Amendment Report

Application for Licence Amendment

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

Licence Number	L7799/2001/8
Licence Holder	Resource Recovery Group
File Number	DER2015/001639
Premises	Canning Vale Centre 350 Bannister Road CANNING VALE WA 6031 Legal description – Part Lot 77 and Part Lot 78 on Plan 2903 As defined by the Premises map attached to the Revised Licence
Date of Report	5 January 2023
Decision	Revised licence granted

MANAGER, WASTE INDUSTRIES
REGULATORY SERVICES
Jarrod Abrahams
Digitally signed by Jarrod Abrahams
Date: 2023.01.05 10:59:22 +08'00'
an officer delegated under section 20 of the *Environmental Protection Act 1986* (WA)

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1. Decision summary

Licence L7799/2001/8 is held by the Resource Recovery Group (Licence Holder) for the Canning Vale Centre (the Premises), located at 350 Bannister Road, Canning Vale.

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 L7799/2001/8 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 8 November 2021, the Licence Holder submitted an application to the department to amend Licence L7799/2001/8 under section 59 and 59B of the *Environmental Protection Act 1986* (EP Act). The following amendments are being sought:

- Inclusion of Prescribed Premises Category 62: Solid Waste Depot, with a 30,000 tonnes per annum limit for a municipal solid waste (MSW) transfer station.
- An increase in the putrescible waste acceptance limit of 109,200 tonnes per annum to 120,000 tonnes per annum in an operational stage two facility upgrade.

At the time of commissioning, the premises consisted of an in-vessel composting facility that processed mixed municipal solid waste MSW to produce saleable compost product. The applicant is in the process of transitioning from the original, in-vessel composting system handling a mixed MSW stream, into a Food Organics Garden Organics (FOGO) processing facility and a MSW Transfer Station.

In recent years, the engineering condition of rotating vessels within the waste composting facility (WCF) deteriorated to the point that the cost of repairs or refurbishment meant that it was commercially unviable to keep them operational and they were decommissioned in November 2019. In parallel with this decision, the applicant decided that the facility should be adapted to treat a FOGO waste stream. It was decided that the composting hall would also be shut down due to the Aeration Building roof required repair to stay structurally sound and additional equipment installed in the WCF Tipping Floor to allow some screening and treatment of the simpler and more homogeneous FOGO waste stream.

The transition to FOGO processing is planned to be undertaken in two stages as follows:

- Stage 1 – the use of the existing tipping building for receival and decontamination of FOGO and food organics, with screened FOGO material sent off-site in covered 30 m^3 trailers for composting; and
- Stage 2 – the continuation of Stage 1 operations and use of the maturation building for composting of decontaminated FOGO and load out of final product through product storage building.

While utilising much of the existing equipment and infrastructure, the new plant will differ from the previous processing operations in the following areas:

- The four digesters will be taken out of service.

- New shredding, screening and sorting equipment will be installed in the Tipping Building.
- An enclosed Link Conveyor will transport decontaminated FOGO material from the Tipping Building to the Maturation Building.
- New product screening, separation and sorting equipment will be installed in the Maturation Building.

In further detail, processing of FOGO and MSW in Stage 1will occur in the following manner:

- FOGO is fed into a slow-speed shredder. The shredded FOGO is then passed through a 40 mm trommel and the minus 40 mm material is sent off-site in covered 30 m^3 trailers for composting. The 40 mm oversize is re-screened within 2 to 3 days of original acceptance, and the oversize material is then passed through a density separator and sorting cabin to remove inert contamination such as plastics and glass. Secondary screened and cleaned FOGO is also sent off-site for composting.
- Any contamination and process losses from the FOGO process are sent to landfill in 30 m^3 bins.
- The WCF facility will also handle segregated food wastes. These are wastes derived from restaurants, retail supermarkets and food processing or production facilities rather than from kerbside FOGO and FO bins and typically have a lower level of plastic and glass contamination. Segregated food wastes will be received in the Tipping Building and transferred off-site with the recovered FOGO organics.
- Facilitate the interim transfer of residual MSW through the Tipping Building. The material will be delivered to the site in conventional compactor trucks from the kerbside collections. The transfer station aggregates MSW into covered trucks and trailers for transfer to appropriate disposal sites.

In Stage 2, the treatment process will be:

- FOGO and food organics will be received within the waste receival hall as occurs in Stage 1. The food organics will be loaded straight into covered 30 m^3 trailers along with processed FOGO for transfer off-site for composting.
- FOGO will be fed to a slow speed shredder and screened through a 40 mm trommel. The minus 40 mm material will be loaded into covered 30m^3 trailers for delivery to off-site composting.
- The 40 mm oversize material will be transferred to the Aeration building via a conveyor and be placed in windrows on the aeration floor for composting over approximately four weeks. This process is intended to essentially be a size reduction process rather than achieve compost conforming with AS 4454.
- The composted materials will then be re-screened in the Aeration building and any oversize material will then be passed through a density separator and sorting cabin to remove inert contamination such as plastics and glass for disposal to landfill.

Figures 1 to 4 depict the infrastructure of the proposed activities.

Table 1 outlines the proposed changes to the existing Licence.

Table 1: Proposed throughput capacity changes

Category	Current production capacity	Proposed production capacity	Description of proposed amendment
Category 61A: Solid waste facility	No more than 52,000 tonnes per year	No change	No change
Category 67A: Compost manufacturing and soil blending	No more than 109,200 tonnes per year	120,000 tonnes per year	An increase in putrescible waste acceptance following an operational stage two facility upgrade.
Category 62: Solid Waste Depot	N/A	30,000 tonnes per annum	Addition of Category 62 for the storage and transfer (with no processing) of municipal solid waste within the transfer station.

Figure 1. Overview of building infrastructure

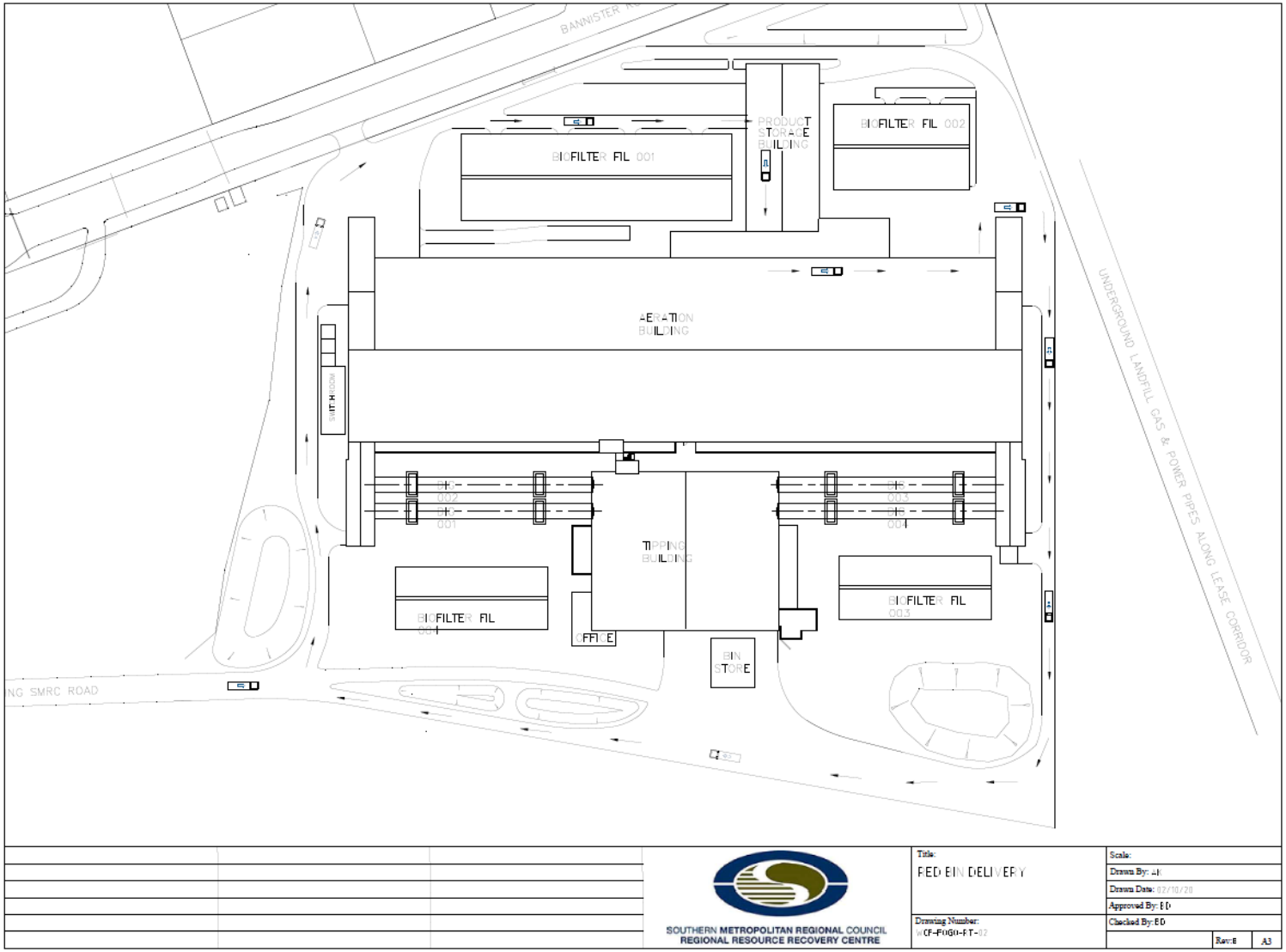


Figure 2. Stage 1 Tipping Building overview

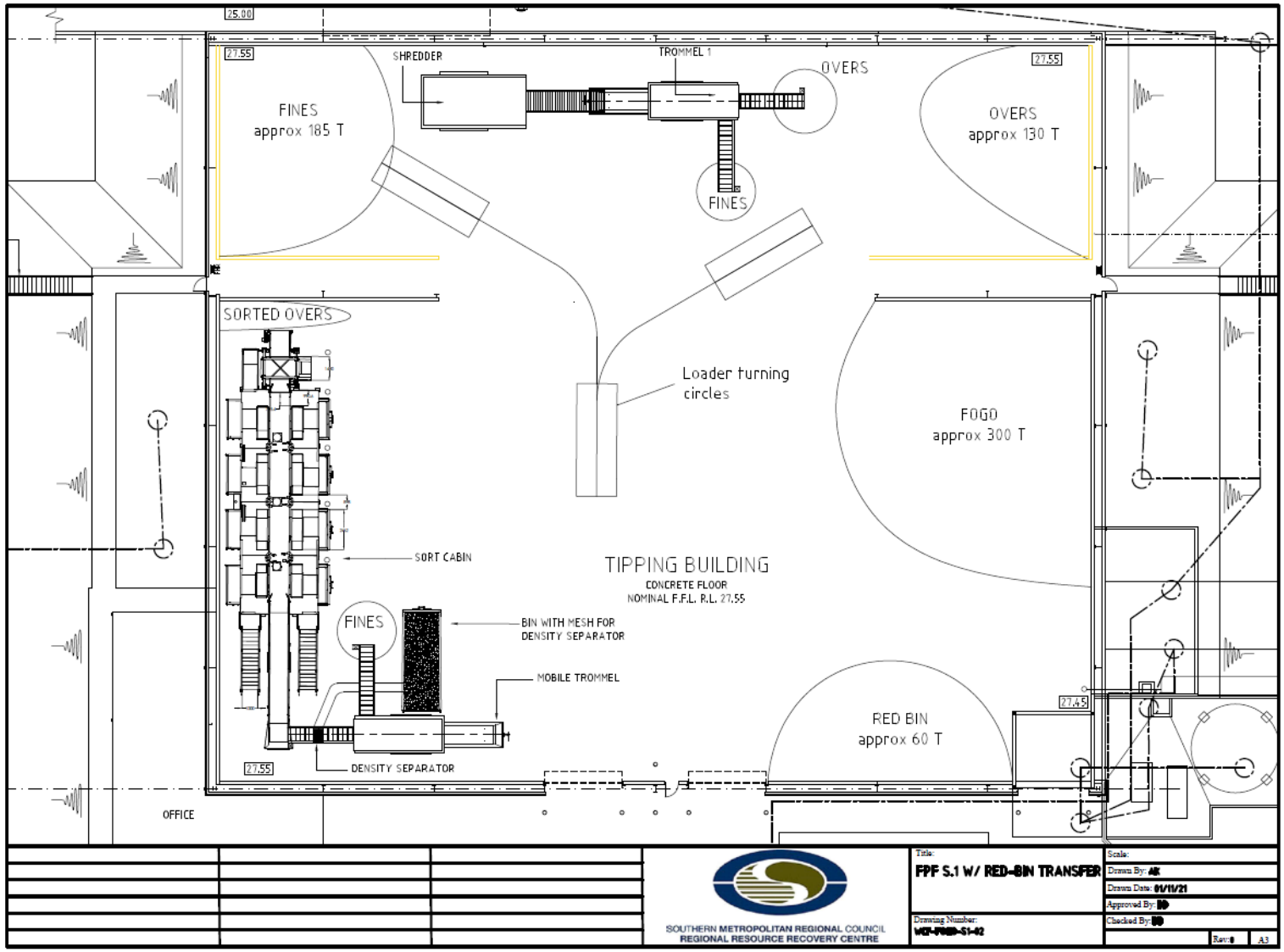


Figure 3. Stage 2 Tipping Building overview

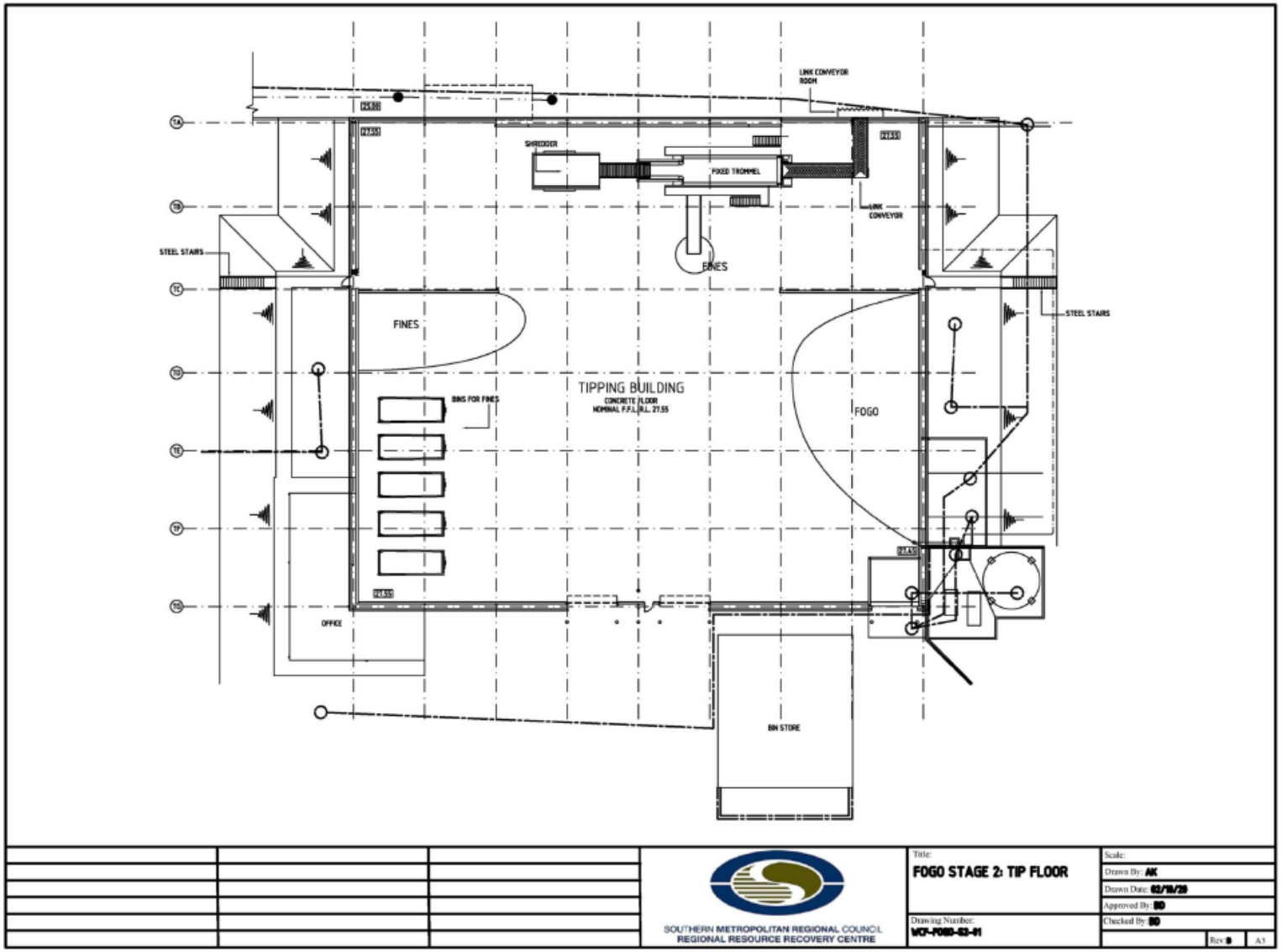
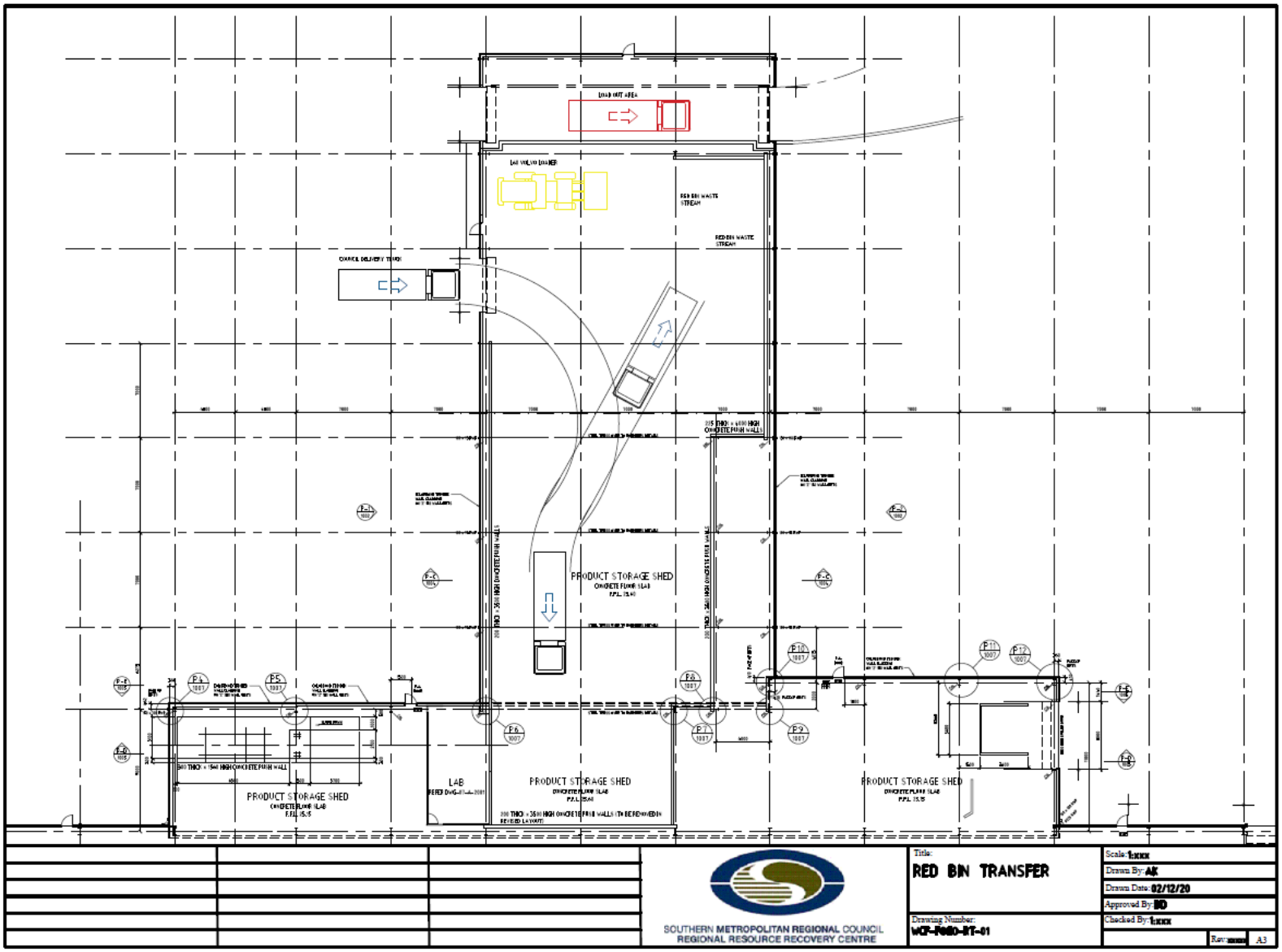


Figure 4. Product Storage Shed overview



Licence: L7799/2001/8

2.3 Part IV of the EP Act

The premises was formally assessed under Part IV of the EP Act and received Ministerial Statement 517 on 30 July 1999. MS 517 provides for the construction and operation of a Regional Resource Recovery Centre for the separation and processing of waste, with three main components:

- An in-vessel composting facility operated under negative pressure and services by biofilters;

- A materials recycling facility; and

- A green waste processing facility.

The in-vessel composting facility is to be operated under negative pressure and services by biofilters

To ensure that any Part V decision is consistent with the Part IV determinations for the premises, the application was referred to EPA Services for advice. Following assessment by EPA Services, correspondence was provided to the applicant on 27 October 2022 by the Environmental Protection Authority confirming that there is no reasonable possibility that the requested amendment/s to the proposal will have a significant detrimental effect on the environment in addition to, or different from, the effect of the original proposal. Approval of the amendment/s to Ministerial statement 517 was therefore granted under section 45C of the *Environmental Protection Act 1986* for the following:

- installation and operation of modified equipment in the Receival Hall;
- modify handling procedures for municipal solid waste (MSW) to include temporary storage within tipping building;
- revised inputs limits to align with the Part V licence (L7799/2001/8) waste types and input volumes; and
- providing contemporary definitions of Outputs/Products

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 construction and operation which have been considered in this Amendment Report are detailed in Table 2. Table 2 also details the proposed control measures the Licence Holder has proposed to assist in controlling these emissions, where necessary.

Table 2: Licence Holder controls

Emission	Sources	Potential pathways	Proposed controls
Construction			
Dust	Installation of FOGO processing infrastructure	Air/windborne pathway	- All works to occur within a negative pressure shed.
Noise	Installation of FOGO processing infrastructure	Air/windborne pathway	- All works to occur within a negative pressure shed.
Operation			
Odour	Acceptance and processing of waste, including FOGO	Air/windborne pathway	- Existing infrastructure and licence L7799/2001/8 controls. - All MSW stored within a negative pressure shed with a concrete tip floor. - Biofilter performance monitoring (continuous temperature, humidity, pressure and fan rate). - Quarterly media surface velocity, odour concentration and temperature monitoring. - Monthly Field Based Ambient Odour Air Assessment. - The bulk of the existing odour collection ductwork will be retained in the Tipping Building, with the exception being the termination of the ducting at the previous pan feeder and digester location. - No changes are proposed to the existing odour ventilation system in the Maturation building. - The Tipping Building is equipped with two identical biofilter systems, each designed to humidify and treat 110,000 m^3/hr of ventilation air. - Fast open/close vehicle access doors with interlocks to prevent multiple openings.
Noise	Acceptance and processing of waste Vehicle movements	Air/windborne pathway	- Limiting the number of truck movements travelling on the loop. - Scheduling of red Bin Truck movements for periods when MRF and WCF bin trucks are less frequent. - Reducing number of active trucks onsite.
Leachate	Acceptance and processing of waste	Seepage to soil and groundwater	- Existing infrastructure and licence L7799/2001/8 controls.

Emission	Sources	Potential pathways	Proposed controls
Dust	Acceptance and processing of waste	Air/windborne pathway	- Existing infrastructure and licence L7799/2001/8 controls.
Vermin	Acceptance and processing of waste	Transmission by vectors	- Existing infrastructure and licence L7799/2001/8 controls.
Windblown waste	Waste acceptance, handling and storage	Air/windborne pathway	- Existing infrastructure and licence L7799/2001/8 controls.
Fire event – smoke and firewater	Waste acceptance, handling and storage	Air/windborne pathway	- Existing infrastructure and licence L7799/2001/8 controls. - Fire and Emergency Response Plan (December 2019) prepared and enacted. - Fire Indicator Panel with supporting alarms within the premises. - Numerous fire extinguishers (CO_2 and Dry Powder) throughout all facilities. - Numerous fire hose reels throughout all facilities. - Dedicated water supply system consisting of water tanks, booster pumps, ring main, fire brigade booster connections and hydrants. - Infra-red flame detectors within the Tipping building and Product storage shed. - Foam suppressant system on screening infrastructure.
Fire event – firewater		Seepage to soil and groundwater	- Existing infrastructure and licence L7799/2001/8 controls.
Elevated pathogens and contaminant levels	Compost not meeting Australian Standard AS 4544 is taken off-site after sale	Direct application of compost to land	- Existing infrastructure and licence L7799/2001/8 controls. - 40 mm oversize material will be transferred to the Aeration building via a conveyor and be placed in windrows on the aeration floor for composting over approximately four weeks. This process is intended to essentially be a size reduction process rather than achieve compost conforming with AS 4454. This material is then sent off-site for composting.

3.1.2 Receptors

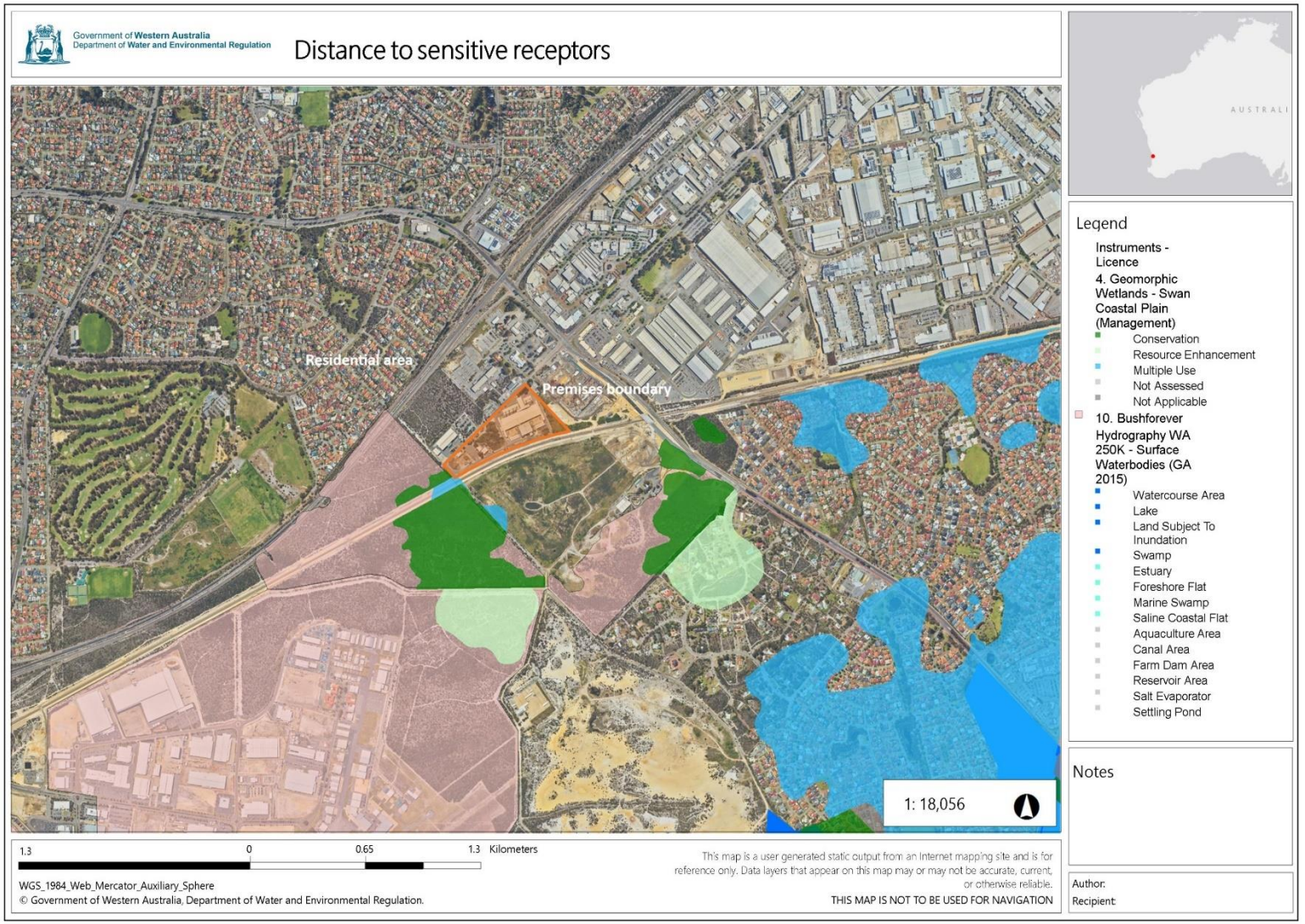
In accordance with the *Guidance Statement: Risk Assessment* (DER 2017), the Delegated Officer has excluded employees, visitors and contractors of the Licence Holder's from its assessment. Protection of these parties often involves different exposure risks and prevention strategies, and is provided for under other state legislation.

Table 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 *(Guidance Statement: Environmental Siting* (DER 2016)).

Table 3: Sensitive human and environmental receptors and distance from prescribed activity

Human receptors	**Distance from prescribed activity**
Residential Premises	350-400 metres to the north-west
Environmental receptors	**Distance from prescribed activity**
Ken Hurst Park - 53- hectare Bush Forever Site (no 245)	Adjacent to the prescribed premises – South West direction
Groundwater	Groundwater is approximately 4 metres below ground level (mbgl) within the premises and approximately 22 metres AHD (https://maps.water.wa.gov.au/Groundwater/) and flows in a north-westerly direction (as previously assessed).
Priority fauna - Quenda, southwestern brown bandicoot	Within Ken Hurst Park adjacent to the premises
Geomorphic wetland (Dampland)	Within Ken Hurst Park adjacent to the premises

Figure 1: Distance to sensitive receptors



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

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

The Revised Licence L7799/2001/8that accompanies this Amendment Report authorises emissions associated with the operation of the Premises i.e. Category 61A, 62 and 67A 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								
Installation of FOGO processing infrastructure	Dust	Air/windborne pathway causing impacts to health and amenity	Sensitive residential premises within Leeming, approx. 400m north of the premises	Refer to Section 3.1	C = Slight L = Unlikely Low Risk	Y	N/A	Dust is not considered likely to cause any distinguishable impacts to receptors at this distance. The Delegated Officer considers that the provisions of section 49 of the EP Act (Causing pollution and unreasonable emissions) is sufficient to regulate dust emissions from installation activities.
	Noise			Refer to Section 3.1	C = Slight L = Unlikely Low Risk	Y	N/A	Noise from installation activities is not considered likely to cause any distinguishable impacts to receptors at this distance. The Delegated Officer considers that the provisions of the *Environmental Protection (Noise) Regulations 1997* are sufficient to regulate noise emissions from installation activities.
Operation								
Acceptance and processing of waste, including FOGO	Odour	Air/windborne pathway causing impacts to health and amenity	Sensitive residential premises within Leeming, approx. 400m north of the premises	Refer to Section 3.1	C = Major L = Possible **High Risk**	Y	Conditions 1, 4, 5, 6, 7, 10, 12, 13(a)-(c), 14(a)-(c), 15(a)-(b), 17, 18(a)-(c), 19, 20, 21, 22, 23, 24, 29, 30, 37 and 38. **Conditions 2, 3, 18(d)**	See Section 3.3

Risk Event					Risk rating[1] C = consequence L = likelihood	Licence Holder's controls sufficient?	Conditions[2] of licence	Justification for additional regulatory controls
Source/Activities	**Potential emission**	**Potential pathways and impact**	**Receptors**	**Licence Holder's controls**				
Acceptance and processing of waste Vehicle movements	Noise	Air/windborne pathway causing impacts to health and amenity	Sensitive residential premises within Leeming, approx. 400m north of the premises	Refer to Section 3.1	C = Moderate L = Possible **Medium Risk**	N	**Conditions 33 to 36**	See Section 3.4
Acceptance and processing of waste	Leachate	Overland runoff and groundwater infiltration potentially causing ecosystem disturbance	Dampland adjacent to the premises. Groundwater 2-5 mbgl.	Refer to Section 3.1	C = Moderate L = Unlikely **Medium Risk**	Y	Conditions 1, 4, 5, 7 and 27 to 31 **Conditions 2 and 3**	The Delegated Officer considers the applicant's controls to be sufficient to mitigate leachate emissions operations. Conditions 2 and 3 require the submission of an Environmental Compliance Report to verify the infrastructure have been installed in accordance with the relevant requirements.
Acceptance and processing of waste	Dust	Air/windborne pathway causing impacts to health and amenity	Sensitive residential premises within Leeming, approx. 400m north of the premises	Refer to Section 3.1	C = Minor L = Unlikely **Medium Risk**	Y	Conditions 7 and 10	Dust is not considered likely to cause any distinguishable impacts to receptors at this distance. The Delegated Officer considers that the applicant's controls and the provisions of section 49 of the EP Act (Causing pollution and unreasonable emissions) are sufficient to regulate dust emissions from operational activities.
Acceptance and processing of waste	Vermin	Transmission by vectors causing impacts to health and amenity	Sensitive residential premises within Leeming, approx. 400m north of the premises	Refer to Section 3.1	C = Minor L = Rare **Low Risk**	Y	Conditions 5, 6 and 7	The Delegated Officer has determined that the transmission of pathogens by vectors causing low level adverse health effects may only occur in exceptional circumstances.
Waste acceptance, handling and storage	Windblown waste	Air/windborne pathway causing impacts to health and amenity	Sensitive residential premises within Leeming, approx. 400m north of the premises	Refer to Section 3.1	C = Minor L = Possible **Medium Risk**	Y	Conditions 7, 8, 10 and 11	The Delegated Officer considers the applicant's controls to be sufficient to mitigate windblown waste emissions during operations.

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**				
Fire at the premises (upset conditions)	Smoke emissions from fire	Air/windborne pathway causing impacts to health and amenity	Adjacent properties	Refer to Section 3.1	C = Major L = Rare **Medium Risk**	Y	Conditions 1, 4, 5, 6, 7, 8, 25 and 26	The Delegated Officer considers the applicant's controls relating to the proposal, in addition to existing firefighting capability at the premises, to be sufficient to mitigate the risk of fire events.
	Firefighting wash waters	Overland runoff and groundwater infiltration potentially causing ecosystem disturbance			C = Major L = Rare **Medium Risk**	Y	Conditions 25 to 28	
Compost not meeting Australian Standard AS 4544 is taken off-site	Elevated pathogens and contaminant levels	Direct application of compost to land (off-site)	Human receptors, land, groundwater and surface water where compost will be applied	Refer to Section 3.1	C = Minor L = Unlikely **Medium Risk**	Y	N/A	All screened and processed FOGO will be transferred to an off-site facility for composting. As such, the immediate application of waste processed at the premises will not occur.

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.

3.3 Detailed risk assessment odour

Given the potential for odour emissions, the application was referred to the department's Air Quality Sciences Branch (AQS), Science and Planning, for technical advice. This advice recommended that the following information be provided for the Licence Holder to consider to inform the assessment:

- Previous recorded maximum throughputs of the premises.
- Odour controls, biofilter efficiency, licence compliance, complaints and putrescible waste fractions during this time.
- Odour controls, biofilter efficiency, licence compliance, complaints during current FOGO operations.
- Biofilter inlet concentrations expected at full capacity, and their capacity to process higher concentrations (ou) and flowrates of odorous air while maintaining licence output limits.
- Consideration of increased door openings due to increased vehicle movements and its impact on the ventilation system.
- Trigger values assigned to the biofilter and other performance parameters with the supervisory control and data acquisition control system.

3.3.1 Further Air Quality advice

The department requested further information particularly with regard to historical operational performance, following the initial Air Quality advice on 25 February 2022. The applicant provided a response on 27 May 2022, with key points including:

- The maximum level of on-site putrescible material in process will be approximately 50% of historical levels under the new FOGO processing methods proposed at a FOGO receival rate of 120,000 tonnes per annum. Putrescible fraction held in process is defined as the amount of organic material on site at any time including tip floor receivals, maturation and compost final product and excludes any inert contamination tonnages in the waste.
- The lower level of organics held in process is a function of the new operating method whereby most of the putrescible fraction is removed up front as part of the decontamination process and exported off-site. The remaining coarse fractions are then further composted in the maturation building prior to final screening and hand sorting to remove the contamination.
- The maximum level of organics held in process is physically limited by the size of the maturation building and compost windrow heights.
- Biofilter efficiency has been measured since March 2012 which shows that for the period up to October 2019 the average biofilter efficiency has consistently been above 90% and has averaged 93.1%.
- Based on current operations receiving FOGO in the tipping building and historical measurements of the compost maturation building the anticipated biofilter inlet concentrations are:
    - Biofilters 001 and 002 (compost maturation): 6,000 to 7,000 OU's; and
    - Biofilters 003 and 004 (tipping building): 1,000 to 1,500 OU's.
- Based on historical performance the biofilters have shown their ability to treat upper level inlet concentrations in the range of 25,000 to 30,000 OU's to a reduced outlet

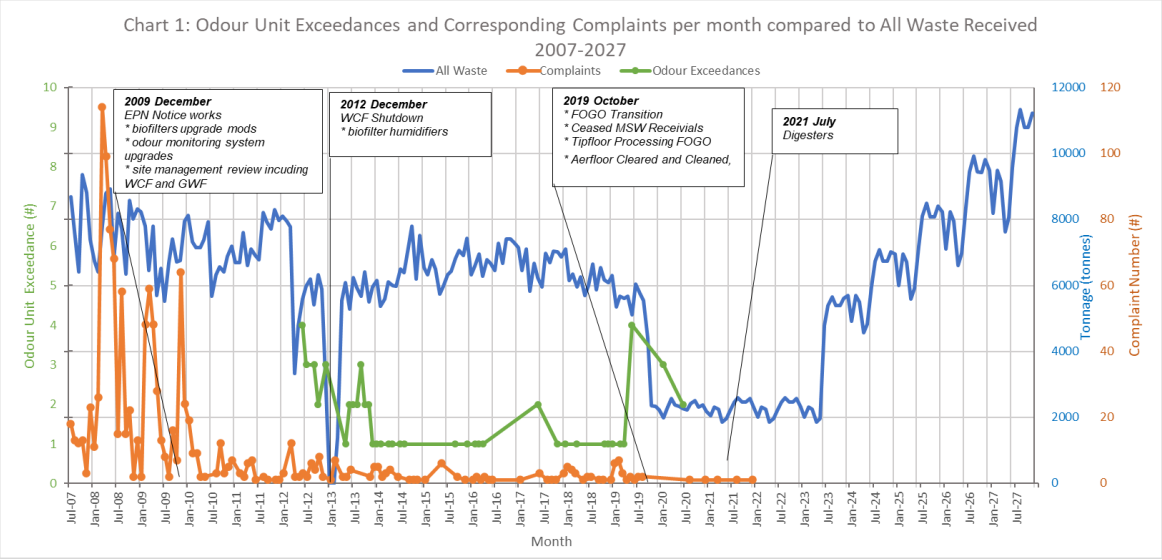
concentration of 500 OU's or less. This represents biofilter efficiencies of 98% and above.

- Odour complaints have significantly reduced since works to address issues with the biofilter design and media performance in December 2009.The complaint levels were then further reduced in December 2012 after installing humidification units to biofilter 1 and 2 and increasing the existing humidification effort to biofilters 3 and 4. After the full implementation of FOGO in October 2019 the level of complaints has been negligible.

This response was considered by Air Quality Branch and is summarised below:

- Regulatory controls within the current licence appear to be reasonable to mitigate the impact of odour emissions to nearby sensitive receptors. However, 120,000 tonnes per annum licence limit (total waste volume accepted is not reflective of the new FOGO operating context. By July 2025, it is estimated that total waste volume accepted will be at levels equivalent to the period 2013 to 2019 when the biofilters were relatively stable and complaints less than six per month (refer Figure 2). At the same period, the putrescible fraction accepted is expected to be higher than historical levels (refer Figure 3). Putrescible fraction in process will however be less than 50% of 2013-2019 levels (refer Figure 4).
- Recommendation that cloud cover observations are included in the OFA Methodology Statement.
- Owing to differences in the FOGO processing procedures compared to MSW and the associated uncertainties, periodic evaluation of the effectiveness and adequacy of the controls should be considered as the throughput increases in a step-wise fashion.

Figure 2: Total waste accepted



Note: Figure supplied by the Licence Holder on 27 May 2022.

Figure 3: Total putrescible waste accepted

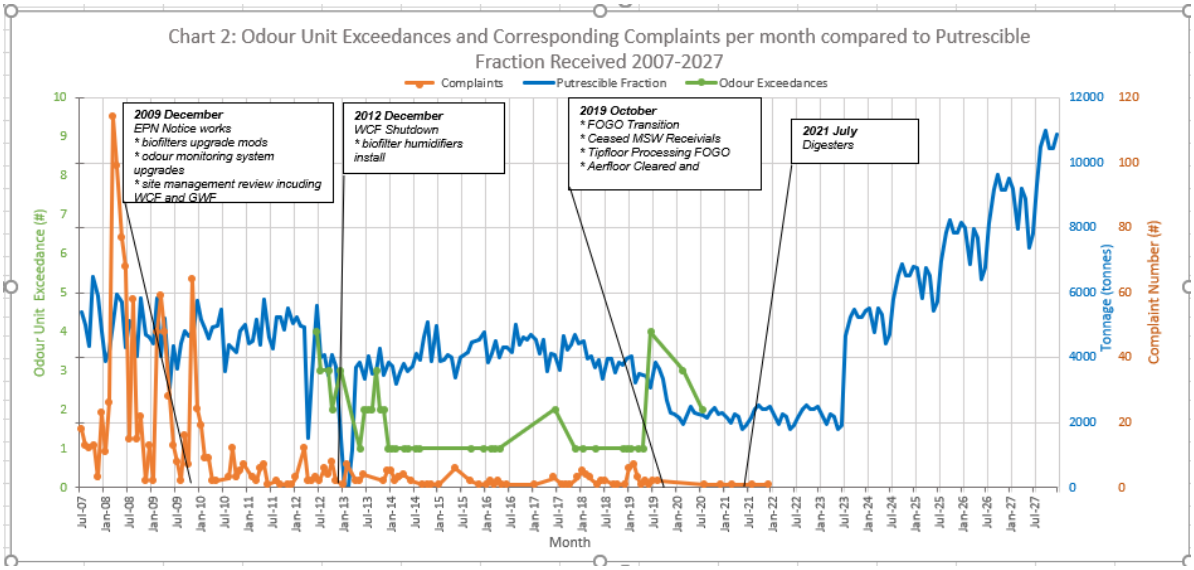
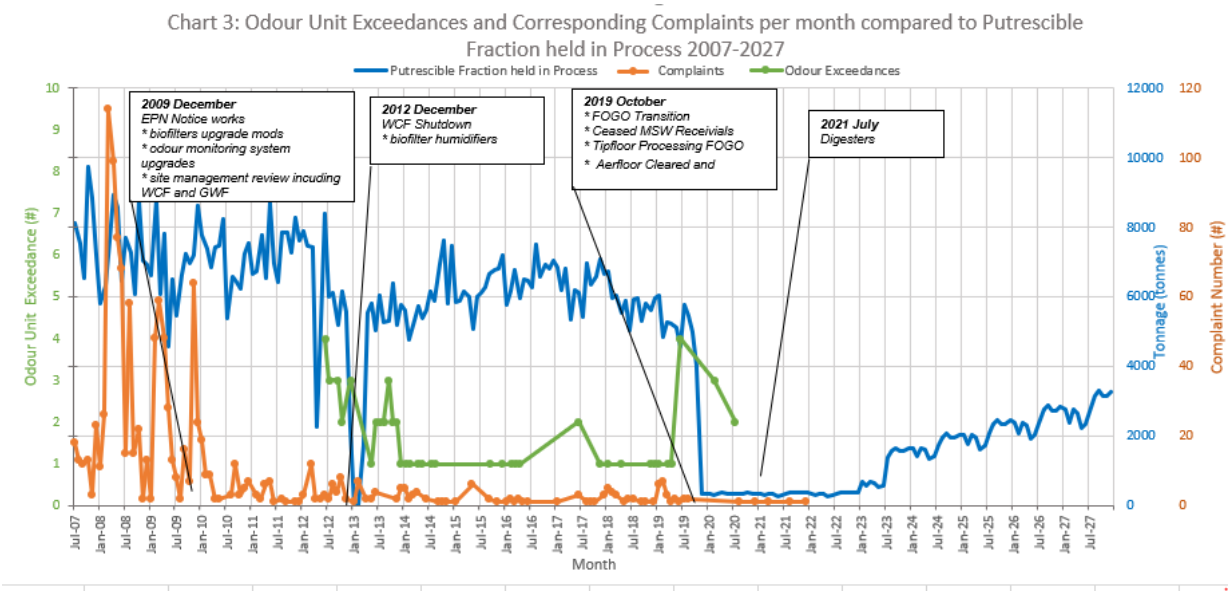


Figure 4: Total putrescible waste processed



Key findings:

1. Regulatory controls within the current licence and proposed operational controls by the Licence Holder appear sufficient to mitigate the impact of odour emissions to nearby sensitive receptors. However, owing to the odour risk uncertainties in the FOGO processing volumes compared to historical municipal solid waste volumes, it is recommended that the Licence Holder evaluate the effectiveness and adequacy of their controls in 2024, following the first step-wise throughput increase in 2023.The findings of this evaluation can then be incorporated into any potential adjustments required prior to the next step-wise throughput increase. Notwithstanding this, the Department will also review and assess OFA reports submitted through requirements of the licence to ensure that regulatory and operational controls are mitigating the impact of

odour emissions to nearby sensitive receptors.

2. Condition 17(b) of the licence requires the monthly publication of the outcomes of the OFAs required by condition 17(a) on the Resource Recovery Group website (https://www.resourcerecoverygroup.com.au/corporate-information/odours.aspx). The Department recognises the comprehensive information on the website that complies with condition 17(b); however, accessing analytical data of complaints received by the Licence Holder may be onerous for members of the public to access. The Department recommends that the complaint data be presented in a manner that depicts trends over time, with data complimented by a graphical representation plotted for the previous two years. Given the proposed step-wise increases in waste acceptance over the next few years, this recommended complaint data presentation would allow for a concise snapshot for those interested members of the public.

3.3.2 Determination

In addition to the applicant's proposed controls, further regulatory controls have been specified within the licence to align with the technical advice, notably in relation to:

- Condition 17(d): Specific reporting requirements for the OFA report, including the addition of cloud cover estimation for meteorological measurements. The addition of this condition provides further certainty of the information submitted to the Department, combined with the requirements of the Odour Field Assessment (OFA): Methodology Statement (Environmental & Air Quality Consulting Pty Ltd, 23 March 2020).

Based on the above information the Delegated Officer has determined the Consequence of odour emissions from the proposal to be **'Major'** (potential high-level impact to amenity at the local scale) while the Likelihood of the risk event occurring is **'Possible'**. The resulting risk rating is therefore deemed as **'High'**.

3.4 Detailed risk assessment noise

Given the potential for noise emissions, the application, including *Waste Composting Facility Upgrade Noise Compliance Assessment (Rpt01-1404728.1-Rev2)* (Wood PLC, 8 February 2021), was referred to the department's Environmental Noise Branch (ENB), Science and Planning, for technical advice. This advice is summarised below:

- The operating scenarios that Wood chose for the noise modelling and compliance assessment seemed reasonable and complete.
- The methodology of the noise modelling, including all inputs and assumptions, seemed correct and acceptable.
- The modelled noise emission levels under each of the three operating scenarios seemed reliable.
- Wood's conclusion that noise from the operation is unlikely to be tonal at the neighbouring noise sensitive receivers seems reasonable, due to the high level of ambient noise in the area.
- The noise mitigation measures proposed seem effective in reducing noise emission levels at the neighbouring noise sensitive premises.
- Wood has proposed further investigation at receiver locations to quantify noise levels during these operations. This proposed investigation can be supported, which should be able to demonstrate if the proposed noise mitigation measures would bring the night-time operation into compliance with the noise regulations or not.

Key findings:

1. The noise modelling used in *Waste Composting Facility Upgrade Noise Compliance Assessment (Rpt01-1404728.1-Rev2)* (Wood PLC, 8 February 2021) is considered reliable.
2. Given the proposed noise mitigation measures with the aim of night-time operation complying with the noise regulations, noise verification monitoring of the proposed noise mitigation measures during the initial operations phase will be added as a regulatory requirement.

3.4.1 Determination

In addition to the applicant's proposed controls, further regulatory controls have been specified within the licence to align with the technical advice, notably in relation to the applicant needing to undertake noise verification monitoring during the initial operations phase.

Based on the above information the Delegated Officer has determined the Consequence of noise emissions from the proposal to be **'Moderate'** (potential mid-level impact to amenity at the local scale) while the Likelihood of the risk event occurring is **'Possible'**. The resulting risk rating is therefore deemed as **'Medium'**.

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 (ended 31 January 2022)	None received	N/A
Local Government Authority advised of proposal (7 January 2022)	The City of Canning provided no comments on the application.	N/A
Licence Holder was provided with draft amendment on 15 November 2022	Refer to Appendix 1	Refer to Appendix 1
Licence Holder was provided with a second draft amendment on 15 December 2022	Refer to Appendix 1	Refer to Appendix 1

5. Conclusion

Based on the assessment in this Amendment Report, the Delegated Officer has determined that a Revised Licence will be granted, subject to conditions commensurate with the determined controls and necessary for administration and reporting requirements.

5.1 Summary of amendments

Table 6 provides a summary of the proposed amendments and will act as record of implemented changes. All proposed changes have been incorporated into the Revised Licence as part of the amendment process.

Table 6: Summary of licence amendments

Condition no.	Proposed amendments
Prescribed premises category description	Inclusion of Category 62: Solid waste depot for the storage and sorting of waste.
Definitions	Updated definitions used throughout the instrument.
Condition 1	Inclusion of an infrastructure and equipment (design, installation and operation) table for the Stage 1 and Stage 2 installation works.
Condition 2	Inclusion of the requirement to prepare and submit an Environmental Compliance Report.
Condition 3	Information requitements of the Environmental Compliance Report included.
Condition 4	Maintenance and operation of the infrastructure installed in accordance with Condition 1.
Condition 5	Putrescible waste quantity limit increased to 120,000 tonnes per annum and inclusion of category 62.
Condition 6	Non-conforming waste to be removed from the premises within seven calendar days.
Condition 7	Consolidation of existing waste processing requirements placed within Table 3.
Condition 18(a) and 18(c)	Updated reference to the Field Odour Assessment Plan
Condition 18(d)	Addition of information requirements for the Odour Field Assessment report.
Condition 33	Requirement to conduct an environmental noise assessment.
Condition 34	Preparation of a report pursuant to the environmental noise assessment.
Condition 35	Submission of the environmental noise assessment report.
Condition 36	Measures to comply with the *Environmental Protection (Noise) Regulations 1997* should the assessment indicate non-compliance.
Schedule 1: Maps	The prescribed premises boundary has been amended to exclude a portion of the Aeration building for a proposed future recycling operation undertaken by a third party. Other maps updated.

Table 7: Consolidation of licence conditions in this amendment

Existing condition	Condition summary	Revised licence condition	Conversion notes
1	Authorised emissions	N/A	Redundant condition. Adequately covered by s.49 of the EP Act. Deleted from the licence.
5	Putrescible waste storage	Condition 7	Condition consolidated within Condition 7, Table 3.

Existing condition	Condition summary	Revised licence condition	Conversion notes
6	Non-solid waste storage	Condition 7	Condition consolidated within Condition 7, Table 3.
7	Putrescible waste storage	Condition 7	Condition consolidated within Condition 7, Table 3.
13	Dust emissions	N/A	Redundant condition. Adequately covered by s.49 of the EP Act. Deleted from the licence.
30	Pond odour emissions	N/A	Redundant condition. Adequately covered by s.49 of the EP Act. Deleted from the licence.
32	Recovery and removal of spills	N/A	Redundant condition. Adequately covered by *Environmental Protection (Unauthorised Discharges) Regulations 2004*. Deleted from licence.
34	Green waste storage	Condition 13	Condition consolidated within Condition 13, Table: Waste processing.
35	Green waste storage	Condition 13	Condition consolidated within Condition 13, Table: Waste processing.

References

1. Department of Environment Regulation (DER) 2016, *Guidance Statement: Environmental Siting*, Perth, Western Australia.
2. DER 2017, *Guidance Statement: Risk Assessments*, Perth, Western Australia.
3. DER 2015, *Guidance Statement: Setting Conditions*, Perth, Western Australia.
4. Department of Water and Environmental Regulation (DWER) 2019, Guideline: Decision Making, Perth, Western Australia
5. DWER 2019, Guideline: Industry Regulation Guide to Licensing, Perth, Western Australia

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

Condition	Summary of Licence Holder's comment	Department's response
Comments provided on 6 December 2022 (draft provided on 15 November 2022)		
Throughout	References to 'Regional Resource Recovery Centre' to be changed to 'Canning Vale Centre'. References to 'Southern Metropolitan Regional Council' to be changed to 'Resource Recovery Group'.	The specified amendments have been made.
Definitions	Biofilter Management Plan - change 'Waste Composting Facility' to 'FOGO Processing Facility'. - remove the last revised date.	The specified amendment has been made.
Condition 4: Table 1, Row 2	Biofilter 1 and 2 ventilation system will not be in use during Stage 1.	The specified amendment has been made, as no composting of material will take place during Stage 1 on the Aeration Building. However, the Biofilter infrastructure will remain in place and maintained for operation in Stage 2.
Condition 4: Table 1, Row 4	Clarifying the use of the Product Storage Shed during Stage 1.	The specified amendment has been made.
Condition 5: Table 2	Inclusion of an acceptance quantity for Category 62: Solid Waste Depot.	An acceptance limit of 30,000 tonnes per annum of municipal solid waste has been included for Category 62.
Condition 33	Clarification of noise survey commencement.	The condition has been amended to specify that the noise survey is to be undertaken during Stage 2 operations.
Condition 34	Amend reference to incorrect condition.	The specified amendment has been made.

Condition	Summary of Licence Holder's comment	Department's response
Schedule 1	Boundary of the Premises redefined to exclude a portion of the Aeration floor due to a proposed third-party processing facility.	The specified amendment has been made, with co-ordinates provided in Table 7 of the amended licence.
Comments provided on 23 December 2022 (second draft provided on 15 December 2022)		
N/A	Request to refine the description of Category 62, as shown in the Table on Page 1 of the licence, to remove provision (b).	The full description of the category is to remain, consistent with Schedule 1 of the *Environmental Protection Regulations 1987*.
Figure 1: Premises map	An updated Premises map was provided	The specified amendment has been made.
Figure 2: Combined premises boundary	An updated Combined premises boundary was provided.	The specified amendment has been made.
Figure 3: Plan of premises	An updated Plan of the premises was provided.	The specified amendment has been made.

Appendix 2: Application validation summary

SECTION 1: APPLICATION SUMMARY					
Application type					
Works approval	☐				
Licence	☐	Relevant works approval number:		None	☐
		Has the works approval been complied with?		Yes ☐ No ☐	
		Has time limited operations under the works approval demonstrated acceptable operations?		Yes ☐ No ☐ N/A ☐	
		Environmental Compliance Report / Critical Containment Infrastructure Report submitted?		Yes ☐ No ☐	
		Date Report received:			
Renewal	☐	Current licence number:			
Amendment to works approval	☐	Current works approval number:			
Amendment to licence	☒	Current licence number:	L7799/2001/8		
		Relevant works approval number:		N/A	☐
Registration	☐	Current works approval number:		None	☐
Date application received		8 November 2021			
Applicant and Premises details					
Applicant name/s (full legal name/s)		Resource Recovery Group			
Premises name		Canning Vale Centre			
Premises location		Part Lot 77 and Part Lot 78 on Plan 2903, 350 Bannister Road CANNING VALE, WA 6031			
Local Government Authority		City of Canning			
Application documents					
HPCM file reference number:		DWERDT524595 A2067264			
Key application documents (additional to application form):		Odour Field Assessments – 2020 Annual Compliance Report Odour Field Assessments – July 2020 to October 2021 Assessment of current design of WCF odour treatment system for FOGO Processing Noise Compliance Assessment			
Scope of application/assessment					

Summary of proposed activities or changes to existing operations.	Licence amendment (which includes construction activities) Installation and Operation of Modified Equipment in the Receival Hall and Aeration Floor to Process FOGO. Requested to include a Prescribed Premises Category 62 Solid Waste Depot, with a 30,000 tonnes per annum operating limit and an increase in Condition 2 Putrescible Waste limit of 109,200tonnes per annum to120,000 tonnes per annum in an operational stage two facility upgrade. The amendment requests to increase throughput capacity are to handle the processing capacity of the FOGO Processing Facility and the MSW Transfer Station.

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

Table 1: Prescribed premises categories

Prescribed premises category and description	Current production or design capacity	Proposed changes to the production or design capacity (amendments only)
Category 61A: Solid waste facility	No more than 52,000 tonnes per year	No change
Category 67A: Compost manufacturing and soil blending	No more than 109,200 tonnes per year	Increase to 120,000 limit per year
Category 62: Solid Waste Depot	New category proposed	30,000 tonnes per annum

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 ☒ No ☐	Managed under Part V ☐ Assessed under Part IV ☐
Does the applicant hold any existing Part IV Ministerial Statements relevant to the application?	Yes ☒ No ☐	Ministerial statement No: 517 EPA Report No: Bulletin 938 Provides for the construction and operation of a Regional Resource Recovery Centre for the separation and processing of waste, with the three main components: - An in-vessel composting facility operated under negative pressure and services by biofilters; - A materials recycling facility; and - A green waste processing facility. The in-vessel composting facility is to be operated under negative pressure and services by biofilters.

Has the proposal been referred and/or assessed under the EPBC Act?	Yes ☐ No ☒	Reference No:
Has the applicant demonstrated occupancy (proof of occupier status)?	Yes ☒ No ☐	Certificate of title ☒ General lease ☐ Expiry: Mining lease / tenement ☐ Expiry: Other evidence ☐ Expiry:
Has the applicant obtained all relevant planning approvals?	Yes ☒ No ☐ N/A ☐	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 ☐ No ☒	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 ☐ No ☒	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 ☒ No ☐	Instrument No. GWL168323(1). As per condition 4 of the licence, the proponent has installed a cumulative water meter and provides volumetric data to the Department of Water. The licence allows for the extraction of 22,000 kL per annum.
Does the proposal involve a discharge of waste into a designated area (as defined in section 57 of the EP Act)?	Yes ☐ No ☒	Name: N/A Type: Has Regulatory Services (Water) been consulted? Yes ☐ No ☐ N/A ☐ Regional office:
Is the Premises situated in a Public Drinking Water Source Area (PDWSA)?	Yes ☐ No ☒	Name: N/A Priority: P1 / P2 / P3 / N/A Are the proposed activities/ landuse compatible with the PDWSA (refer to WQPN 25)? Yes ☐ No ☐ N/A ☐

Is the Premises subject to any other Acts or subsidiary regulations (e.g. *Dangerous Goods Safety Act 2004, Environmental Protection (Controlled Waste) Regulations 2004, State Agreement Act xxxx*)	Yes ☐ No ☒	
Is the Premises within an Environmental Protection Policy (EPP) Area?	Yes ☐ No ☒	
Is the Premises subject to any EPP requirements?	Yes ☐ No ☒	
Is the Premises a known or suspected contaminated site under the *Contaminated Sites Act 2003*?	Yes ☐ No ☒	Possibly contaminated - investigation required (PCIR) - 2009