



Application for Licence Amendment

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

Licence Number	L8889/2015/1
Licence Holder	Eastern Metropolitan Regional Council
File Number	DER2018/000777-1
Premises	Red Hill Waste Management Facility Toodyay Road, Red Hill 6056 Legal description – Lot 1 on Diagram 15239, Lot 2 on Diagram 68630, Lot 11 on Diagram 69105 and Lot 12 on Deposited Plan 26468 As defined by the Premises maps attached to the Revised Licence
Date of Report	17 May 2021
Licence Number	L8889/2015/1
Decision	Revised licence granted

**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 L8889/2015/1 is held by Eastern Metropolitan Regional Council (EMRC) (Licence Holder) for the Red Hill Waste Management Facility (the Premises), located at Toodyay Road, Red Hill, being Lot 1 on Diagram 15239, Lot 2 on Diagram 68630, Lot 11 on Diagram 69105 and Lot 12 on Deposited Plan 26468.

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 L8889/2015/1 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 4 May 2021, the Licence Holder submitted an application to the department to amend Licence L8889/2015/1 under section 59 and 59B of the *Environmental Protection Act 1986* (EP Act). The application was in relation to proposed changes to acceptance requirements of asbestos material.

Condition 1 of the Licence L8889/2015/1 currently has the requirement:

“Before entry to the premises, any asbestos material is wrapped in heavy duty plastic”.

The Licence Holder is seeking a change to the wording of Condition 1 to be consistent with the *Environmental Protection (Controlled Waste) Regulations 2004*, which states under r.44 Part 3, Division 6 –

A person who takes material containing asbestos to a waste facility or to a place approved by the CEO under regulation 46(a) which is not –

(a) separated from other material for disposal where that is reasonably practicable; and

(b) wrapped or otherwise contained in a manner that prevents asbestos fibres entering the atmosphere during transportation on a road; and

(c) labelled or marked with the words “CAUTION ASBESTOS” in letters not less than 50 mm high”.

The impetus of the application relates to asbestos clean-up works resulting from the 2021 Wooroloo bushfires, whereby asbestos impacted soils and other bulky building materials containing asbestos containing materials (ACM) cannot be reasonably wrapped. Noting the requirements of the *Environmental Protection (Controlled Waste) Regulations 2004*, the Licence Holder has proposed that the amendment be applicable for all asbestos wastes acceptance for the future, rather than limited to asbestos waste resulting from the Wooroloo bushfires.

Given the nature of the impact of bushfire on these properties and the asbestos contained within, the asbestos waste is considered potentially friable. Bulky building materials likely to be impacted by friable asbestos include corrugated iron roof sheeting, timber structural members, steel structural members, windows, lintels, doors, screens, bricks, concrete and fence panels.

Transporting these bulky items and the quantity of spoil also associated with the clean-up will require the use of tip trucks. Plastic lining within the tip truck bins and trays can be readily compromised by being torn and shredded by the bulky materials resulting in the lining and sealing with plastic becoming ineffective.

DWER notes that specific controls were submitted as part of the application relating to Wooroloo bushfire asbestos waste, particularly in relation to transport of the waste. While these controls have been considered, it is acknowledged that future acceptance of bulk asbestos contaminated material may not occur in accordance with the proposed Licence Holder controls specified for the bushfire waste. Allowing for deviation from these measures, DWER has considered other appropriate controls while still mitigating the risks associated with asbestos acceptance and disposal continuing after the bushfire waste clean-up process.

The asbestos material is proposed to be disposed of in the existing asbestos disposal location, within the Stage 15 cell (refer Figure 1). This cell has ceased disposal of putrescibles wastes, with the remaining airspace used exclusively for asbestos. The Licence Holder advised that asbestos waste is disposed of on top of the existing wastes, with no excavation of existing landfilled waste undertaken. Cover of the asbestos waste is then undertaken using putrescible waste awaiting disposal.

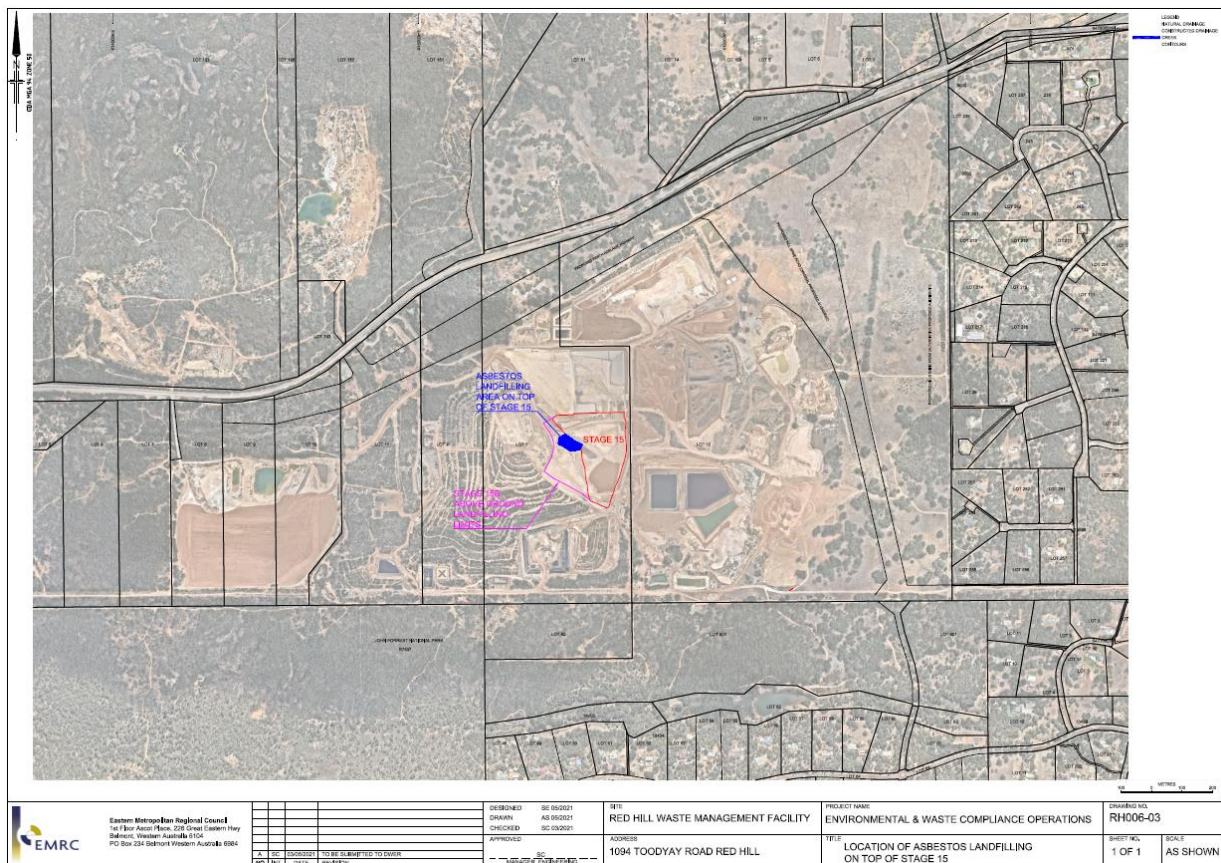


Figure 1. Asbestos disposal location

This amendment is limited only to the acceptance of asbestos material, and no changes to the throughput capacity for categories relating to the Premises have been proposed. No further changes to the aspects of the existing Licence have been requested by the Licence Holder.

2.3 Part IV of the EP Act

The Premises is currently subject to five Ministerial Statements (MS) under Part IV of the EP Act. In regulating the premises under Part V, Division 3 of the EP Act, DWER will seek to avoid duplication of requirements imposed under Part IV. Pursuant to section 59B(7) of the EP

Act, DWER will also not amend a Part V licence that is contrary to, or otherwise than in accordance with, an implementation agreement or decision.

A summary of the respective Ministerial Statements is provided below:

- MS 274 (15 July 1992) – Relates to the Red Hill Waste Management Facility Extension;
- MS 462 (21 November 1997) – Relates to the establishment of Class IV waste disposal cells at the existing Red Hill Waste Management Facility; and
- MS 976 (9 July 2014), MS 1092 (5 March 2019) and MS 1122 (20 January 2020) – Relate to the proposal to construct and operate a resource recovery facility within the existing Red Hill Waste Management Facility, for the processing of waste to produce energy, using either anaerobic digestion or gasification technology.

The scope of the amendment relates to MS 274 and 462. The proposed licence amendment does not propose to alter or duplicate requirements covered under these existing Statements.

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 *Guidance Statement: Risk Assessments* (DER 2017).

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 1 below. Table 1 also details the proposed control measures the Licence Holder has proposed to assist in controlling these emissions, where necessary.

Table 1: Licence Holder controls

Emission	Sources	Potential pathways	Proposed controls
Dust containing asbestos fibres	Acceptance, handling and disposal of bulk asbestos contaminated material	Air/windborne pathway (includes the subsequent deposition to land and/or waters)	<ul style="list-style-type: none"> - When trucks containing bulk asbestos material arrive at the Premises, they will be directed to a separate area in the northern section of the Class III Stage 15 landfill cell. See Figure 1. The asbestos contaminated waste will be disposed in isolation from customers and staff and other traffic on site. - A water cart will be made available at the time of tipping to ensure any dust is contained in the designated area. - The tailgate of the delivery trucks will be protected from material loss through the use of sealed, leak-proof tail gated trucks and tarping systems. - Dampening and dust suppression via the

Emission	Sources	Potential pathways	Proposed controls
			<p>use of a non-fluorinated proprietary foam (100% bio-degradable) on asbestos material will be undertaken prior to truck loading. The Safety Data Sheet for the foam (Product name: Thuroona foam) states that the foam is not classified as hazardous according to Safe Work Australia Criteria.</p> <ul style="list-style-type: none"> - Foam is applied to each loading bucket prior to loading within the truck. Hence, the material within the truck is adequately bonded, rather than just the surface area. <p>The process will involve the use of a high-volume foam generator that contains a surfactant that is specifically designed to be used on asbestos impacted soils. Foam will be applied prior to and during loading to minimise the risk of the generation of airborne particles.</p> <ul style="list-style-type: none"> - Through the use of the foam, the asbestos particles becomes wetted, with it's weight increased, reducing the likelihood of airborne emissions. - The asbestos material remains wetted throughout transportation and disposal. - During disposal, the asbestos material is in a moist spadable consistency, with a low potential for airborne fibre emissions.

3.1.2 Receptors

In accordance with the *Guidance Statement: Risk Assessment* (DER 2017), 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 2 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 (*Guidance Statement: Environmental Siting* (DER 2016)).

Table 2: Sensitive human and environmental receptors and distance from prescribed activity

Human receptors	Distance from prescribed activity
Semi-rural residential areas and farms	<p>Distance from Class III (Stage 15) landfill:</p> <p>Immediately to the north and north-east of the Premises: multiple lots ranging from approximately 750m from the Stage 15 landfill operation.</p> <p>Immediately to the east of the Premises (Lot 12): Barbarich Estate comprising of multiple lots ranging from approximately 1 km from Stage 15.</p> <p>To the south and south-east of the of the Premises: multiple lots ranging from approximately 750m from stage 15. Lots are separated from the Premises by a vegetation buffer (approximately 260m to 400m wide) located on Lot 82 on Diagram 18309 and Lot 501 on Plan 40105, Parkerville (owned by EMRC), followed by a drainage/public recreation reserve (approximately 50m to 125m wide) on Lot 62 on Plan 23731 and Lot 15403 on Plan 40033, Parkerville (vested in the Shire of Mundaring).</p>
Environmental receptors	Distance from prescribed activity
Parks and Wildlife Management Lands and Waters	John Forrest National Park: adjacent to the southern boundary of the premises.
Threatened/Priority Fauna	<p>The following species were identified within 2,000 m of the premises boundary:</p> <ul style="list-style-type: none"> • Two endangered species (Baudin’s cockatoo and Carnaby’s cockatoo). • One vulnerable species (forest red-tailed black cockatoo). • One species of migratory bird protected under an international agreement (fork-tailed swift). • One Priority 4 species (quenda). <p>One species of special conservation interest (south-western brush-tailed phascogale).</p>
Groundwater	<p>There are two distinct water bearing layers underlying the site:</p> <ul style="list-style-type: none"> • The upper layer comprises of a perched water table associated with shallow lateritic sediments mainly on low lying areas which have developed above pallid zone clays (impermeable layer of kaolinitic clays). Perched aquifers are reported to be limited in their lateral extent and considered ephemeral during and post winter. • The lower layer comprises the regional groundwater table within granite bedrock (fracture systems) or within extensive saprolite grits (porous, weathered bedrock) often semi

	<p>confined by pallid zone clays.</p> <p>The base of Stage 15 has been constructed to maintain a three metre separation distance between the base of the landfill and the underlying regional groundwater table.</p> <p>The Premises is not located within a <i>Rights in Water and Irrigation Act 1914</i> proclaimed Groundwater Area.</p>
Surface water	<p>Susannah Brook (Significant Stream)</p> <ul style="list-style-type: none"> • Approximately 1km to the north of the Premises. <p>Christmas Tree Creek (Watercourse - minor, perennial)</p> <ul style="list-style-type: none"> • Approximately 370m to the south of the Premises and 680m from the Stage 15 site. • Flows in a westerly direction parallel to the southern boundary of the premises and is a tributary to the Jane Brook and Swan River.

3.2 Risk ratings

Risk ratings have been assessed in accordance with the *Guidance Statement: Risk Assessments* (DER 2017) 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 3.1.1), 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 3.

The Revised Licence L8889/2015/1 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 3. 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				
Operation								
Acceptance, handling and disposal of asbestos material	Dust potentially containing asbestos fibres	Air/windborne pathway causing impacts to health and amenity: Direct inhalation	Multiple lots ranging from approximately 750m from the Stage 15 cell	Refer to Section 3.1.1 Refer to Section 3.1.1	C = Major L = Unlikely Medium Risk	Y	Condition 1 Condition 5	The acceptance and disposal of asbestos material is consistent with the <i>Environmental Protection (Controlled Waste) Regulations 2004</i> .
		Air/windborne pathway causing impacts to health and amenity: Deposition to land, rainwater tanks and/or dams/ponds (including catchment areas)				Y	Condition 1 Condition 5	DWER considers the Licence Holder's controls sufficient to mitigate the generation of airborne asbestos fibres during acceptance, handling and disposal of bushfire asbestos material waste. Due to the continued acceptance of bulk asbestos contaminated material following the bushfire process, DWER has specified acceptance and disposal requirements relating to containment and the prevention of airborne asbestos fibres.
		Air/windborne pathway impacting surface water and transporting free fibres downstream.	Susannah Brook: Approximately 1km to the north of the Premises. Christmas Tree Creek: Approximately 370m to the south of the Premises and 680m from the Stage 15 cell.	Refer to Section 3.1.1	C = Major L = Unlikely Medium Risk	Y	Condition 1 Condition 5	DWER considers the containment requirements, in addition to the immediate cover requirements, sufficient to mitigate the potential for asbestos fibres entering the atmosphere.

Note 1: Consequence ratings, likelihood ratings and risk descriptions are detailed in the *Guidance Statement: Risk Assessments* (DER 2017).

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 4 provides a summary of the consultation undertaken by the department.

Table 4: Consultation

Consultation method	Comments received	Department response
Licence Holder was provided with draft amendment on 11 May 2021	<p>- Consideration given to specify or have reference to 'bulky material' or 'material that cannot be practicably wrapped in plastic such as bulky material' to avoid confusion.</p> <p>Confirmation that bulking asbestos containing material will be placed onto existing waste within the Stage 15 cell, with no excavation occurring into the existing landfill.</p>	<p>Requirements have been specified in waste acceptance conditions to ensure related waste materials are contained in a manner to prevent the release of asbestos fibres into the atmosphere.</p> <p>Waste cover requirements also specified for the disposal of wrapped and un-wrapped ACM and/or asbestos contaminated soils.</p>

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 5 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 5: Summary of licence amendments

Condition no.	Proposed amendments
1, Table 1	Changes to the acceptance requirements for Special Waste Type 1.
5, Table 3	Inclusion of disposal controls relating to Special Waste Type 1.
Definitions	Inclusion of new definitions relating to asbestos and other waste types (inert waste type 1 and 2)

References

1. Department of Environment Regulation (DER) 2019, *Guideline: Decision Making*, Perth, Western Australia.
2. DER 2016, *Guidance Statement: Environmental Siting*, Perth, Western Australia.
3. DER 2015, *Guidance Statement: Regulatory Principles*, Perth, Western Australia.
4. DER 2017, *Guidance Statement: Risk Assessments*, Perth, Western Australia.
5. DER 2015, *Guidance Statement: Setting Conditions*, Perth, Western Australia.

Appendix 1: 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:	L8889/2015/1	
		Relevant works approval number:		N/A <input type="checkbox"/>
Registration	<input type="checkbox"/>	Current works approval number:		None <input type="checkbox"/>
Date application received		4 May 2021		
Applicant and Premises details				
Applicant name/s (full legal name/s)		Eastern Metropolitan Regional Council		
Premises name		Red Hill Waste Management Facility		
Premises location		Lot 1 on Diagram 15239, Lot 2 on Diagram 68630 and Lot 11 on Diagram 69105 Toodyay Road red Hill and Lot 12 on Plan 26468 Toodyay Road Gidgegannup		
Local Government Authority		City of Swan		
Application documents				
HPCM file reference number:		DWERDT447632		
Key application documents (additional to application form):		Thuroona - Bushfire Clean Up Project – Project Specific Standard for Asbestos Transport Using Unlined Trucks		
Scope of application/assessment				

<p>Summary of proposed activities or changes to existing operations.</p>	<p>6. Licence amendment</p> <p>Condition 1 of Licence L8889/2015/1 currently states: “Before entry to the premises, any asbestos material is wrapped in heavy duty plastic”.</p> <p>The EMRC is seeking a change to the wording of Condition 1 as stated in the Licence, to the wording stated in the <i>Environmental Protection (Controlled Waste) Regulations 2004</i>.</p> <p>Amendment to this condition of the licence, will enable the acceptance and disposal of asbestos contaminated soil/material or bulky building material at the Red Hill Waste Management Facility that cannot be wrapped such as that resulting from the 2021 Wooroloo bushfires.</p>
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Category number/s (activities that cause the premises to become prescribed premises)

Table 1: Prescribed premises categories

Prescribed premises category and description	Assessed production or design capacity	Proposed changes to the production or design capacity (amendments only)
Category 64: Class II or III putrescible landfill site	7. 350,000 tonnes per annual period	No change
8.		

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 checked="" type="checkbox"/> No <input type="checkbox"/>	Ministerial statement No: MS274 and MS462 EPA Report No:
Has the proposal been referred and/or assessed under the EPBC Act?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Reference No:
Has the applicant demonstrated occupancy (proof of occupier status)?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Certificate of title <input type="checkbox"/> General lease <input type="checkbox"/> Expiry: Mining lease / tenement <input type="checkbox"/> Expiry: Other evidence <input type="checkbox"/> Expiry: Demonstrated through previous applications
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.
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 type="checkbox"/> No <input checked="" type="checkbox"/>	Name: N/A Type: Has Regulatory Services (Water) been consulted? Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/> Regional office:
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: P1 / P2 / P3 / 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 type="checkbox"/>
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>)	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
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 type="checkbox"/>	Classification: Contaminated - remediation required Date of classification: Oct 27, 2015