



Application for Works Approval

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

Works Approval Number	W6749/2022/1
Applicant	Shire of Waroona
File number	DER2022/000568
Premises	Buller Road Refuse Disposal Site 702 Buller Road WAROONA WA 6215 Legal description Lot 1701 on Deposited Plan 214632 As defined by the premises maps attached to the issued works approval
Date of report	21/02/2023
Decision	Works approval granted

Abbie Crawford
A/MANAGER, WASTE INDUSTRIES

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

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1. Decision summary

This decision report documents the assessment of potential risks to the environment and public health from emissions and discharges during the construction and operation of the premises. As a result of this assessment, works approval W6749/2022/1 has been granted.

2. Scope of assessment

2.1 Regulatory framework

In completing the assessment documented in this decision report, the Department of Water and Environmental Regulation (the department; DWER) 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 and overview of premises

The Shire of Waroona operates the Buller Road Refuse Disposal Site under Licence L6756/1996/11, which serves as a landfill site for mixed wastes disposal under Category 64. On 18 October 2022, the applicant submitted an application for a works approval to the department under section 54 of the *Environmental Protection Act 1986* (EP Act).

The application is to undertake construction works relating to the modification of an existing machinery shed into a waste acceptance and transfer shed at the premises. The shed will be a waste drop off point for the daily facility users, which will remove public access to the active landfill cell and mitigate the risk of unsupervised access to the landfill area. In addition, it will allow the gatehouse staff to search the waste to ensure any salvageable or hazardous material is removed prior to being disposed at landfill. The premises is approximately 8.5 km south-west of Waroona.

The premises relates to the categories and assessed production and design capacity under Schedule 1 of the *Environmental Protection Regulations 1987* (EP Regulations) which are defined in works approval W6749/2022/1. The infrastructure and equipment relating to the premises category and any associated activities which the department has considered in line with *Guideline: Risk Assessments* (DWER 2020) are outlined in works approval W6749/2022/1.

The works approval is for Category 62 to recognise that waste will be temporarily stored before being disposed of to landfill. The applicant has advised they do not intend on increasing the volume of waste accepted at the premises, therefore there are no proposed changes to Category 64 activities from the previously assessed Existing Licence L6756/1996/11. Category 62 is to be added to the licence once the works, in accordance with the works approval, are complete.

Table 1: Approved production capacity

Category	Assessed production capacity
Category 62: Premises on which waste is stored, or sorted, pending final disposal or reuse.	3,000 tpa

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 construction and operation which have been considered in this decision report are detailed in Table 2 below. Table 2 also details the control measures the applicant has proposed to assist in controlling these emissions, where necessary.

Table 2: Proposed applicant controls

Emission	Sources	Potential pathways	Proposed controls
Construction			
Dust	Construction of shed infrastructure	Air / windborne pathway	Water cart onsite and used to suppress dust if required. Excavation works not undertaken during periods of high wind speeds where prevailing winds are likely to impact on surrounding sensitive receptors.
Noise	Construction of shed infrastructure	Air / windborne pathway	Noise is minimised through limiting the hours of work to weekdays between 8:00am and 3:00pm, which are within the daytime hours in the Noise Regulations. Machinery only operated as required. All vehicle noise reduction measures will be maintained in good working order. Landfill area is surrounded by a buffer of native vegetation. Targets and limits as defined in the <i>Environmental Protection (Noise) Regulations 1997</i> .
Sediment laden Stormwater	Construction activities (construction and modification of shed infrastructure and equipment) for the solid waste depot	Overland runoff to adjacent vegetation and/ or seepage to groundwater	Clean stormwater is directed away from any areas where waste is present.

Emission	Sources	Potential pathways	Proposed controls
Operation (Including Time-Limited Operations)			
Fugitive odour	Temporary storage of waste	Air / windborne pathway	Waste will be removed from the transfer shed at the end of each day.
Noise	Operation of machinery and vehicle movements associated with the handling and disposal of waste.	Air / windborne pathway	<p>Noise is minimised through limiting the hours of work to weekdays between 8:00am and 3:00pm, which are within the day time hours in the <i>Environmental Protection (Noise) Regulations 1997</i>.</p> <p>Machinery only operated as required.</p> <p>All vehicle noise reduction measures will be maintained in good working order.</p> <p>Landfill area is surrounded by a buffer of native vegetation.</p> <p>Targets and limits as defined in the <i>Environmental Protection (Noise) Regulations 1997</i>.</p>
Dust	Vehicle movements and machinery	Air / windborne pathway	<p>Asbestos is accepted either wrapped or in a manner that prevents the release of fibres during receipt.</p> <p>Waste is placed in a defined area or area enclosed in a bund.</p> <p>Water cart onsite and used to suppress dust if required.</p>
Litter/windblown waste	Unloaded waste in active landfill areas	Air / windborne pathway	Waste will be pushed up regularly and thereby compacted, limiting its ability to become airborne.
Leachate	Temporary storage of putrescible waste in transfer shed	Overland runoff and seepage	<p>Transfer shed floor will contain a concrete base and concrete push walls.</p> <p>Clean stormwater is directed away from any areas where waste is present.</p> <p>Additional groundwater monitoring bores installed to monitor impacts.</p> <p>Groundwater monitoring undertaken in accordance with licence conditions.</p>
Contaminated stormwater	Stormwater	Overland runoff and seepage	Clean stormwater is directed away from any areas where waste is present.

3.1.2 Receptors

In accordance with the *Guideline: Risk Assessment* (DWER 2020), the Delegated Officer has excluded the applicant's employees, visitors, and contractors 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	~220m south east of the Premises boundary ~480m south west of the Premises boundary
Environmental receptors	Distance from prescribed activity
Multiple use category wetland, palusplain	Adjacent to eastern boundary of the Premises
Conservation category wetland, sumpland	~90m north of the Premises
Buller Nature Reserve	Adjacent to southern boundary of the Premises
Peel Harvey Environmental Protection Policy area	Premises located within policy area
Threatened Ecological Community – Banksia Dominated Woodlands of the Swan Coastal Plain	Mapped within, and adjacent to, the Premises boundary
Murray Groundwater Area – area proclaimed under the Right in Water and Irrigation Act 1914	Premises located within proclaimed area
Major surface water drain	~140m east of the Premises boundary
Groundwater	Depth to groundwater ~13-18m
Groundwater bores - beneficial use	~900m south east of the Premises boundary

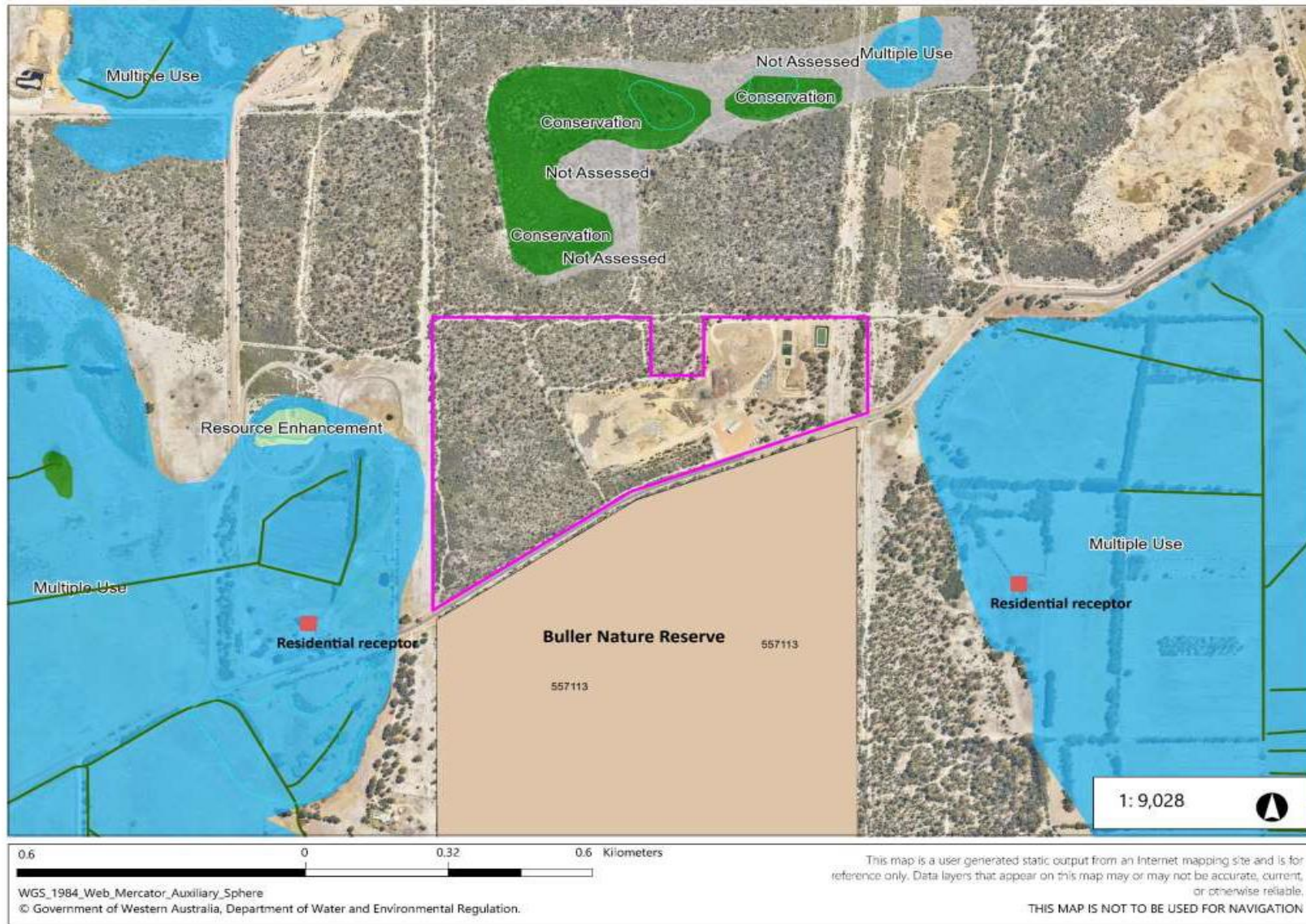


Figure 1: Distance to sensitive receptors

3.2 Risk ratings

Risk ratings have been assessed in accordance with the *Guideline: Risk Assessments* (DWER 2020) for each identified emission source 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 applicant 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 applicant's proposed controls to be critical to maintaining an acceptable level of risk, these will be incorporated into the works approval as regulatory controls.

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

Works approval W6479/2022/1 that accompanies this decision report authorises construction and time-limited operations. The conditions in the issued works approval, as outlined in Table 4 have been determined in accordance with *Guidance Statement: Setting Conditions* (DER 2015).

An amendment to existing licence L6756/1996/11 is required following the time-limited operational phase authorised under the works approval to authorise emissions associated with the ongoing operation of the waste acceptance and transfer shed. A risk assessment for the operational phase has been included in this decision report, however licence conditions will not be finalised until the department assesses the licence application.

Table 4: Risk assessment of potential emissions and discharges from the premises during construction

Risk events					Risk rating ¹ C = consequence L = likelihood	Applicant controls sufficient?	Conditions ² of works approval	Justification for additional regulatory controls
Sources / activities	Potential emission	Potential pathways and impact	Receptors	Applicant controls				
Construction								
Construction of waste acceptance/transfer area	Dust	Air / windborne pathway causing impacts to health and amenity	Residential premises	Refer to Section 3.1	C = Minor L = Rare Low Risk	Y	N/A	The Delegated Officer has considered the risk of dust as not foreseeable due to the separation distance between the source and receptors.
	Noise		Buller Nature Reserve					
Operation (Including Time-Limited Operations)								
Operation of waste transfer/ acceptance area	Dust and Noise from operation of machinery and vehicle movements associated with the handling and disposal of waste	Air / windborne pathway causing impacts to human health and amenity	Residential premises	Refer to Section 3.1	C = Slight L = Rare Low Risk	Y	N/A	The Delegated Officer has considered the risk of dust and noise as not foreseeable due to the separation distance between the source and receptors. Noise Emissions can be adequately managed by the <i>Environmental Protection (Noise) Regulations 1997</i> .
			Buller Nature Reserve					

Risk events					Risk rating ¹ C = consequence L = likelihood	Applicant controls sufficient?	Conditions ² of works approval	Justification for additional regulatory controls
Sources / activities	Potential emission	Potential pathways and impact	Receptors	Applicant controls				
	Spills of environmentally hazardous material including fuel, oil, or other hydrocarbons	Overland runoff	Buller Nature Reserve TEC Groundwater	Refer to Section 3.1	C = Moderate L = Unlikely Medium Risk	Y	Condition 9	The Delegated Officer considers that the applicant's controls and the regulatory controls specified are sufficient to regulate the spills of environmentally hazardous material emissions during time-limited operations.
	Windblow litter	Air/wind dispersion of waste causing visual amenity and nuisance impacts	Buller Nature Reserve TEC Residential premises	Refer to Section 3.1	C = Minor L = Unlikely Medium Risk	Y	Condition 5 of existing licence (L6756/1996/11)	The existing licence conditions are considered appropriate to manage the risk of windblown waste impacting receptors.
	Stormwater	Overland runoff into adjacent environment	Buller Nature Reserve TEC Wetlands	Refer to Section 3.1	C = Slight L = Rare Low Risk	Y	Condition 1 and 8	The Delegated Officer considers that the applicant's controls and the regulatory controls specified are sufficient to regulate contaminated stormwater emissions during time-limited operations.
	Fire and smoke	Air/wind dispersion of particulate matter resulting in health and amenity impacts to	Buller Nature Reserve TEC Residential	Refer to Section 3.1	C = Moderate L = Unlikely Medium Risk	Y	Condition 6 of existing licence (L6756/1996/11)	The Delegated Officer considers that the applicant's controls are sufficient to regulate fire and smoke

Risk events					Risk rating ¹ C = consequence L = likelihood	Applicant controls sufficient?	Conditions ² of works approval	Justification for additional regulatory controls
Sources / activities	Potential emission	Potential pathways and impact	Receptors	Applicant controls				
		sensitive receptors	premises					emissions during time-limited operations
	Leachate	Infiltration through soil profile to groundwater causing potential impacts on ecological values and beneficial uses associated with quality of water in the aquifer.	Peel Harvey Environmental Protection area. Groundwater dependent threatened ecological community located within and adjacent to the premises. Groundwater at 13-18m.	Section 3.1	C = Moderate L = Possible Medium Risk	Y	Conditions 1 and 7	Condition 7 requires waste to be unloaded in the shed, which minimises the risk of leachate entering the environment.

Note 1: Consequence ratings, likelihood ratings and risk descriptions are detailed in the *Guideline: Risk Assessments* (DWER 2020).

Note 2: Proposed applicant controls are depicted by standard text. **Bold and underline text** depicts additional regulatory controls imposed by department.

4. Consultation

Table 5 provides a summary of the consultation undertaken by the department.

Table 5: Consultation

Consultation method	Comments received	Department response
Application advertised on the department's website on 28 November 2022	No submissions received	N/A
Applicant was provided with draft documents on 16 February 2023	Applicant requests to expand throughput from 2,000 tpa to 3,000tpa on 20/02/2023.	Department increases throughput volume accordingly to 3,000 tpa on 21/02/2023. This increase does impact the risk assessment.

5. Conclusion

Based on the assessment in this decision report, the delegated officer has determined that a works approval will be granted, subject to conditions commensurate with the determined controls and necessary for administration and reporting 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.

Appendix 1: Application validation summary

SECTION 1: APPLICATION SUMMARY (as updated from validation checklist)				
Application type				
Works approval	<input checked="" 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 type="checkbox"/>	Current licence number:		
		Relevant works approval number:		N/A <input type="checkbox"/>
Registration	<input type="checkbox"/>	Current works approval number:		None <input type="checkbox"/>
Date application received				
Applicant and premises details				
Applicant name/s (full legal name/s)		Shire of Waroona		
Premises name		Buller Road Refuse Disposal Site		
Premises location		702 Buller Road WAROONA WA 6215		
Local Government Authority		Shire of Waroona		
Application documents				
HPCM file reference number:		DER2018/001042-8		
Key application documents (additional to application form):		Supporting Information Document, which includes: <ul style="list-style-type: none"> • Proof of Occupier Status • Premises Map • Description of Proposed Activities • Structural Plans • On ground photos of the premises 		
Scope of application/assessment				

SECTION 1: APPLICATION SUMMARY (as updated from validation checklist)

Summary of proposed activities or changes to existing operations.	<p>Modification of existing shed to seal the floor and provide side access to loader operator. This includes an internal and external push-wall for drop off and collection. Public drop off currently occurs at the waste tipping face out of sight of the staffed area. Works are intended to mitigate risk to the public by relocating the tipping and sorting area to an undercover, bunded and sealed.</p> <p>Layout/infrastructure plan includes delineation of water tanks, toilet block and gatehouse, however no proposed works are evident for these structures.</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 under existing licence	Proposed changes to the production or design capacity
Category 64: Class II putrescible landfill	5,000tpa	n/a
Category 61: Liquid waste facility	850tpa	n/a
Category 62: Solid waste depot	n/a	3,000 tpa

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 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 checked="" 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?
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.

SECTION 1: APPLICATION SUMMARY (as updated from validation checklist)

<p>Has the applicant applied for, or have an existing CAWS Act clearing licence in relation to this proposal?</p>	<p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p>	<p>Application reference No: N/A Licence/permit No: N/A No clearing is proposed.</p>
<p>Has the applicant applied for, or have an existing RIWI Act licence or permit in relation to this proposal?</p>	<p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p>	<p>Application reference No: Licence/permit No: Licence / permit not required.</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: Proclaimed Groundwater Area/Surface Water Area Has Regulatory Services (Water) been consulted? Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/> Regional office: Kwinana Peel</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 <u>WQPN 25</u>)? 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, Environmental Protection (Controlled Waste) Regulations 2004, State Agreement Act xxxx</i>)</p>	<p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>	<p>Environmental Protection (Controlled Waste) Regulations 2004 – controlled waste is accepted at the premises (K210 and K110)</p>
<p>Is the Premises within an Environmental Protection Policy (EPP) Area?</p>	<p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>	<p>Located within the Peel Harvey Protection Policy Area</p>
<p>Is the Premises subject to any EPP requirements?</p>	<p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p>	

SECTION 1: APPLICATION SUMMARY (as updated from validation checklist)

<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: 30/08/2017</p>
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