



Application for Licence Amendment

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

Choose an item.	L7120/1997/12
Choose an item.	City of Busselton
File Number	DER2013/001432-1
Premises	Rendezvous Road Transfer Station 39 Rendezvous Road VASSE WA 6280 Being Lot 500 on Plan 55437 As defined by the Premises maps attached to the Revised Licence
Date of Report	4 October 2022
Decision	Revised licence granted

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REGULATORY SERVICES

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

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1. Decision summary

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 construction and operation of the Premises. As a result of this assessment, Revised Licence L7120/1997/12 has been granted.

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 Amendment summary

On 10 March 2022, the Licence Holder submitted an application to the department to amend the Licence under section 59 and 59B of the *Environmental Protection Act 1986* (EP Act). The following amendments are being sought:

- allow for the following upgrade works to be carried out in relation to the treatment pad for acid sulfate soil (ASS);
 - expansion of treatment pad for acid sulfate soil (ASS) from 45m x 12m to 45m x 25m;
 - the treatment pad to be overlain with 0.15m (150mm) compacted limestone;
 - the treatment pad footprint will be surrounded by a 150 mm limestone bund.
- change the design capacity of Category 61A to 15,000 tonnes and Category 62 to 24,000 tonnes annually;
- change the inert waste type 1 quantity limit to 2,000 tonnes;
- change the inert waste type 2, putrescible waste and hazardous waste quantity limit to 22,000 tonnes;
- change the acid sulphate soil quantity limit to 5,000 tonnes per annual period;
- allow the licence holder to accept 800 m³ (1120 tonnes) of acid sulphate soil at any one time for processing; and
- approve production of 4,000 tonnes of shredded green waste for offsite composting per annual period.

Table 1 below outlines the proposed changes to the existing Licence

Table 1: Proposed design or throughput capacity changes

Category	Current throughput capacity	Proposed throughput capacity	Description of proposed amendment
61A	1400 tonnes per annual period	9000 tonnes per annual period	The licence holder is seeking approval for the expansion of treatment pad for acid sulfate soil. Dredging of the lower Vasse

			<i>River will commence soon with materials pumped into geobags. The dried material will be transported to the Busselton Transfer Station for treatment on the Acid Sulphate pad. The turnaround time for the treatment process will be 72 hours.</i>
62	<i>15,000 tonnes per annual period</i>	<i>24,000 tonnes per annual</i>	<i>A stationary compacter will be used to transfer loads from the rubbish trucks into the semi-trailer for disposal.</i>

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 the expansion and operation of the treatment pad for Acid Sulphate Soil (ASS) which have been considered in this Amendment Report are detailed in

Table 22 below. The Category approved premises production volume has been revised for Category 61A and Category 62 in accordance with the amendment application. The Delegated Officer considers this change to volumes minor and does not impact or alter the risk rating of the premises operation. The premises does not discharge any waste to land, surface water, groundwater, or air through its current operation.

Table 22 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
<i>Odour</i>	<i>Geobags containing Acid Sulphate soil in cut open. From the storage handling and compaction of putrescible waste.</i>	<i>Air/windborne pathway</i>	<i>ASS materials will arrive on site in a dried condition therefore should produce minimal odour. The Licence Holder has installed roofing over the hook lift bins for the receipt of putrescible wastes to prevent the access of stormwater. The site records odour incidence or complaints received regarding odour. Operations are timed for wind conditions</i>

Emission	Sources	Potential pathways	Proposed controls
			<p>directing odour away from residences to the north of the Premises.</p> <p>Temporary cover soil for spreading at the end of each day with 'odour knockout spray' available for use if required.</p>
<i>Dust</i>	<p><i>Acid sulphate soils</i></p> <p><i>Waste compaction</i></p> <p><i>Shredding of green waste for offsite composting</i></p>	<i>Air/windborne pathway</i>	<p>Spraying the surface of the ASS stockpile to keep it moist using iron-free or neutralising solution.</p> <p>Will comply with the general provisions of the EP Act.</p> <p>As per licence condition Table 2 ASS will either be covered or maintained in a damp condition to prevent dust emissions.</p> <p>Domestic vehicles will be restricted to the community recycling and waste transfer station areas, which have sealed roadways and concrete hardstands.</p> <p>Hook-lift bins have temporary covers to minimise dust and windblown waste lift-off during loading or unloading.</p> <p>The waste compactor is an enclosed unit with a hopper for the loading of waste.</p> <p>Dampening of loads prior to unloading, minimisation of material movements, dampening of trafficable areas, ceasing of operations in adverse weather, dampening during screening activities.</p> <p>Operations are only conducted when there is not a strong southerly breeze blowing, to reduce impacts of dust emissions for the nearby receptors.</p>
<i>Leachate</i>	<i>Acid sulphate soils dredged from the river</i>	<i>Seepage to soils and groundwater</i>	<p>Hardstand constructed to meet not less than 1×10^{-8} m/s permeability with bunds surrounding the footprint of the treatment pad.</p> <p>The treatment cell is lined (bitumen and limestone) and banded (150 mm high compacted limestone bunds) to exclude stormwater from outside entering the area and prevent leachate from inside getting out, and the cell will also have a fall to allow the collection of leachate at one point.</p> <p>Any leachate produced will be inspected and tested daily, overseen by an experienced environmental consultant to ensure it is between 6 – 8.5 Ph (ANZECC) prior to discharge.</p>
<i>Noise</i>	<p><i>Vehicle movements</i></p> <p><i>Waste compaction</i></p> <p><i>Shredding of green waste</i></p> <p><i>From various activities</i></p>	<i>Air/windborne pathway</i>	<p>Any noise impacts resulting from the Premises will be adequately managed under the Environmental Protection (Noise) Regulations 1997.</p> <p>Shredding of green waste and waste compaction activities will be restricted to the operating hours of 7am to 4pm Monday to Friday.</p>

Emission	Sources	Potential pathways	Proposed controls
	<p><i>related to the movement and handling of ASS, including machinery and vehicle movements.</i></p>		<p><i>Operations are only conducted when there is not a strong southerly breeze blowing, to reduce impacts of noise emissions for the nearby receptors.</i></p> <p><i>The shredding equipment is also owned and operated by a contractor who is required to maintain the machinery to current noise muffling standards.</i></p> <p><i>The ASS treatment activities will only occur during daylight hours.</i></p>
<p><i>High levels of sulfides in the treated product.</i></p> <p><i>Sulfide in the soil then could react with metals to form metal sulfides that release acid when exposed to air. If exposed to air, the metal sulfides react with oxygen to produce sulfuric acid, which can seriously affect water and soil quality.</i></p>	<p><i>Acid sulphate soils</i></p>	<p><i>Direct discharge- Seepage to soils and groundwater</i></p> <p><i>The leaching of oxidised ASS may result in impacts to the superficial aquifer, including acidification and the release of heavy metals and other contaminants.</i></p>	<p><i>All stockpiles will be labelled, clearly stating the date and time when the first material was excavated and stockpiled.</i></p> <p><i>Liming of ASS will be undertaken within 70 hours of opening the Geo-tubes by mechanical mixing with finely crushed limestone (e.g., Aglime) into stockpiled soils.</i></p> <p><i>If sediments are unable to be uniformly blended with Aglime in-situ within the opened Geo-tubes in the lined basin, ASS will be transferred from the Geo-tubes lined basin and placed on compacted limestone treatment pads comprising a minimum thickness of limestone of 150 mm. The thickness of the ASS will not exceed 0.5 m.</i></p> <p><i>Liming rates have been predetermined based on available information; however daily pH testing and formal validation testing (using sample frequencies from the Landfill Waste Classification and Waste Definitions) will allow the flexibility to ensure that ASS is effectively treated on a case-by-case basis.</i></p> <p><i>Mechanical mixing of additional Aglime will occur until the performance criteria are met.</i></p> <p><i>Following mixing, surface area of the stockpile will be minimised to reduce the extent of material exposed to atmospheric oxygen.</i></p> <p><i>The stockpile will be capped or lined with a material that will minimise its drying by wind and sun and prevent the ingress of rainfall.</i></p> <p><i>Validation sampling (i.e., field pH and net acidity as detailed) of the treated and neutralised sediment material will be conducted post-treatment to confirm appropriate neutralisation has been undertaken.</i></p> <p><i>No treated material will be reused or removed from site, until the necessary validation testing has been undertaken and the material has been confirmed as suitable for backfilling by the Environmental Consultant.</i></p> <p><i>If offsite disposal/reuse is required after treatment, heavy metals and hydrocarbons will also be tested for.</i></p> <p><i>Dockets from trucks and the receiving waste facility will be retained by the contractor for</i></p>

Emission	Sources	Potential pathways	Proposed controls
			<i>inclusion in the closure reporting, along with laboratory certificates detailing that soil have been neutralised.</i>
<i>Fire/ smoke (Abnormal operation)</i>	<i>Greenwaste storage and shredding. The licence holder has requested approval to produce 400 tonnes of shredded green waste for offsite composting per annual period.</i>	<i>Air/windborne pathway</i>	<p><i>Existing controls and licence conditions will apply to manage the risk of noxious emissions from fire spreading to other areas i.e.</i></p> <p><i>Greenwaste is not burned as part of normal operation.</i></p> <p><i>The Licence Holder maintains a fence around the perimeter of the Premises to prevent unauthorised access to the Premises (reducing the risk of arson).</i></p> <p><i>Signage at the entry to the Premises includes a warning (including penalties) for the lighting of fires.</i></p> <p><i>Greenwaste is stored in its own discrete area of the Premises, and is arranged in separate rows, decreasing the volume of waste which could reasonably catch alight in one fire event and allowing access for fire control.</i></p> <p><i>Fire risk is also reduced through limiting the amount of greenwaste stored at the site and preventing excessively dry conditions from occurring within the greenwaste.</i></p>

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 33 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
Five rural residential properties	Immediately north of Premises, with the closest dwelling approximately 300m from the prescribed activity
Agricultural property (W)	Immediately west of the Premises, with dwelling approximately 215m from the boundary
Agricultural property (E)	Immediately east of the Premises, with dwelling approximately 300m from the prescribed activity
Water Corporation depot	Immediately southeast of the Premises, with closest building approximately 50m from the boundary
Environmental receptors	Distance from prescribed activity

Multiple priority ecological sites (10+)	500m buffer edges of four sites located inside Premises boundary; Other sites clustered northeast of Premises boundary.
Multiple threatened ecological sites (5+)	500m buffer edge 1100m northwest of Premises boundary
Geomorphic wetlands – Multiple use Dampland	1. 70m north of northwest corner of Premises 2. 320m north of Premises boundary 540m north of Premises boundary
Geomorphic wetland – Multiple use Sumpland	320m west of Premises boundary
Geomorphic wetland – Multiple use Floodplain	100m south of Premises boundary
RAMSAR listed wetland	More than 4km from the Premises boundary.

Surface water

The Premises is located within the Busselton Coastal catchment that drains north into Geopraphe Bay.

The Premises is designed to discharge some stormwater. While the most contaminated stormwater/leachate from the mixed domestic waste drop-off area is retained on the Premises in a large evaporation basin, stormwater from the community recycling area is directed to two ponds which are designed to overflow in a northerly direction through a gross pollutant trap. The Premises is understood to be essentially flat with an average elevation of 8 metres (m) AHD.

Statewide hydrological mapping suggests that the Premises is surrounded by various damplands and areas subject to inundation within a 500m distance. Mapping data also indicates that the southern and eastern boundaries of the Premises have minor drainage lines which drain in a northerly direction, eventually connecting with the Vasse Diversion Drain (approximately 1.6km north-northeast of the Premises). The Vasse Diversion Drain carries and diverts water from an upstream location (3.8km east-southeast of the Premises) of the Vasse River and diverts it to an outlet into Geopraphe Bay (3km north of the Premises). The Vasse River (Lower) in its natural location occurs 2.9km northeast of the Premises boundary.

Groundwater

Surface water generated from rainfall occurring over the low-lying parts of the coastal plain accumulates within the superficial horizons (superficial or unconfined aquifer), where winter levels are approximately 1 m below the surface, and 2 m below surface in summer. Flow direction is understood to be northwards towards the coast.

More locally at the Premises, measurements from 10 groundwater monitoring bores from July 2016 revealed that groundwater was encountered between approximately 1.3 – 3.5m below the top of the bore casings, confirming that groundwater is shallow at the Premises (approximately 0.6 – 2.8m below ground level). The depth to groundwater beneath the treatment cell is estimated to be approximately 5 m below ground.

Natural groundwater quality within the general area of the premises ranges from potable to moderately brackish (260 – 1,000 mg/L TDS). Levels of nitrogen in groundwater flowing under the premises are elevated and increase across the premises along the groundwater flow path from south to northwest. Residential properties to the north of the Site are known to extract groundwater for non-potable use.

Ground water contamination investigation

Groundwater monitoring carried out as part of the licence condition shows that groundwater at

the northern, down gradient boundary of the site is contaminated by landfill leachate. The main contaminants of concern identified through groundwater investigations are ammonia and arsenic. Groundwater in the area has also shown levels of hydrocarbons, metals, nutrients and PFAS above background levels.

The Department of Water and Environment Regulation (DWER) Contaminated Sites has recommended ongoing assessment of groundwater contamination including:

- Assessment of historical contaminant concentrations against groundwater elevations to identify possible seasonal variations that relate to changes in groundwater levels;
- Assessment of temporal trends in contaminant concentrations using appropriate statistical methods; and
- Further testing of groundwater for organic contaminants that have been detected at the site

Test results from the recent groundwater monitoring event within the investigation area indicated that the nature and extent of the contamination have, to a large extent, been determined, with no significant changes to the contamination plume and concentrations compared to previous test results.

Soil types

Undisturbed surface materials are sand and sandy clays to a depth of approximately 2m, where a limestone of the Tamala formation is encountered. Alternating limestone, sand and sandy clay layers occur to an average depth of 7 m, which is underlain by a stiff, grey micaceous clay layer, with a thickness of 8 – 12 m which separates the superficial formations from the interbedded sands, gravels and sandy clays of the Leederville Formation.

3.2 Meteorology

3.2.1 Rainfall and temperature

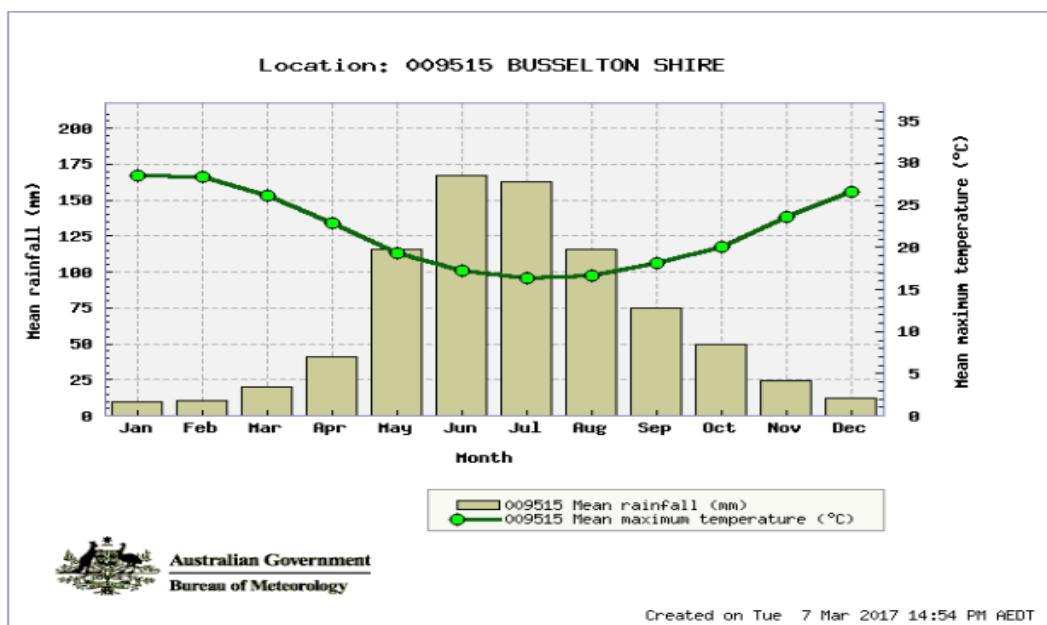


Figure 1: Mean maximum temperature and mean rainfall for Busselton

The Bureau of Meteorology also provides the 9am and 3pm wind speed and direction for Busselton, see Figure 2 and Figure 3 below. It is important to note that these wind roses show

historical wind speed and wind direction data for Busselton and should not be used to predict future data.

3.2.2 Wind direction and strength

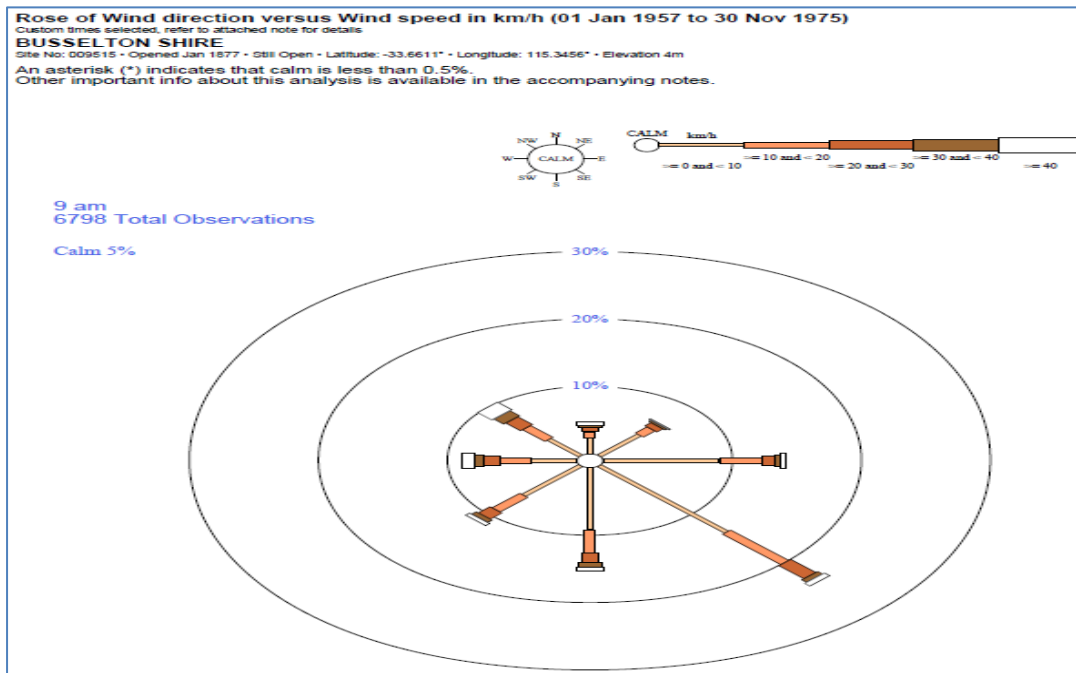


Figure 2: Busselton 9am average wind speed and direction

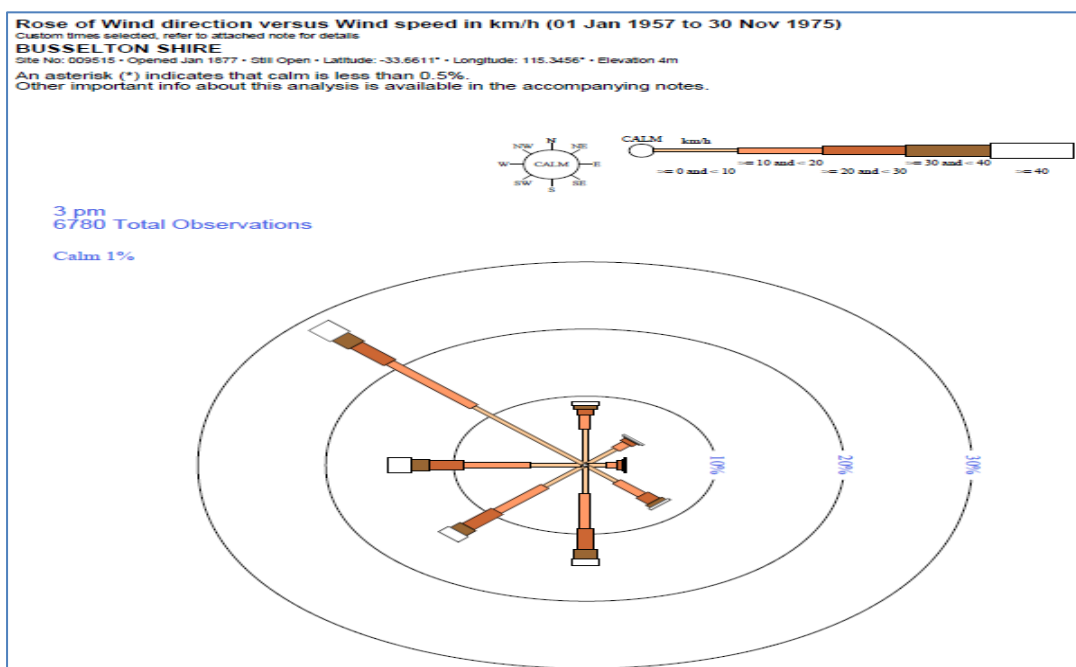


Figure 3: Busselton 3pm average wind speed and direction

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 0. 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 0), 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 44.

The Revised Licence L7120/1997/12 that accompanies this Amendment Report authorises emissions associated with the expansion and operation of the Acid Sulfate Soils (ASS) Remediation Pad Premises i.e. 61A and 62 activities.

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 construction and 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				
Construction								
Expansion of the Acid Sulfate Soils (ASS) Remediation Pad from 45m x 12m to 45m x 25m	Dust	Air/windborne pathway causing impacts to health and amenity	Five rural residential properties (closest 300m from the prescribed activities)	Refer to Section 3.1	C = Moderate L = Unlikely Medium Risk	Y	N/A	The Delegated Officer considers that the provisions of section 49 of the EP Act is sufficient to regulate dust emissions during construction.
	Noise			Refer to Section 3.1	C = Moderate L = Unlikely Medium Risk	Y	N/A	The Delegated Officer considers that noise emissions can be sufficiently managed through the Environmental Protection (Noise) Regulations 1997.
Operation								
<p>The Category approved premises production volume has been revised for Category 61A in accordance with the amendment application from 1,400 tonnes to 9,000 per annual period.</p> <p>The Category approved premises production volume has been revised for Category 62 in accordance with amendment application from 15,000 to 24,000 per annual period.</p> <p>The Delegated Officer considers this change to volumes minor and does not impact or alter the risk rating of the premises operation. The premises does not discharge any waste to land, surface water, groundwater, or air through its current operation.</p> <p>The waste acceptance Table 1 has also been amended in accordance with amendment application, i.e., decrease in the quantity limit to receive Inert waste type 2 from 10,000 tonnes to 2,000 tonnes, increase in quantity limit for putrescible waste and hazardous waste under Category 62 from 5,000 tonnes to 22,000 tonnes and increase in quantity limit for acid sulphate soils from 1,400 tonnes to 5,000 tonnes . The total annual throughput volume for Category 62 has therefore increased to 24,000 tonnes and Category 61A to 9000 tonnes per annual period.</p>								
Category 61A Waste compaction	Dust	Air/windborne pathway causing impacts to health and amenity	Five rural residential properties (closest 300m from	Refer to Section 3.1	C = Moderate L = Unlikely Medium Risk	Y	Condition 1 - sets the maximum quantities on wastes received	The Delegated Officer considers dust from unloading to be insignificant in the

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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				
			<i>the prescribed activities)</i>				<p><i>Condition 3 (Table 2)- includes various requirements to prevent dust liftoff or potential fugitive emission generation.</i></p> <p><i>Conditions 19 and 20- requires the maintenance of a complaints management system in which complaints received and resulting actions taken are recorded. A summary of complaints is also required to be reported in the Annual Environmental Report under condition 20.</i></p>	<i>context of the rest of operations. Potential emissions can be adequately regulated under the general provisions of the EP Act.</i>
	Noise	<i>Air/windborne pathway causing impacts to health and amenity</i>	<i>Five rural residential properties (closest 300m from the prescribed activities)</i>	<i>Refer to Section 3.1</i>	<p><i>C = Moderate</i></p> <p><i>L = Unlikely</i></p> <p>Medium Risk</p>	Y	<p><i>Condition 1 - sets the maximum quantities on wastes received</i></p> <p><i>Condition 3 (Table 2)- includes the requirement for the waste compactor to be located to maintain the proposed separation distance of 125m to the nearest private dwelling.</i></p> <p><i>Condition 7 (Table 3) – requires for the equipment's maintained in good working order, the maximum size of the motor and the working capacity of the compactor.</i></p> <p><i>Conditions 19 and 20- requires the maintenance of a complaints management system in</i></p>	<i>The Delegated Officer considers noise from unloading to be insignificant in the context of the rest of operations. Noise emissions will be subject to the Noise Regulations</i>

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Risk Event					Risk rating ¹	Licence Holder's controls sufficient?	Conditions ² of licence	Justification for additional regulatory controls
Source/Activities	Potential emission	Potential pathways and impact	Receptors	Licence Holder's controls	C = consequence L = likelihood			
							which complaints received and resulting actions taken are recorded. A summary of complaints is also required to be reported in the Annual Environmental Report under condition 20.	
	Odour	Air/windborne pathway causing impacts to health and amenity	Five rural residential properties (closest 300m from the prescribed activities)	Refer to Section 3.1	C = Moderate L = Unlikely Medium Risk	Y	<p>Condition 1- Conditions 1(Table 1)- sets all allowable waste types for acceptance on the Premises.</p> <p>Condition 3 (Table 2)- includes containment requirements for the storage of putrescible wastes to be within the hook-lift bins as per the Application, and for the bins to be roofed. This ensures leachate generation is avoided.</p> <p>Condition 19 and 20- requires the maintenance of a complaints management system in which complaints received and resulting actions taken are recorded. A summary of complaints is also required to be reported in the Annual Environmental Report under condition 20.</p>	The Delegated Officer considers odour will not have a foreseeable impact from the unloading and treatment process. Potential odour emissions can be adequately regulated under the general provisions of the EP Act.
	Smoke (from unauthorised	Air/windborne pathway causing	Five rural residential	Refer to Section	C = Moderate	Y	Conditions 3(Table 2)- no waste must be burnt on	The Delegated Officer considers

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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				
	<i>fire) related to greenwaste storage and mulching</i>	<i>impacts to health and amenity</i>	<i>properties (closest 300m from the prescribed activities)</i>	<i>3.1</i>	<i>L = Unlikely Medium Risk</i>		<i>the premises, five metre fire breaks around areas used to store green waste. Condition 4 - relating to implementing security measures, Condition 5 relating to signs warning indicating penalties for lighting fires Conditions 18 (AACR) & 20(reporting)</i>	<i>that the Environmental Protection (Unauthorised Discharges) Regulations 2004 can be used to regulate the emission of smoke from burning of Schedule 2 materials. The general provisions of the EP Act will also apply with regards to pollution that results from a fire event.</i>
Category 61A Greenwaste storage and shredding	<i>Dust</i>	<i>Air/windborne pathway causing impacts to health and amenity</i>	<i>Five rural residential properties (closest 300m from the prescribed activities)</i>	<i>Refer to Section 3.1</i>	<i>C = Moderate L = Unlikely Medium Risk</i>	<i>Y</i>	<i>Condition 1 - sets the maximum quantities on wastes received Condition 3 (Table 2)- includes various requirements to prevent dust liftoff or potential fugitive emission generation. Conditions 19 and 20- requires the maintenance of a complaints management system in which complaints received and resulting actions taken are recorded. A summary of complaints is also required to be reported in the Annual Environmental Report under condition 20.</i>	<i>NA- Potential emissions can be adequately regulated under the general provisions of the EP Act.</i>

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IR-T15 Amendment report template v3.0 (May 2021)

Risk Event					Risk rating ¹	Licence Holder's controls sufficient?	Conditions ² of licence	Justification for additional regulatory controls
Source/Activities	Potential emission	Potential pathways and impact	Receptors	Licence Holder's controls	C = consequence L = likelihood			
	Noise	Air/windborne pathway causing impacts to health and amenity	Five rural residential properties (closest 300m from the prescribed activities)	Refer to Section 3.1	C = Moderate L = Unlikely Medium Risk	Y	<p>Condition 1 - sets the maximum quantities on wastes received</p> <p>Condition 3 (Table 2)- includes the requirement for the shredder to be located to maintain the separation distance of 300m to the nearest private dwelling.</p> <p>Condition 7 (Table 3) –row 6 relating to the green waste storage area has been added to ensure the equipment's are maintained in good working order and fitted with muffler to reduce the amount of noise it produces.</p> <p>Conditions 19 and 20- requires the maintenance of a complaints management system in which complaints received and resulting actions taken are recorded. A summary of complaints is also required to be reported in the Annual Environmental Report under condition 20.</p>	<p>Licence condition added to ensure the closest residential property is not impacted by the shredder noise.</p> <p>The Delegated Officer also considers that noise emissions can be sufficiently managed through the Environmental Protection (Noise) Regulations 1997.</p>
	Smoke (from unauthorised fire) related to greenwaste storage and mulching	Air/windborne pathway causing impacts to health and amenity	Five rural residential properties (closest 300m from the prescribed	Refer to Section 3.1	C = Moderate L = Unlikely Medium Risk	Y	<p>Conditions 3(Table 2)- no waste must be burnt on the premises, five metre fire breaks around areas used to store green waste.</p> <p>Condition 4 - relating to</p>	<p>The Delegated Officer considers that the Environmental Protection (Unauthorised Discharges)</p>

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Risk Event					Risk rating ¹	Licence Holder's controls sufficient?	Conditions ² of licence	Justification for additional regulatory controls
Source/Activities	Potential emission	Potential pathways and impact	Receptors	Licence Holder's controls	C = consequence L = likelihood			
			activities)				<p>implementing security measures,</p> <p>Condition 5 relating to signs warning indicating penalties for lighting fires</p> <p>Conditions 18 (AACR) & 20(reporting)</p>	<p>Regulations 2004 can be used to regulate the emission of smoke from burning of Schedule 2 materials. The general provisions of the EP Act will also apply with regards to pollution that results from a fire event.</p>
<p>Category 62</p> <p>Treatment of Acid sulphate soil</p>	Odour	Air/windborne pathway causing impacts to health and amenity	Five rural residential properties (closest 300m from the prescribed activities)	Refer to Section 3.1	<p>C = Moderate</p> <p>L = Unlikely</p> <p>Medium Risk</p>	Y	<p>Condition 1 - sets the maximum quantities on wastes received</p> <p>Condition 3 (Table 2)- includes requirements for the receipt, storage, treatment, and off-site disposal of treated ASS.</p> <p>Condition 19 and 20- requires the maintenance of a complaints management system in which complaints received and resulting actions taken are recorded. A summary of complaints is also required to be reported in the Annual Environmental Report under condition 20.</p>	<p>NA- The Delegated Officer considers that potential odour emissions can be adequately regulated under the general provisions of the EP Act.</p>
	Dust	Air/windborne pathway causing impacts to health and amenity		Refer to Section 3.1	<p>C = Moderate</p> <p>L = Unlikely</p> <p>Medium Risk</p>	Y	<p>Condition 1 - sets the maximum quantities on wastes received.</p> <p>Condition 3 (Table 2)- includes various</p>	

Licence: L7120/1997/12

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				
							<p>requirements to prevent dust liftoff or potential fugitive emission generation.</p> <p>Conditions 19 and 20-require the maintenance of a complaints management system in which complaints received and resulting actions taken are recorded. A summary of complaints is also required to be reported in the Annual Environmental Report under condition 20.</p>	
	Noise	Air/windborne pathway causing impacts to health and amenity		Refer to Section 3.1	C = Moderate L = Unlikely Medium Risk	Y	<p>Condition 1 - sets the maximum quantities on wastes received</p> <p>Conditions 19 and 20- requires the maintenance of a complaints management system in which complaints received and resulting actions taken are recorded. A summary of complaints is also required to be reported in the Annual Environmental Report under condition 20.</p>	Noise can be regulated via the Noise Regulations. The site does not have a significant history of noise complaints; however, should complaints arise DWER may consider further conditions for the licence.
	Leachate	<p>Direct discharge-land and groundwater</p> <p>The leaching of oxidised ASS may result in impacts to the</p>	Underlying soil and groundwater	Refer to Section 3.1	C = Moderate L = Unlikely Medium Risk	Y	<p>Condition 1 - sets the maximum quantities on wastes received</p> <p>Condition 3 (Table 2)- includes the requirements relating to the treatment, storage, and disposal of</p>	The Delegated Officer considers that the risk of leachate discharging to land and infiltrating to ground water from the activities

Licence: L7120/1997/12

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				
		<i>superficial aquifer, including acidification and the release of heavy metals and other contaminants.</i>					<p>ASS.</p> <p>Condition 14, Table 4 relates to the recording of ASS received onsite.</p> <p>Condition 15, Table 5- requires the validation sampling for each batch of ASS that is treated, in accordance with what was committed to in the Licensee's Acid Sulfate Soil Management Plan. Additionally, the condition required sampling of the material in accordance with the Landfill Waste Classification and Waste Definitions 1996 (as amended) to determine an appropriate end-use and/or disposal. This monitoring also ensures that the treated ASS meet a particular pH standard before being removed from the treatment cell and to be classified for disposal/end-use.</p> <p>Conditions 19 and 20- require the maintenance of a complaints management system in which complaints received and resulting actions taken are recorded. A summary of complaints is also required to be reported in the Annual Environmental Report under condition 20.</p>	<p><i>associated with the treatment of ASS is deemed to be low at this stage.</i></p> <p><i>DWER may consider further conditions for the licence should ground water monitoring indicate that leachate from the treatment activities is recharging the ground water.</i></p>

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				
							<p><i>Conditions 21 and 22 require the submission of a final Closure Report after ASS treatment activities have been completed, in accordance with the 'Treatment and management of soil and water in acid sulfate soil landscapes' (DER 2015).</i></p> <p><i><u>Conditions 24 and 25 have been added to ensure that the expansion of the acid sulfate soils treatment cell occurs as was committed in the application.</u></i></p> <p><i><u>Conditions 26 and 27 have been added to ensure that the submission of a compliance document to certify construction has been completed to this effect.</u></i></p>	

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
<p><i>Licence Holder was provided with draft amendment on 30 August 2022</i></p>	<p><i>On 20 September 2022 the Licence Holder provided the following comments:</i></p> <p><i>The licence stipulates that the ASS remediation pad be overlain with 0.6m compacted limestone. Given that the pad has a sealed bitumen surface, we believe the engineered drawing requirement of a 0.15m compacted limestone pad (see attached drawing) should be sufficient to ensure protection of the environment.</i></p> <p><i>The licence also stipulates a minimum freeboard of 0.5m for the ASS remediation pad. Given that the material is dry and not liquid, we believe this freeboard is not a relevant requirement. The engineered drawing on the licence amendment does include an additional 0.15m limestone kerb for the pad which we believe will be sufficient to ensure protection of the environment.</i></p> <p><i>Mulching of green waste is a regular activity at the site, taking place around 3-4 times each year. The mulch is trucked to a compost farm to be used as a base product for compost. The nearest residence is 300m from the mulching site.</i></p>	<p><i>The Delegated Officer is aware under the “Treatment and management of soil and water in acid sulfate soil landscapes (June 2015)” guideline, the treatment pad should consist of a minimum 300-millimetre thickness of compacted crushed limestone, or other appropriate neutralisation material. However, since the pad is lined with bitumen and compacted crushed limestone, requested typographical changes has been adopted.</i></p> <p><i>Request adopted. 500mm freeboard requirement removed from the licence.</i></p> <p><i>Noted. The Delegated Officer is aware that shredded green waste is transported for off site composting. Therefore, the word Mulch has been removed from the licence. The site will be allowed to shred green waste for offsite composting.</i></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.

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
<i>Front page</i>	<i>The Category approved premises production volume has been revised for Category 61A to 900 tonnes and Category 62 to 24,000 tonnes per annual period.</i>
<i>Condition 1, Table 1</i>	<i>Table 1 has also been amended in accordance with amendment application, i.e., decrease in the quantity limit to receive Inert waste type 2 from 10,000 tonnes to 2,000 tonnes, increase in quantity limit for putrescible waste and hazardous waste under Category 62 from 5,000 tonnes to 22,000 tonnes and increase in quantity limit for acid sulphate soils from 1,400 tonnes to 5,000 tonnes.</i>
<i>Condition 3, Table 2 – row 4</i>	<i>Table 2 has been amended to allow the licence holder to produce 4000 tonnes of mulch per annual period.</i>
<i>Condition 3, Table 2 – row 6 item 1</i>	<i>Table 2 has been amended to allow the licence holder to now accept 800 m³ (1120 tonnes) of acid sulphate soil at any one time for processing.</i>
<i>Condition 7, Table 3 – row 6 item 1</i>	<i>Table 3 amended to reflect the proposed treatment pad area.</i>
<i>Condition 9</i>	<i>Removed as it is not a permitted condition</i>
<i>Condition 24</i>	<i>New licence condition relating to the construction/expansion of the treatment pad.</i>
<i>Condition 25</i>	<i>Standard condition added to the licence.</i>
<i>Condition 26</i>	<i>Standard licence condition relating to submitting a compliance report to the CEO after the construction of the treatment pad.</i>
<i>Condition 27</i>	<i>Standard licence condition requiring the licence holder to ensure the compliance report required under condition 27 is certified by a qualified engineer or builder.</i>

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: 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:	L7120/1997/12			
		Relevant works approval number:		N/A	<input type="checkbox"/>	
Registration	<input type="checkbox"/>	Current works approval number:		None	<input type="checkbox"/>	
Date application received		27 April 2022				
Applicant and Premises details						
Applicant name/s (full legal name/s)		City of Busselton				
Premises name		Rendezvous Road Transfer Station				
Premises location		39 Rendezvous Road Lot 500 Rendezvous Rd, Vasse, on Deposited Plan 55437				
Local Government Authority		City of Busselton				
Application documents						
HPCM file reference number:						
Key application documents (additional to application form):		<i>Application form with supporting information Further information required provided on 4/07/2022</i>				
Scope of application/assessment						

<p>Summary of proposed activities or changes to existing operations.</p>	<p><u>Licence amendment</u></p> <p>License holder seeking approval to expand the treatment pad for Acid Sulfate soil from 45m x 12m to 45m x 25m.</p> <p>Requesting approval to change the design capacity:</p> <p>Category 61A: From 1,400 tonnes to 9,000 tonnes</p> <p>Category 62: From 15,000 tonnes to 24,000 tonnes</p> <p>Table 1 – Change Inert Waste Quantity limit from 10,000 to 2,000 tonnes</p> <p>Table 1 – Change Inert Waste type 2/Putrescible waste/Hazardous Waste Quantity limit from 5,000 to 22,000 tonnes</p> <p>Table 1 – Change Acid Sulphate soils Waste Quantity limit from 1,400 to 5,000 tonnes</p> <p>Table 2 – Seeking to mulch 4,000 tonnes of green waste</p> <p>Table 2 - Change acid sulphate process limit from 400m³ to 800m³</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 61A: Solid waste facility	1,400 tonnes per annual period	9,000 tonnes
Category 62: Solid waste depot	15,000 tonnes per annual period	24,000 tonnes

Legislative context and other approvals

<p>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?</p>	<p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p>	<p>Referral decision No: Managed under Part V <input type="checkbox"/> Assessed under Part IV <input type="checkbox"/></p>
<p>Does the applicant hold any existing Part IV Ministerial Statements relevant to the application?</p>	<p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p>	<p>Ministerial statement No: EPA Report No:</p>
<p>Has the proposal been referred and/or assessed under the EPBC Act?</p>	<p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p>	<p>Reference No:</p>

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:
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 checked="" 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 <u>WQPN 25</u>)? 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>Dangerous Goods Safety Act 2004</i> , <i>Environmental Protection (Controlled Waste) Regulations 2004</i>

Is the Premises within an Environmental Protection Policy (EPP) Area?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	N/A
Is the Premises subject to any EPP requirements?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	N/A
Is the Premises a known or suspected contaminated site under the <i>Contaminated Sites Act 2003</i> ?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	If Yes include details here. Classification: contaminated – remediation required (C-RR) Date of classification: 26/03/2018
Direct interest stakeholders		
<i>LGA</i>	Letter to be sent	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
<i>DMIRS</i>	Letter to be sent	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
<i>JTSI</i>	Letter to be sent	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>