



Department initiated Amendment

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

Licence Number	L8410/2009/2
Licence Holder	WA Composts Pty Ltd
ACN	078 383 856
File Number	DER2015/001436-1
Premises	C-Wise 230 Gull Road NAMBEELUP WA 6027 Legal description – Part of Lot 89 on Plan 741 Certificate of Title Volume 1112 Folio 243 As defined by the coordinates in Schedule 2 of the revised licence
Date of Report	25 October 2024
Decision	Revised licence granted

**DIRECTOR
STATE-WIDE DELIVERY (ENVIRONMENT)**

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

1. Decision summary

The Delegated Officer has determined to make amendments to Licence L8410/2009/2. This Amendment Report documents the amendments made pursuant to section 59 and 59(B) of the *Environmental Protection Act 1986* (EP Act).

The decision report for the existing licence will remain on the department's website for future reference and will act as a record of the department's decision making.

1.1 Regulatory framework

In amending the licence, 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>.

1.2 Amendment summary

Licence L8410/2009/2 is held by WA Composts Pty Ltd (Licence Holder) for C-Wise (the premises), located at 230 Gull Road, Nambeelup. The premises relates to the categories and the assessed production capacity under Schedule 1 of the *Environmental Protection Regulations 1987* (EP Regulations) which are defined in existing Licence L8410/2009/2.

On 9 July 2024, the department initiated an amendment to Licence L8410/2009/2 to extend the licence expiry to assist with operational considerations and compliance investigations into odour emissions occurring at the premises. In addition to the expiry date extension, the Delegated Officer has determined to make the following amendments:

1. Include a new condition related to unreasonable odour emissions
2. Include conditions relating to the submission and implementation of a sludge management plan, along with the necessary administrative requirements for amending the plan. The objectives of the sludge management plan are to mitigate odour and leachate emissions associated with pond desludging, while ensuring compliance with the per- and poly-fluoroalkyl substances (PFAS) National Environmental Management Plan (NEMP).

In determining the amendments to the licence, the department considered the following:

- Works Approval W6871/2023/1 for a new facility at 320 Gull Road, Keralup was issued to WA Composts Pty Ltd on 12 July 2024. The works approval authorises construction works for a Carbon Recycling Facility that will accept and process solid and liquid organic wastes to produce compost at an alternative location to the existing premises.
- The proposed works authorised through Works Approval W6871/2023/1 will be delivered across two stages to provide the Licence Holder with an opportunity to progressively relocate all existing operations to the new premises. Stage 1 will be used to process primarily FOGO materials, while Stage 2 will shift operations from the Licence Holder's existing premises to the new premises. Following completion of Stage 2, the existing premises will be decommissioned.
- The Licence Holder has not committed to timeframes on the shift from the existing premise to the new premises, or an end date for operations at the existing premises.
- Investigations into odour emissions in the Nambeelup and Mandurah areas were undertaken in 2023 and 2024, resulting in DWER issuing EPN 202401 to the Licence Holder under section 65 of the EP Act, on 22 February 2024. Following the issue of EPN 202401, complaints in relation to odour emissions from the premises continued and investigations confirmed that unreasonable odour emissions were still being emitted from the premises.

- No sensitive receptors are located within 1 km of the premises boundary, with the closest sensitive receptor being located approximately 1.1 km to the southwest. Approximately 18 sensitive receptors are located within 1 km of the boundary of Lot 89 on Plan 741.
- It has been identified that liquids, solids and sludge within some ponds on the premises requires removal and contains levels of PFAS that must be disposed to a facility able to accept Special Waste Type 3 or Controlled Waste Code M270. It is considered that due to the characteristics of the waste, a sludge management plan is required to be developed so that odour and leachate emissions are mitigated during desludging.
- Recent licence duration extensions granted to facilities with complex management issues have ranged between 1 to 5 years.
- The expiry day and month on the existing licence does not align with the anniversary date of the grant of the licence (23 April 2015).
- In accordance with the *Guidance Statement: Licence Duration* (DER 2016), the level of risk of harm to public health and the environment posed by the premises should be considered when determining licence durations. Matters relevant to the efficient operation of the licensing regime should also be considered.

2. 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.

2.1 Source-pathways and receptors

2.1.1 Emissions and controls

The key emissions and associated actual or likely pathway during premises operation which have been considered in this Amendment Report are detailed in Table 1 below. Table 1 also details the existing regulatory controls that are specified as conditions on existing Licence L8410/2009/2.

Table 1: Existing regulatory controls relating to odour and leachate within L8410/2009/2

Emission	Sources	Potential pathways	Existing regulatory controls
Odour	Feedstock acceptance, handling and storage	Air/Windborne pathway	Limitations on the volume of compost that can be manufactured per annual period.
	Composting process		Specified infrastructure including aeration systems.
	Pond desludging		Specifying the location where processing of feedstocks and compost materials can occur. Specifying the types of liquid waste that can be applied on the pre-wetting area. Appropriate characterisation of the feedstock. Related record-keeping and complaints management.

Emission	Sources	Potential pathways	Existing regulatory controls
Leachate	Acceptance and storage of liquid wastes	Seepage to land	Specified infrastructure including HDPE lining of ponds.
	Pond desludging	Spills and overflows discharging to land	Specifying the location where processing of feedstocks and compost materials can occur. Specifying the types of liquid waste that can be applied on the pre-wetting area. Appropriate characterisation of the feedstock Related record-keeping and complaints management.

2.1.2 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 2 below provides a summary of potential human and environmental receptors that may be impacted by as a result of activities upon or emission and discharges from the prescribed premises (*Guideline: Environmental siting* (DWER 2020)).

Table 2: Sensitive human receptors and distance from prescribed activity

Receptors	Distance from prescribed activity
Human receptors	
Murrayfield Airport	Approximately 500 m south of the premises boundary.
Nearest group of rural residential premises	Starting at approximately 1,100 m southwest of the premises.
Group of rural residential premises	Starting at approximately 1,990 m southeast of the premises.
Nearest residential development (Stake Hill)	Approximately 3,160 m northwest of the premises.
Southern portion of Stake Hill residential area	Approximately 3,300 m northwest of the premises.
Barragup residential area	Approximately 3,750 m southwest of the premises.
Environmental receptors	
Nature reserve	Crown land vested in the Conservation Commission of Western Australian for the conservation of flora and fauna is located approximately 700 m to the southwest of the premises.
Threatened Ecological Communities and Priority Ecological Communities	A threatened ecological community is located approximately 5 km to the southwest of the premises.

Receptors	Distance from prescribed activity
Rare flora	The premises is located within an area approximately 20 km by 9 km known to contain declared rare flora.
Environmental Protection Peel Inlet – Harvey Estuary Policy 1992	The premises is within the Policy area.
Rights in Water and Irrigation Act 1914 - Surface Water (Serpentine River System) - Groundwater (Murray)	The premises is within the Proclaimed areas.
Groundwater	<p>Groundwater is generally less than 2 m from the ground surface across the premises area. The regional direction of groundwater flow may be in a west to north-westerly direction towards the Serpentine River. There may be local variations in flow direction near Nambeelup Farm due to the presence of water table management drains, seepage from ponds and local groundwater abstraction.</p> <p>There are several abstraction bores within the vicinity and down hydraulic gradient from the premises which are used for livestock watering and irrigation.</p>
RAMSAR wetland	Peel-Yalgorup System (Peel Estuary Harvey Inlet) located over 11 km west-southwest of the premises.
Geomorphic Wetlands	<p>There are five conservation category wetlands within 1 km of the premises operational areas:</p> <ul style="list-style-type: none"> - One approximately 1 km southwest of the premises; - Two approximately 800 m and 600 m southeast of the premises; and - Two approximately 400 m and 800 m north of the premises.
Waterbodies	<p>The Nambeelup Brook is located approximately 2 km east of the premises. The Serpentine River is located approximately 2.5 km west of the premises. Goegrup Lake is approximately 5 km southwest of the premises and is fed by both the Serpentine River and Nambeelup Brook.</p> <p>All three waterbodies are Conservation category wetlands (western end of Nambeelup Brook only) and ultimately drain to the Peel Harvey Estuary.</p>

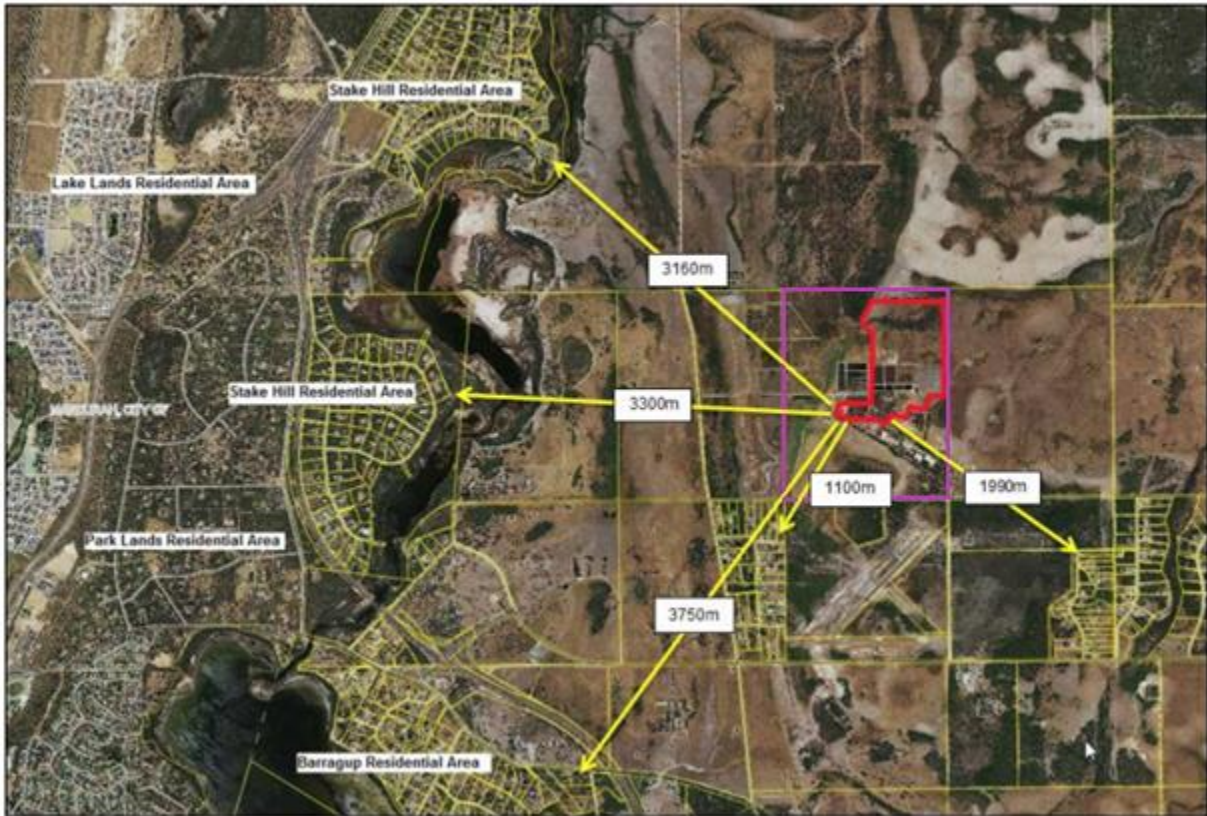


Figure 1: Sensitive receptors for odour emissions surrounding the premises

2.2 Risk ratings

Risk ratings have been assessed in accordance with the *Guideline: Risk Assessments* (DWER 2020) for those emission sources which are proposed to change and takes into account potential source-pathway and receptor linkages as identified in Section 2.1. Where linkages are incomplete they have not been considered further in the risk assessment.

Where the Licence Holder has proposed mitigation measures/controls (as detailed in Section 2.1), these have been considered when determining the final risk rating. Where the Delegated Officer considers the Licence Holder's proposed controls to be critical to maintaining an acceptable level of risk, these will be incorporated into the licence as regulatory controls.

Additional regulatory controls may be imposed where the Licence Holder's controls are not deemed sufficient. Where this is the case the need for additional controls will be documented and justified in Table 3.

The revised Licence L8410/2009/2 that accompanies this Amendment Report authorises emissions associated with the operation of the premises.

The conditions in the revised licence have been determined in accordance with *Guidance Statement: Setting Conditions* (DER 2015).

Table 3: Risk assessment of potential emissions and discharges from the premises during operation.

Risk Event					Risk rating ¹	Conditions ² of licence	Justification for additional regulatory controls
Source/Activities	Potential emission	Potential pathways and impact	Receptors	Existing regulatory controls	C = consequence L = likelihood		
Composting process including solid and liquid feedstock acceptance, handling and storage Desludging of ponds	Odour	Pathway: Air / windborne Impacts: Health and amenity	Residential receptors Patrons of airfield located 500 m south	See Table 1	C = Moderate L = Likely High Risk	Licence conditions 2, 3, 4, 9 to 16, 20, 21, and 27 to 29 <u>1A: Odour emissions must not unreasonably interfere with sensitive receptors</u> <u>10A: Sludge management plan must be in place to remove sludge</u> <u>21A to 21D: Submission, implementation and administrative requirements for a sludge management plan</u>	The Delegated Officer considers that odour from the premises is likely to be causing a direct or indirect alteration of the environment to the detriment or degradation of an environmental value. Environmental value, in this context, is considered to be the beneficial use of the portion of the environment (air quality) that is conducive to public amenity, public health and aesthetic enjoyment of the environment for surrounding receptors. The Delegated Officer has considered current premises activities, the volume of odour complaints recently received and the outcomes of odour investigations in the area, to determine that the likelihood of odour emissions from the premises impacting surrounding receptors has increased. This increases the overall rating of the risk event to High and will require additional outcome-based and management conditions to be specified on the licence as regulatory controls.
	Leachate	Pathways: Seepage, spills and pond overflows discharging to land Impacts: Soil contamination, ecosystem disturbance and impacts to water quality	Peel-Yalgorup RAMSAR Wetland/Peel Inlet and Harvey Estuary EPP area Groundwater (abstraction bores) Conservation category geomorphic wetlands Nambeelup Brook Serpentine River Nature reserve Threatened Ecological Communities and Priority Ecological Communities	See Table 1	C = Moderate L = Likely High Risk	Licence conditions 2 to 7, 8, 10, 19, 21, and 27 to 29 <u>10A: Sludge management plan must be in place to remove sludge</u> <u>21A to 21D: Submission, implementation and administrative requirements for a sludge management plan</u>	Based on monitoring information received to date, the Delegated Officer considers that the liquids, solids and sludge present in ponds on the premises has increased the likelihood of leachate emissions impacting surrounding receptors. This increases the overall rating of the risk event to High and will require additional outcome-based and management conditions to be specified on the licence as regulatory controls. To reduce the likelihood of leachate emission impacts, the Delegated Officer will require removal of sludge in accordance with an endorsed plan that sets out the key actions and objectives to be achieved.

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

Note 2: Existing regulatory controls are depicted by standard text. **Bold and underline text** depicts additional regulatory controls imposed by the department through this amendment.

3. Consultation

The Licence Holder was provided with the draft amendment on 20 September 2024 and provided a response on 9 October 2024. A revised draft was then provided by the Delegated Officer on 16 October 2024, which the Licence Holder responded to on 18 October 2024. The Delegated Officer has considered both responses received from the Licence Holder in determining this amendment.

4. Decision and summary of amendments

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.

Table 4 below provides a summary of the proposed amendments and will act as a record of implemented changes. All proposed changes have been incorporated into the revised licence as part of the amendment process.

Table 4: Summary of licence amendments

Condition no.	Proposed amendments
Duration (date of issue)	Corrected an unintentional error by changing the date to 23 April 2015 to reflect the actual issue date of L8410/2009/2.
Duration (expiry date)	Extended by approximately 3.5 years to 22 April 2028 and in alignment with the anniversary date of the grant of the licence.
1: Table 1	Table amended to include reference to new conditions 1A, 10A and 21A to 21D.
1A	New condition added requiring odour emissions to not unreasonably interfere with sensitive receptors.
10	Condition amended to refer to the Sludge Management Plan prepared in accordance with condition 21A.
10A	New condition added requiring a sludge management plan to be in place before desludging ponds.
21	Condition amended to refer to the Sludge Management Plan prepared in accordance with condition 21A.
21A to 21D	New condition set added specifying submission, implementation and administrative requirements for a sludge management plan.
Definitions	The following new definitions were added in relation to the above amendments: <ul style="list-style-type: none"> - Guideline: Odour emissions - Sensitive Receptor - Sludge Management Plan
	Adding additional wording to the CEO definition in relation to the sludge management plan conditions.
	Corrected a clerical mistake in the PFAS NEMP definition.

References

1. Department of Environment Regulation (DER) 2015, *Guidance Statement: Setting Conditions*, Perth, Western Australia.
2. DER 2016, *Guidance Statement: Licence Duration*, Perth, Western Australia.
3. Department of Water and Environmental Regulation (DWER) 2020, *Guideline: Environmental Siting*, Perth, Western Australia.
4. DWER 2020, *Guideline: Risk Assessments*, Perth, Western Australia.