risk	N	N/A	The delegated officer considers that noise emissions are effectively managed under the <i>Environmental Protection (Noise) Regulations 1997</i> .
	Odour			Refer to Section 3.1	C = Minor L = Rare Low Risk	Y	Conditions 1 & 3 Existing conditions: Condition 10	N/A
	Litter			Refer to Section 3.1	C = Slight L = Unlikely Low Risk	N	Existing conditions: Conditions 6 & 9	The delegated officer considers that litter is effectively managed by existing conditions.
	Fire / smoke	Refer to Section 3.1	C = Major L = Rare Medium Risk	N	Conditions 3, 13, 14, 15 & 16	Condition 3 has been amended to ensure that tyres cannot roll if burning. The delegated officer deems it appropriate that the licence holder complies with DFES Guidance Note: GN02 Bulk Storage of Rubber Tyres Including Shredded and Crumbed Tyres (2020). Given the proximity of the premises to sensitive receptors, the delegated officer has added conditions 15, 16 and 17 to ensure that the licence holder has appropriate procedures and systems in place to prevent, mitigate and extinguish fires.		
	Leachate / contaminated stormwater	Overland run-off and infiltration to land causing impacts to underlying soil and groundwater	Agricultural premises immediately adjacent to premises Groundwater approximately 2 m bgl Geomorphic wetlands within and surrounding premises	Refer to Section 3.1	C = Moderate L = Unlikely Medium Risk	N	Condition 3 Conditions 1, 11 & 12 Existing conditions: Condition 7	The premises accepts relatively small quantities of green waste and produces mulch in limited batches. The delegated officer considers storage and mulching of green waste as a low risk activity with minimal capacity of leachate generation. Green waste and mulch are stored on a hardstand and the delegated officer has added a requirement for the hardstand to be bunded. Conditions 11 and 12 have been added as standard spill management conditions.
Acceptance, handling and storage of putrescible waste	Pests / vermin	Biological pathway causing impacts to health and amenity	Agricultural premises immediately adjacent to premises	Refer to Section 3.1	C = Moderate L = Possible Medium Risk	Y	Conditions 1 & 3 Existing conditions:	N/A

Risk Event					Risk rating ¹	Licence holder's controls sufficient?	Conditions ² of licence	Justification for additional regulatory controls
Source/Activities	Potential emission	Potential pathways and impact	Receptors	Licence holder's controls	C = consequence L = likelihood			
			Rural properties within a 1.5 km radius Threatened flora / fauna within premises and immediately adjacent				Conditions 6 & 24	
Product quality (fit-for-purpose mulch)	Release of physical, chemical and / or biological contamination	Direct contact of product by consumers and the receiving environment impacting amenity and environmental and human health	Product users and the environment receiving the product	Refer to Section 3.1	C = Moderate L = Possible Medium Risk	N	<u>Condition 3</u>	<p>During a site visit conducted on 25 May 2023, the licence holder advised that mulch produced on the premises undergoes solarisation but does not undergo pasteurisation. Mulch users are informed that the mulch is not pasteurised and does not meet the Australian Standard AS 4454.</p> <p>Mulch produced on the premises is classed as a Category B product as per the Guideline: Better practice organics recycling (December 2022). It is up to the licence holder to ensure that all products are fit-for-purpose for the proposed end use. A fit-for-purpose product provides beneficial uses for the environment when used and does not contain contaminants at a level that could cause pollution or environmental harm. Unpasteurised mulch is typically only fit for purpose in areas that are not weed sensitive or close to sensitive receptors.</p> <p>The delegated officer considers it appropriate that the licence holder communicates to mulch users that the mulch does not comply with AS 4454 and any risks associated with use of the mulch in terms of pathogens, weeds and contaminants. Condition 3 has been added requiring the licence holder to install a sign at the entrance of the premises communicating this information.</p>
Acceptance, handling and storage of end-of-life refrigerators	Refrigerant leaks	Air/windborne pathways causing impacts to ecosystem health	Receiving environment / atmosphere	Refer to Section 3.1	C = Major L = Rare Medium Risk	Y	Condition 3	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 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 19 July 2023	Comments received on 14 August 2023. See Appendix 1.	See Appendix 1

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
1	Addition of waste acceptance for Category 61A and 62 activities
3	Addition of processing requirements for transfer station waste
11 & 12	Addition of standard conditions relating to the clean up of spills
13	Standard condition specifying CEO is to be immediately notified of a fire or other emergency on the premises
14	Addition of condition specifying that the licence holder must develop and implement a fire and emergency management plan
15	Addition of condition to require management measures to mitigate the risk of a fire on the premises
16	Requirement to, in the event of a fire, extinguish the fire and recover firefighting wash water and other waste arising from the fire
19	Amending input parameters to be monitored to specify all waste types listed in Table 1
Definitions	Included definitions for construction and demolition waste and e-waste
Figure 3	New premises map denoting the location of transfer station storage locations

References

1. Department of Environment Regulation (DER) 2015, *Guidance Statement: Setting Conditions*, Perth, Western Australia.
2. Department of Fire and Emergency Services (DFES) 2020, *Guidance Note: GN02 Bulk Storage of Rubber Tyres Including Shredded and Crumbed Tyres*, Perth, Western Australia.
3. Department of Water and Environmental Regulation (DWER) 2022, *Guideline: Better practice organics recycling*, Perth, Western Australia.
4. Department of Water and Environmental Regulation (DWER) 2020, *Guideline: Environmental Siting*, Perth, Western Australia.
5. Department of Water and Environmental Regulation (DWER) 2020, *Guideline: Risk Assessments*, Perth, Western Australia.

Appendix 1: Summary of licence holder's comments on risk assessment and draft conditions

Condition	Summary of licence holder's comment	Department's response
1	Can this please be increased to 10. 5 tonnes should be adequate, but there might be the chance of 6-8 tonnes (two collections a year) in a year. Just want to provide some breathing room.	The increase in acceptance limit of liquid waste does not change the risk profile. Updated from 5 tonnes to 10.5 tonnes.
3	Only domestic waste, what happens if a small commercial business needs to dispose of waste. This might need more discussion.	Risk controlled adequately by throughput limits. Reference to domestic waste only removed.
3	Only domestic what happens if a small commercial business needs to dispose of a few small batteries. This might need more discussion	Risk controlled adequately by throughput limits. Reference to domestic waste only removed.
3	Scrap metal - typo	Amended.

Appendix 2: Application validation summary

SECTION 1: APPLICATION SUMMARY				
Application type				
Works approval	<input type="checkbox"/>			
Licence	<input type="checkbox"/>	Relevant works approval number:		None <input type="checkbox"/>
		Has the works approval been complied with?		Yes <input type="checkbox"/> No <input type="checkbox"/>
		Has time limited operations under the works approval demonstrated acceptable operations?		Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
		Environmental Compliance Report / Critical Containment Infrastructure Report submitted?		Yes <input type="checkbox"/> No <input type="checkbox"/>
		Date Report received:		
Renewal	<input type="checkbox"/>	Current licence number:		
Amendment to works approval	<input type="checkbox"/>	Current works approval number:		
Amendment to licence	<input checked="" type="checkbox"/>	Current licence number:	L9235/2020/1	
		Relevant works approval number:		N/A <input type="checkbox"/>
Registration	<input type="checkbox"/>	Current works approval number:		None <input type="checkbox"/>
Date application received	18/4/2023			
Applicant and Premises details				
Applicant name/s (full legal name/s)	Shire of Harvey			
Premises name	Richardson Road Landfill Site			
Premises location	Richardson Road UDUC WA 6220 Being part of Lot 6 on Diagram 55535			
Local Government Authority	Shire of Harvey			
Application documents				
HPCM file reference number:	DWERDT767310			
Key application documents (additional to application form):	Supporting Information for Licence Amendment			
Scope of application/assessment				
Summary of proposed activities or changes to existing operations.	Facility has already been operating as a solid waste depot and Class II landfill (only licensed as a Category 64). Following a compliance inspection and the licence renewal, the Shire were told to apply for an amendment to add Category 62 to the licence. It is the Shire's intention to close the landfill and operate only as a transfer station in the future.			

Category number/s (activities that cause the premises to become prescribed premises)

Table 1: Prescribed premises categories

Prescribed premises category and description	Proposed production or design capacity
Category 61A: Solid Waste Facility	1,500 tonnes per annum
Category 62: Solid Waste Depot	5,000 tonnes per annum
Category 64: Putrescible landfill site	No change (5,000 tonnes per annum)

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 checked="" type="checkbox"/>	Referral decision No: N/A Managed under Part V <input 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: N/A EPA Report No: N/A
Has the proposal been referred and/or assessed under the EPBC Act?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Reference No: N/A
Has the applicant demonstrated occupancy (proof of occupier status)?	Yes <input 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: N/A Expiry date: N/A If N/A explain why? No change in land use. Facility run by the Shire.
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"/>	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 <input type="checkbox"/> No <input checked="" type="checkbox"/>	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 <input type="checkbox"/> No <input checked="" type="checkbox"/>	Application reference No: N/A Licence/permit No: N/A Licence / permit not required.

<p>Does the proposal involve a discharge of waste into a designated area (as defined in section 57 of the EP Act)?</p>	<p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p>	<p>Name: South West Coastal Groundwater Area Type: Proclaimed Groundwater Area Has Regulatory Services (Water) been consulted? Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/> Regional office: South-West</p>
<p>Is the Premises situated in a Public Drinking Water Source Area (PDWSA)?</p>	<p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p>	<p>Name: N/A Priority: N/A Are the proposed activities/ landuse compatible with the PDWSA (refer to WQPN 25)? Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/></p>
<p>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>)</p>	<p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p>	<p>N/A</p>
<p>Is the Premises within an Environmental Protection Policy (EPP) Area?</p>	<p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p>	<p>N/A</p>
<p>Is the Premises subject to any EPP requirements?</p>	<p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p>	<p>N/A</p>
<p>Is the Premises a known or suspected contaminated site under the <i>Contaminated Sites Act 2003</i>?</p>	<p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>	<p>Classification: possibly contaminated – investigation required (PC–IR) Date of classification: 26 August 2014 Periodic groundwater monitoring has been undertaken at the site since 2006. The results of historical groundwater monitoring indicate that groundwater beneath the site has been impacted by elevated concentrations of nutrients, metals, sulfate and acidity. Further groundwater investigations are required, to fully delineate and characterise the contamination status of groundwater beneath the site to the west and south-west of the landfill body.</p>