



## Application for Licence Amendment

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

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<b>Licence Number</b>	L9127/2018/1
<b>Licence Holder</b>	City of Greater Geraldton
<b>File Number</b>	DER2018/000553-1~4
<b>Premises</b>	Meru Waste Disposal Facility Landfill Road, NARNGULU WA 6532  Legal description - Lot 204 on Plan 403161 and Lot 2268 on Plan 250829
<b>Date of Report</b>	20 June 2023
<b>Decision</b>	Revised licence granted

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**A/Manager, Waste Industries**

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

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## 1. Decision summary

Licence L9127/2018/1 is held by City of Greater Geraldton (Licence Holder) for the Meru waste Disposal Facility (the Premises), located at Lot 204 on Plan 403161 and Lot 2268 on Plan 250829.

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 L9127/2018/1 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 9 March 2023, the Licence Holder submitted an application to the department to amend Licence L9127/2018/1 under section 59 and 59B of the *Environmental Protection Act 1986* (EP Act). The following amendments are being sought:

- Addition of hazardous waste which is accepted under the Household Hazardous Waste (HHW) program.
- Increase the liquid waste facility throughput capacity from 4,000 tonnes to 6,000 per annual period.
- Increase the electronic waste acceptance limit from 25 tonnes to 40 tonnes per annual period.
- Inclusion of additional recycling waste and other hazardous waste types received at the premises, being:
  - Carboard
  - Scrap metal
  - DrumMUSTER chemical containers

All the hazardous waste currently accepted at the premises is stored at the existing Hazardous Waste Shed. On 21 July 2021 the applicant was issued Works Approval W6519/2021/1 to construct a new transfer station at the premises, which will replace the current Hazardous Waste Shed .

The current Liquid Waste Facility (LWF) comprises five ponds. Pond 1 and Pond 2 are both septage receival ponds, lined with High-Density Polyethylene (HDPE), and Pond 1 and 2 both overflow into Pond 4, which is clay-lined and receives the Site's composting leachate. Pond 3 is also clay lined and receives any inputs from the Truck Wash to the east of the LWF, and this pond also overflows into Pond 4. Pond 4 overflows into Pond 5, which is clay lined and contains an overflow outlet in the rare instance all 5 ponds are full above their freeboard.

The LWF ponds have an estimated total operational capacity of 17,304 m<sup>3</sup>, and at total full capacity of 24,771 m<sup>3</sup>. Assuming a reduction coefficient of 0.7, and that each pond is operating at its maximum evaporation area, the pond system is capable of evaporating approximately net 16,450 m<sup>3</sup> of leachate/liquid waste in an average year.

This amendment is limited only to changes to Category 61A and 61 activities from the Existing Licence. No changes to the aspects of the existing Licence relating to Category 13, 57, 64 and 67A 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	Description of proposed amendment
61 Liquid waste facility	4,000 tonnes/year	6,000 tonnes/year	The Licence holder requests to increase the liquid waste throughput capacity from 4,000 tonnes to 6,000 tonnes per annual.
61A: Solid waste Facility	100,000 tonnes/year	No change to the existing assessed throughput	The Licence Holder requests to increase the electronic waste acceptance limit up to 40 tonnes per annual. Addition of additional waste types accepted through the transfer station.

### 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
Acceptance, storage and handling of hazardous waste prior to disposal off-site (including HHW)	Dust	Air/windborne pathway	Acceptance of hazardous waste and E-Waste limited to 30 tonnes and 40 tonnes per annual period respectively.  The Existing Licence includes various controls for the management of dust and fire.
	Noise		
	Fire		
Increase electronic waste acceptance limit up to 40 tonnes per annual.	Contaminated stormwater	Direct discharge to soil, and seepage through soil into groundwater	Materials will be stored in a bunded Hazardous Waste Shed and in individual containers inside of the shed.  The Existing Licence includes various controls for the management of potentially contaminated stormwater.
	Spills of chemicals/hydrocarbon		
	Firewater		
Increase the liquid waste throughput capacity from 4,000 tonnes to 6,000 tonnes per annual.	Odour	Air/windborne pathway	No additional controls were proposed. The existing Licence includes various controls and infrastructure for the management of potentially contaminated stormwater and spills
	Contaminated stormwater	Direct discharge to soil, and seepage through soil into groundwater	
	Spills/leaks of liquid waste	Direct discharge to soil, and seepage through soil into groundwater	

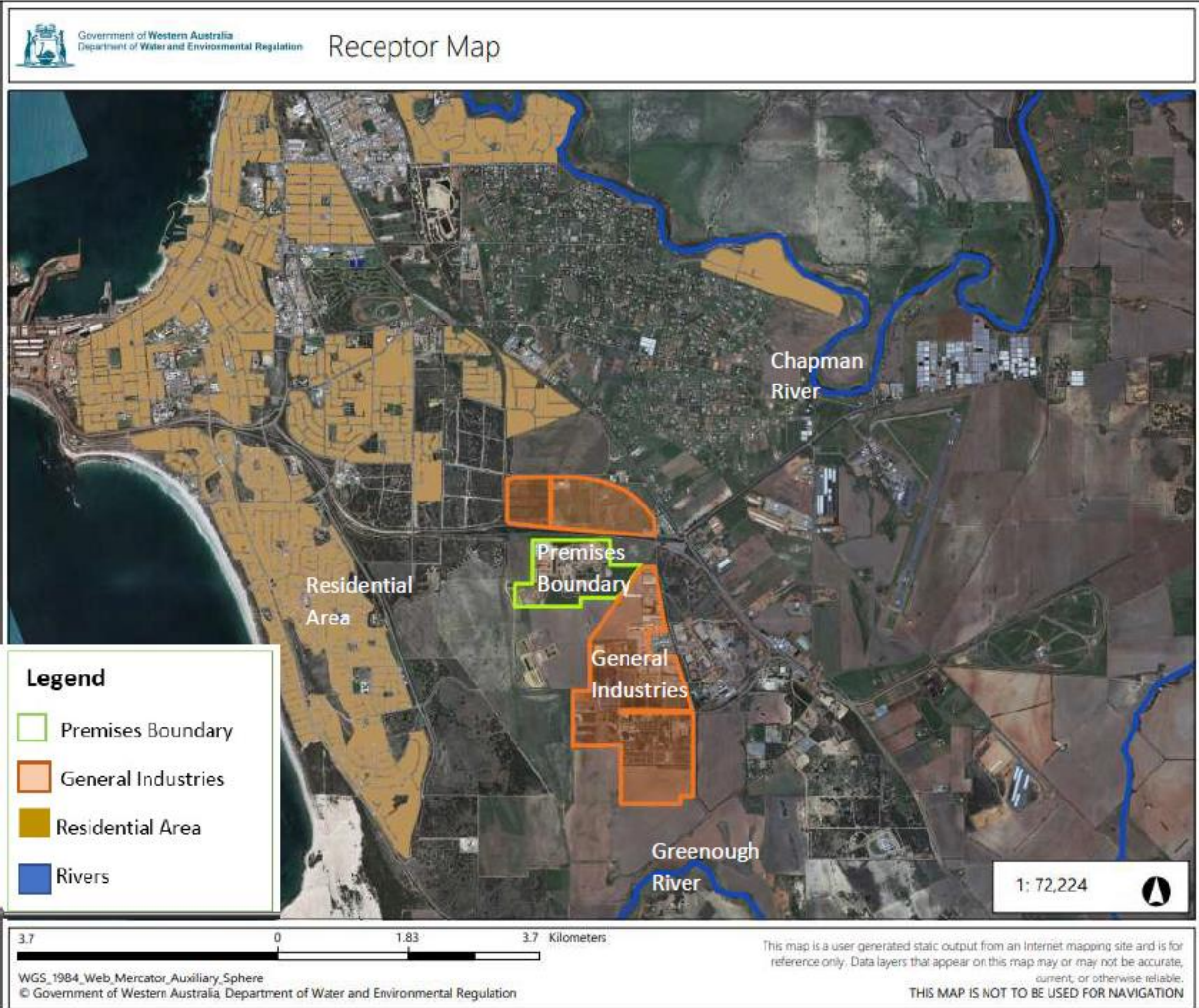
### 3.1.2 Receptors

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**

<b>Human receptors</b>	<b>Distance from prescribed activity</b>
Rural residential premises	Approximately 700m north of the premises boundary
Residential premises	Approximately 1.5km north-west of the premises boundary
Industrial premises	Immediately adjacent to eastern boundary of the premises
Groundwater user	Groundwater Licence- Ins No 202081 and Groundwater Licence- Ins No 178160 415m and 658m north-west of the premises boundary respectively.
<b>Environmental receptors</b>	<b>Distance from prescribed activity</b>
Chapman River	Approximately 3km north-east of the premises boundary
Greenough River	Approximately 3.5km south of the premises boundary
<i>Rights in Water and Irrigation Act 1914</i> (RIWI Act) - Groundwater Areas	Premises within the RIWI Act- groundwater area
Greenough River and Tributaries Catchment Area	Immediately adjacent to the east of the premises boundary.
Underlying groundwater (non-potable purposes)	Data from groundwater monitoring bores within the premises indicate that depth to groundwater varies across the Premises from 14.6 to 17.5 mBGL.
Threatened ecological communities	Priority 1 Coastal sands dominated by <i>Acacia rostellifera</i> , <i>Eucalyptus oraria</i> and <i>Eucalyptus obtusiflora</i> (Geraldton area) approximately 2.3km south-west of the premises.



**Figure 1: Receptors Map**



## 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 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 L9127/2018/1 that accompanies this Amendment Report authorises emissions associated with the operation of the hazardous waste which accepted under the Household Hazardous Waste program and E-Waste acceptance on 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 <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				
Acceptance, storage and handling of hazardous waste prior to disposal off-site (including HHW)	Dust	Air/windborne pathway causing impacts to health and amenity.	Rural residences approximately 700m north of the premises boundary	Refer to Section 3.1	C = Slight L = Possible <b>Low Risk</b>	Yes	Condition 2,4 and 24	Conditions 2 and 4 of the licence have been updated to allow for the activity to occur, and to set processing limits/requirements in line with the licence holder's commitments to reducing potential emissions.
	Noise		Industrial premises immediately adjacent to eastern boundary of the premises	Refer to Section 3.1	C = Slight L = Possible <b>Low Risk</b>	Yes	Condition 2 and 4	
	Fire		Refer to Section 3.1	C = Moderate L = Unlikely <b>Medium Risk</b>	Yes	Condition 2, 4, 9, 10 and 21 Condition 25 -27 and 28 -30		
Increase electronic waste acceptance limit up to 40 tonnes per annual.	Contaminated stormwater	Direct discharge to the land causing impacts on human health, soil and ground water quality.	RIWI Act-groundwater Areas	Refer to Section 3.1	C = Moderate L = Unlikely <b>Medium Risk</b>	Yes	Condition 2 and 4 Condition 31 -33	
	Spills of hazardous waste		Underlying groundwater across the Premises from 14.6 to 17.5 mBGL	Refer to Section 3.1	C = Moderate L = Unlikely <b>Medium Risk</b>	Yes	Condition 2, 4 and 21	
	Firewater		Greenough River and Tributaries Catchment Area Immediately adjacent to the east of the Premises boundary	Refer to Section 3.1	C = Moderate L = Unlikely <b>Medium Risk</b>	Yes	Condition 2 and 4 Condition 28 -30 and 33	
Increase the liquid waste throughput	Odour	Air/windborne pathway	Rural residences approximately 700m	Refer to		Yes	Condition 2 and 4	

Licence: L9127/2018/1

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				
capacity from 4,000 tonnes to 6,000 tonnes per annual		causing impacts to health and amenity.	north of the premises boundary Industrial premises immediately adjacent to eastern boundary of the premises	Section 3.1	C = Slight L = Possible <b>Low Risk</b>		Condition 58 - 60	updated to allow for the activity to occur.
	Contaminated stormwater	Direct discharge to the land causing impacts on human health, soil and ground water quality	RIWI Act-groundwater Areas Underlying groundwater across the Premises from 14.6 to 17.5 mBGL	Refer to Section 3.1	C = Moderate L = Unlikely <b>Medium Risk</b>	Yes	Condition 2, 4 and 41 Condition 31 - 33	
	Spills/leaks of liquid waste		Greenough River and Tributaries Catchment Area Immediately adjacent to the east of the Premises boundary	Refer to Section 3.1	C = Moderate L = Unlikely <b>Medium Risk</b>	Yes	Condition 2, 4 and 41	

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 14/06/2023	Refer to Appendix 1	Refer to 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
Cover page	Updated the category 61- liquid waste facility throughput capacity from 4,000 tonnes to 6,000 tonnes per annual
Condition 1 Table 1	Inclusion of existing Waste Transfer Station to the infrastructure table
Condition 2 Table 2	Updated the Table 2 with below changes, <ul style="list-style-type: none"> <li>- addition of new row to cover Hazardous waste acceptance specifications.</li> <li>- updated the category 61 and 61A waste acceptance limits in accordance with the licence throughput capacity.</li> <li>- updated the e-waste acceptance limit.</li> <li>- addition of carboard under the putrescible waste</li> <li>- addition of the scrap metal under the inert waste type 1</li> <li>- liquid waste (waste oil and paint) moved to category 61A.</li> </ul>
Condition 4 Table 3	Addition of process limits and specification for hazardous waste Addition of process limits and specification for e-waste in accordance with AS/NZS 5377:2013 standard.
N/A	Deleted the previous licence condition 38 that Requirements incorporated into Condition 37 Table 7 - Note 1
Condition 40	Updated the conditions

Definition	Added definition for the “Household Hazardous Waste” and “Schedule 1 “.
Attachment 1	Added figure 5 - liquid waste facility layout
Schedule 1	Inclusion of list of Hazardous Household Waste accepted within HHW program

## 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.

## Appendix 1: Summary of Licence Holder's comments on risk assessment and draft conditions

Condition	Summary of Licence Holder's comment	Department's response
Condition 4, Table 3	The City of Greater Geraldton (the applicant) requested that the condition of "Witness the covering of the asbestos waste or material containing asbestos and sign the register referred to above within two hours of the covering taking place" be removed from the waste processing table in condition 4, Table 3.	The Delegated Officer declined to remove the asbestos requirement from the licence as it was not related to the current amendment and had not been risk assessed.
	The Licence holder requested to update the Waste storage location as "Household Hazardous Waste (HHW) shed"	The Delegated Officer agreed to change the hazardous waste storage location to "Hazardous Waste shed" as it marked on the existing licence.

## 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"/>
		Has time limited operations under the works approval demonstrated acceptable operations?			Yes	<input type="checkbox"/>
		Environmental Compliance Report / Critical Containment Infrastructure Report submitted?			Yes	<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:	L9127/2018/1			
		Relevant works approval number:	W6519/2021/1	N/A	<input type="checkbox"/>	
Registration	<input type="checkbox"/>	Current works approval number:		None	<input type="checkbox"/>	
Date application received		09 March 2023				
Applicant and Premises details						
Applicant name/s (full legal name/s)		City of Greater Geraldton				
Premises name		Meru Waste Disposal Facility				
Premises location		Located on plan 2268 on Plan 250829 and Lot 204 on Plan 403161 off Goulds Road, Narngulu WA 6532				
Local Government Authority		City of Greater Geraldton				
Application documents						
HPCM file reference number:		DER2018/000553-1 ~4				
Key application documents (additional to application form):		None				
Scope of application/assessment						



Summary of proposed activities or changes to existing operations.

1. Adding new waste type of Hazardous waste which accepted Household hazardous waste and other hazardous waste up to 30 tonnes per annual period through HHW program and recycle program.
2. Liquid waste (paint) moved to under the "Hazardous waste".
3. Increase the electronic waste acceptance limit up to 40 tonnes per annual.

Changes to Category 61 & 61A to accommodate for Hazardous Waste:

Contaminated solid waste	75,000 tonnes combined per annual period	As per current acceptance specification	
Liquid waste (Oil)			
Electronic Waste	40 tonnes per annual	Limited to a maximum of 25 tonnes accepted during an annual period. Acceptance, storage and handling prior to disposal off-site.	
Hazardous Waste:			
Liquid waste (Paint)	35 tonnes per annual period	Acceptance, storage and handling prior to disposal off-site.	Move from cat 61 to "Special Waste – Hazardous Waste" new section under category 61
Other Hazardous Waste	30 tonnes per annual period	Limited to material accepted within the HHW Program ( <a href="#">Link</a> ) and b-cycle program ( <a href="#">Link</a> ) Acceptance, storage and handling prior to disposal off-site.	New

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

**Table 1: Prescribed premises categories**

Prescribed premises category and description	production or design capacity	Proposed changes to the production or design capacity (amendments only)
Category 13: <i>Crushing of building material</i>	20,000 tonnes/year	No change to the existing assessed production capacity.
Category 57: Used tyre storage (general)	1,000 tyres	
Category 61: Liquid waste facility	4,000 tonnes/year	
Category 61A: Solid waste facility	100,000 tonnes/year	
Category 64: Class II or III putrescible landfill site	100,000 tonnes/year	
Category 67A: Compost manufacturing and soil blending	20,000 tonnes/year	

**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: 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:

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 checked="" type="checkbox"/> No <input type="checkbox"/>	Registered proprietor on certificate of title.
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: If N/A explain why?
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: 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 <input checked="" type="checkbox"/> No <input type="checkbox"/>	Name: Arrowsmith Groundwater Area Type: RIWI Act- Groundwater Areas Has Regulatory Services (Water) been consulted? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Regional office:
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 <a href="#">WQPN 25</a> )? 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"/>	<i>Environmental Protection (Controlled Waste) Regulations 2004</i> due to Cat 61 and 57

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"/>	