



Application for Licence Amendment

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

Licence Number	L6963/1997/14
Licence Holder	Mindarie Regional Council
File Number	DER2016/001330-1~6
Premises	Tamala Park Waste Management Facility 1700 Marmion Avenue CLARKSON WA 6030 Being part of Lot 9020 on Plan 408820 as depicted in Schedule 1 of the Revised Licence
Date of Amendment	14 March 2023
Decision	Revised licence granted

MANAGER WASTE INDUSTRIES

REGULATORY SERVICES

Officer delegated under section 20 of the Environmental Protection Act 1986

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1. Decision summary

Licence L6963/1997/14 is held by Mindarie Regional Council (Licence Holder) for the Tamala Park Waste Management Facility (the Premises), located at 1700 Marmion Avenue, Clarkson WA 6030.

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 L6963/1997/14 has been granted.

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

2. Scope of assessment

2.1 Regulatory framework

In completing the assessment documented in this Amendment Report, the department has considered and given due regard to its Regulatory Framework and relevant policy documents which are available at <https://dwer.wa.gov.au/regulatory-documents>.

2.2 Application summary

On 30 November 2022, the Licence Holder submitted an application to the department to amend Licence L6963/1997/14 under section 59 and 59B of the *Environmental Protection Act 1986* (EP Act).

An amendment of the Licence is being sought to allow additional waste acceptance and processing of Hazardous Household Waste (HHW) recycle products shown in Appendix 2 - Household Hazardous Wastes, polystyrene, scrap metal, cardboard, furniture, and other recyclable materials.

This amendment is limited only to changes to Category 61, 61A and 62 activities from the Existing Licence. No changes to the aspects of the Licence relating to Category 12, 57, 64 and 77 have been requested by the Licence Holder.

The activities and area related to this amendment application is also licensed by the Department of Mines, Industry Regulation and Safety (DMIRS) as a Dangerous Goods site (licence #DGS020256).

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
Category 61: Liquid waste facility	252 tonnes per annual period	500 tonnes per annual period	The licence holder proposes to increase waste acceptance from 252 to 500 tonnes per annual period. The increase in throughput is attributed to the acceptance and processing of HHW products (see

Category	Current throughput capacity	Proposed throughput capacity	Description of proposed amendment
			Appendix 2).
Category 61A: Solid waste facility	1,500 tonnes per annual period	1,500 tonnes per annual period	Acceptance and processing of HHW products (see Appendix 2). Acceptance of polystyrene, scrap metal, cardboard and e-waste.
Category 62: Solid waste depot	15,000 tonnes per annual period	15,000 tonnes per annual period	Acceptance and processing of HHW products (see Appendix 2). Acceptance of polystyrene, scrap metal, cardboard and e-waste.

2.3 Landfill Gas Management Plan Submission

The Licence holder was required to submit a Landfill Gas Management Plan (LGMP) by 13 February 2023 under condition 2.1.1 of Licence L6963/1997/14. On 1 March 2023 the licence holder requested an extension to allow submission of a LGMP by February 2024.

The landfill gas on site is currently managed under the documents shown below:

- Site Management Plan
- Sampling and Analysis Quality Plan
- Landfill System design
- Landfill Gas Management Plan
- Tamala Park Closure and Post-Closure Plan
- Geophysical Survey
- Mandatory Audit Reports

The department considers the above documents sufficient in the management of landfill gas until the LGMP is submitted and accepts the request for an extension. The Licence has been amended to update the LGMP submission by 31 March 2024.

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
Odour	Storage of HHW material	Air/windborne pathway causing impacts to health and amenity of sensitive receptors (residential dwellings)	HHW wastes in liquid form must be in sealed containers/packages to reduce the risk of cumulative odour emissions. Only domestic wastes accepted, with limits of 20 kg or 20 L per waste type.
Leachate, spills and leaks	Storage of HHW material	Overland runoff potentially causing ecosystem disturbance or impacting surface or groundwater quality	Segregation of waste types to prevent incompatible waste interacting. Respective storage areas are secured and encompass a hardstand with double bunding and internal sumps for leachate and/or spill/leak collection. Sheds are employed for certain waste types which can be locked and reduce interaction or related wastes with stormwater (therefore reducing the risk of leachate generation). Site is staffed during operational hours and spill control measures are in-place if needed. Storage area for paint includes self-bunded platforms, capped drainage sump and is fully fenced.
Fire (smoke)	Storage of HHW material and other flammable materials (e.g. Cardboard) due to storage	Air causing impacts to health and amenity Run-off and seepage to land and waters causing potential impacts to soil underlying and groundwater	Segregation of waste types to prevent incompatible waste interacting. Flammable liquids and batteries are secured and encompass bunding with an internal sump for spill/leak collection.

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	<p>The residential Catalina House Estate and development area is located approximately 150m north of the premise boundary and 640m north of the HHW/Transfer station shown in Figure 1: Distance to sensitive receptors.</p> <p>In addition, the Kinross residential area is located approximately 20m south of the Premises boundary and 690m south of the HHW/Transfer station shown in Figure 1: Distance to sensitive receptors.</p>
Environmental receptors	Distance from prescribed activity
Groundwater	<p>The nearest major user of groundwater is the Water Corporation which, as part of the Coastal Groundwater Scheme, abstracts groundwater from the superficial aquifer via the Neerabup bore field. These abstractions bores are all located up-hydraulic gradient from the site to the north, north-east and south-east. Additional water has also been abstracted by the nearby Catalina Housing Development. The water is utilised from dust suppression and for watering of public open spaces. There are no known users of groundwater down-hydraulic gradient from the landfill, due to its coastal location.</p> <p>The Site is located immediately to the west of Priority 3 (P3) Public Drinking Water Source Protection Area, which is located within the Premises boundary and to the east. Given the general direction of groundwater flow within the superficial aquifer is inferred to be in a west-south-westerly direction towards the ocean, the P3 area is considered to be up hydraulic gradient of the Site.</p>
TECs/PECs	<p>Site is located within Bush Forever site. Site 323 is located within the entirety of the premises boundary up to but excluding the landfill area itself, as well as east of the Premises' eastern boundary to the western boundary of the next Lot (50m-425m from the Premises western boundary). It comprises a link between the two Bush Forever sites to the east and west. Site 322 extends west to east from Indian Ocean to the west boundary of the Premises and adjacent Kinross residential development to the south. It is the Burns Beach Bushland. Site 383 lies to the east of Lot 323. It is within the Neerabup National Park, Lake Gnowergup Nature Reserve and adjacent Bushland, Neerabup</p>

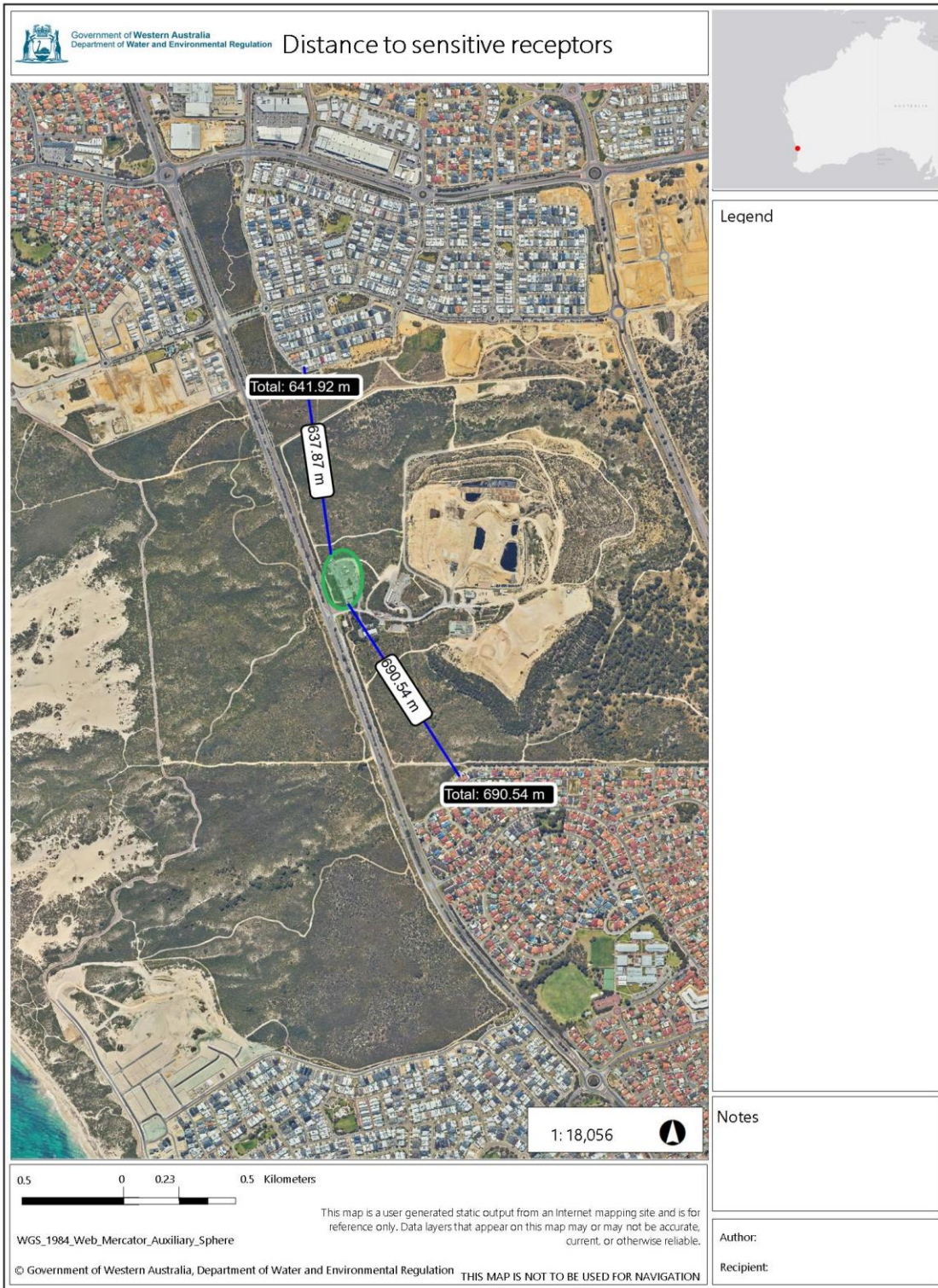


Figure 1: Distance to sensitive receptors

3.2 Risk ratings

Risk ratings have been assessed in accordance with the *Guideline: Risk Assessments* (DWER 2020) for those emission sources which are proposed to change and takes into account potential source-pathway and receptor linkages as identified in Section 3.1. Where linkages are incomplete they have not been considered further in the risk assessment.

Where the Licence Holder has proposed mitigation measures/controls (as detailed in Section 3.1), these have been considered when determining the final risk rating. Where the Delegated Officer considers the Licence Holder's proposed controls to be critical to maintaining an acceptable level of risk, these will be incorporated into the licence as regulatory controls.

Additional regulatory controls may be imposed where the Licence Holder's controls are not deemed sufficient. Where this is the case the need for additional controls will be documented and justified in Table 4.

The Revised Licence L6963/1997/14 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 C = consequence L = likelihood	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				
Acceptance and storage of HHWs, E Waste	Odour	Air causing impacts to health and amenity	Residences 640m north and 690m south.	Refer to Section 3.1	C = Moderate L = Unlikely Medium Risk	Y	Condition 1.2.1 Condition 1.2.2 <u>Condition 1.2.18</u> <u>Condition 1.2.19</u>	Additional spills or leak management conditions for liquid hazardous wastes to capture odour control.
	Spills and leaks of liquid waste	Run-off and seepage to land and water causing potential impacts to soil and underlying groundwater	Residences 640m north and 690m south.	Refer to Section 3.1	C = Moderate L = Unlikely Medium Risk	Y	Condition 1.2.1 Condition 1.2.2 Condition 1.2.17 Condition 1.2.20 <u>Condition 1.2.18</u> <u>Condition 1.2.19</u> <u>Condition 1.2.20</u>	Additional spills or leak management conditions for liquid hazardous wastes.
	Potentially Contaminated Stormwater		Bush forever site 323 located within the entirety of the premises	Refer to Section 3.1	C = Moderate L = Unlikely Medium Risk	Y		
	Fire (smoke) and fire wastewater	Air causing impacts to health and amenity Land and waters causing impacts to underlying groundwater	Residences 640m north and 690m south. Bush forever site 323 located within the entirety of the premises	Refer to Section 3.1	C = Moderate L = Unlikely Medium Risk	Y	Condition 1.2.1 Condition 1.2.2 Condition 1.2.7 Condition 1.2.11 Condition 1.2.16 <u>Condition 1.2.20</u>	Additional condition to capture fire management and firefighting wastewater management within the Dangerous Goods and HHW areas.

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
The City of Joondalup advised of proposal (25/01/2023)	No response	N/A
Mindarie Regional Council (MRC)	MRC responded on 28 February 2023. Comments were of a minor nature and did not affect the risk assessment.	The department notes the comments and has amended the licence if deemed necessary.

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

Existing Condition no.	New Condition no.	Proposed amendments
n/a	n/a	Increase of approved premises production or design capacity table for Category 61 from 252 to 500 tonnes per annual period.
1.1.2	n/a	New definitions for e-waste, green waste, and household hazardous waste. References included for the Leachate Management Plan and the Surface Water Management Strategy.
1.2.1	n/a	Increase of approved premises production or design capacity for Category 61 from 252 to 500 tonnes per annual period.
1.2.1	n/a	Addition of waste acceptance for HHW, e-waste, scrap metal, green waste, cardboard, furniture, lead and dry cell batteries polystyrene, waste mineral oil
1.2.2	n/a	Addition of waste processing for HHW, e-waste, scrap metal, green waste, cardboard, furniture, lead and dry cell batteries polystyrene, waste mineral oil
n/a	1.2.18	New condition to capture spill or leak management recovery, removal and disposal
n/a	1.2.19	New condition to capture appropriate storage and disposal of accumulated liquids and residues

Existing Condition no.	New Condition no.	Proposed amendments
n/a	1.2.20	New condition to capture fire management for the Dangerous Goods and HHW areas
n/a	1.2.21	New condition to capture the Surface Water and Leachate Management Plan implementation
2.1.1	n/a	Removal of submission of Surface Water Management Strategy and Leachate Management Plan. Submitted 10 November 2022
2.1.1 (2)	2.1.1 (1)	Updated submission due date of a Landfill Gas Management Plan to 31 March 2024.
n/a	Schedule 5	Included to capture the accepted materials for HHW
n/a	Schedule 5 - Map 7	Addition of map to capture the Dangerous Goods and HHW site layout

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 2 - Household Hazardous Wastes

Acids
Aerosols – CFC based
Aerosols, flammable – paint and lacquers
Aerosols, flammable - pesticide
Alkalis
Arsenic based products
Batteries - household, dry cell
Cyanides
Engine coolants and glycols
Fire extinguishers – non-Halon
Flammable liquids – hydrocarbons and fuels
Flammable solids
Flares
Fluorescent tubes, compact fluorescent lights and light fittings
Gas cylinders – other
Gas cylinders – propane
General household chemicals e.g., cleaners
Heavy metal compounds
Inorganic oxidising agents – e.g., pool chlorine
Low level radioactive substances e.g., smoke detectors
Mercury – elemental
Organic peroxides
Paint – metal based
Paint – other, including isocyanates and amines
Paint – recyclable
Paint – solvent based, including resins and adhesives
Paint – water based

PCB materials
Pesticides – non-Schedule X
Pesticides – Schedule X
Solvents – halogenated
Toxics

Appendix 3: 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:	L6963/1997/14	
		Relevant works approval number:		N/A <input type="checkbox"/>
Registration	<input type="checkbox"/>	Current works approval number:		None <input type="checkbox"/>
Date application received		30 November 2022		
Applicant and Premises details				
Applicant name/s (full legal name/s)		Mindarie Regional Council		
Premises name		Tamala Park Waste Management Facility		
Premises location		1700 Marmion Avenue CLARKSON WA 6030 Being part of Lot 9020 on Plan 408820		
Local Government Authority		City of Wanneroo		
Application documents				
HPCM file reference number:		DWERDT694867		
Key application documents (additional		Site Management Plan		

to application form):	Dangerous Goods & Recyclable Waste Site Plan Annual tonnage for 2021-2022 Dangerous Goods Risk Assessment Soil sampling summary report Banksia Woodlands TEC Assessment DWER - MRC Licence - suggestion wording
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Scope of application/assessment

Summary of proposed activities or changes to existing operations.	Operation of Waste Management Facility Category 61 proposed to increase to 500 tonnes design capacity per annual period. Add Hazardous Waste interpretation to licence condition 1.1.2. Amendments to licence condition 1.2 (Table 1.2.1) to reflect proposed inclusions in waste acceptance limits and specification. Amendments to licence condition 1.2 (Table 1.2.2) to reflect proposed waste processing limits and specification. Addition of Schedule 5 to indicate Household Hazardous Wastes Accepted.
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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
Category 12: <i>Screening etc. of material</i>	1,500,000 tonnes per annual period	N/A
Category 57: <i>Used tyre storage (general)</i>	500 tyres (at any one time)	N/A
Category 61: <i>Liquid waste facility</i>	252 tonnes per annual period	Increase to 500 tonnes per annual period
Category 61A: <i>Solid waste facility</i>	1,500 tonnes per annual period	N/A
Category 62: <i>Solid waste depot</i>	15,000 tonnes per annual period	N/A
Category 64: <i>Class II or III putrescible landfill site</i>	350,000 tonnes per annual period	N/A
Category 77: <i>Concrete batching or cement products manufacturing:</i>	30,000 tonnes per annual period	N/A

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: 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: 000629 EPA Report No: 1139 Note: The site does not have a Ministerial Statement (MS) specific for the site. The MS Relates to Metropolitan Regional Scheme to accommodate modifications to zones and reserves for Clarkson-L6963/1997/14. Condition 2 of the MS requirements the scheme to maintain a 500 meter buffer from the active landfill face areas.
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 checked="" type="checkbox"/> Expiry: 30/06/2032 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?
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
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

<p>Has the applicant applied for, or have an existing RIWI Act licence or permit in relation to this proposal?</p>	<p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>	<p>Application reference No: N/A Licence/permit No:68672, 173726, 200058 and 17591. Licence / permit not required: N/A</p>
<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: N/A Type: N/A Has Regulatory Services (Water) been consulted? Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/> Regional office: N/A</p>
<p>Is the Premises situated in a Public Drinking Water Source Area (PDWSA)?</p>	<p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>	<p>Name: Part of Perth Ground Water Area Priority: P3 Note: The Site is located immediately to the west of Priority 3 (P3) Public Drinking Water Source Protection Area, which is located within the Premises boundary and to the east. Are the proposed activities/landuse compatible with the PDWSA (refer to WQPN 25)? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input 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 checked="" type="checkbox"/> No <input type="checkbox"/></p>	<p>Dangerous Goods Safety Act 2004 - Department of Mines, Industry Regulation and Safety (DMIRS) Licence #DGS020256 Environmental Protection (Controlled Waste) Regulations 2004</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>Is the Premises subject to any EPP requirements?</p>	<p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></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: - Contaminated - remediation required</p> <p>Date of classification: 29/07/2020</p> <p>A landfill leachate plume is present in groundwater migrating in a north-westerly direction. Landfill gas has been detected on site and is being intercepted to prevent off-site migration in a northerly direction.</p>
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Direct interest stakeholders

<i>City of Joondalup</i>	Letter to be sent Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
	Letter to be sent Yes <input type="checkbox"/> No <input type="checkbox"/>
	Letter to be sent Yes <input type="checkbox"/> No <input type="checkbox"/>
	Letter to be sent Yes <input type="checkbox"/> No <input type="checkbox"/>
	Letter to be sent Yes <input type="checkbox"/> No <input type="checkbox"/>