



Application for Works Approval

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

Works Approval Number W6815/2023/1

Applicant River Nominees Pty Ltd

ACN 260 959 585

File number DER2023/000239

Premises Purearth Woottating Facility
324 Horton Road WOOTTATING WA 6562
Part of Lot 13 on Deposited Plan 87525
Certificate of Title Volume 2026 Folio 553
As defined by the coordinates in Schedule 2 of the works approval

Date of report 14 December 2023

Decision Works approval granted

Abbie Crawford
A/MANAGER, WASTE INDUSTRY
an officer delegated under section 20 of the *Environmental Protection Act 1986* (WA)

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1. Decision summary

This decision report documents the assessment of potential risks to the environment and public health from emissions and discharges during the construction and operation of the premises. As a result of this assessment, works approval W6815/2023/1 has been granted.

2. Scope of assessment

2.1 Regulatory framework

In completing the assessment documented in this decision report, the Department of Water and Environmental Regulation (the department; DWER) has considered and given due regard to its regulatory framework and relevant policy documents which are available at <https://dwer.wa.gov.au/regulatory-documents>.

In this assessment the delegated officer has also considered the approach set out in the [Guideline: better practice organics recycling](#).

2.2 Application summary and overview of premises

River Nominees Pty Ltd trading as Purearth operates an organic waste composting facility known as the Purearth Woottating Facility on a property located at Lot 13 on Diagram 87525, having street address 324 Horton Road, Woottating, Western Australia (WA). The operation covers 8 hectares of the 133 ha property. The property is predominantly used for agricultural purposes and has, in the past, been used for grazing cattle.

The current composting operations at the premises uses technology comprising of forced aeration for covered compost windrows. The facility mixes a range of liquid wastes with the composting solids in a mixing shed before waste is placed in windrows for composting. Air is pulled through the windrows by fans and directed to a biofilter.

On 3 April 2023, the applicant submitted an application for a works approval to the department under section 54 of the *Environmental Protection Act 1986* (EP Act).

The application is to undertake construction works associated with the following:

- Installation of eight concrete bunker-type walls around existing composting slabs;
- Additional compost maturation area and finished product storage area;
- Installation of three additional groundwater monitoring bores;
- Additional water tank for contingency purposes; and
- Additional leachate storage pond.

The applicant is also proposing to introduce FOGO as a discrete feedstock and increase throughput from 77,500 tonnes to 85,000 tonnes per annual period, being:

- Category 61: 20,000 tonnes; and
- Category 67A: 65,000 tonnes.

The production increase will include changes to the existing processing infrastructure to include a conversion of the existing compost hardstand to a bunker composting system with each pasteurisation bunker having 3 metre (m) high concrete walls. The pasteurisation bunkers will provide the infrastructure to contain and cover the composting process and treat odour emissions via the existing biofilter.

It is proposed that the eight pasteurisation bunkers will be constructed in the location of the existing composting hardstand. The pasteurisation bunkers will have solid walls (concrete) erected on three sides. Each bunker will measure approximately 50.5 m x 11.0 m x 3.0 m in height. It is proposed that the installation of these bunker walls would be phased to enable composting operations to continue.

Leachate from the additional compost maturation and finished product storage area will be

directed to a new leachate pond. The applicant undertook a water balance assessment of the proposed leachate pond in line with the *Guideline: better practice organics recycling* using rainfall figures obtained from the nearest Bureau of Meteorology (BOM) weather station. The findings of the assessment determined that the cumulative leachate volume within the leachate pond will peak at approximately 32.29 kL during the second year of cumulative storage. Based on a total available capacity of 35 kL (excluding freeboard) there is sufficient storage availability for leachate across the new leachate pond under normal conditions. There is also sufficient contingency contained within the freeboard capacity to contain a range of storm events.

Groundwater is present beneath the premises as a seasonal perched unit above the pallid clay zone of the laterite profile. The thickness of the perched aquifer, when present, is expected to range between 1 - 3 m. Depth to the perched groundwater table across the prescribed activity area ranges from approximately 3.5 – 9 mbgl. Groundwater flow is inferred to be north-northeast with a shallow gradient of 0.002. Regional groundwater occurs in a low yielding, fractured rock aquifer located between the pallid clay zone and granite bedrock. Depth to the regional groundwater table is approximately 20 – 25 mbgl.

The applicant currently monitors three groundwater bores on the premises as part of requirements in their existing licence. The three groundwater bores have been installed and screened at the depth of the seasonal perched aquifer and generally are unable to be sampled during the summer months. The applicant proposes to install an additional three monitoring bores in proximity to the extension area.

The premises relates to the categories and assessed production capacity under Schedule 1 of the *Environmental Protection Regulations 1987* (EP Regulations) which are defined in works approval W6815/2023/1. The infrastructure and equipment relating to the premises category and any associated activities which the department has considered in line with *Guideline: Risk Assessments* (DWER 2020) are outlined in works approval W6815/2023/1.

2.3 Environmental Protection (Clearing of Native Vegetation) Regulations 2004

Historically, the area was covered in native vegetation up until the early 1980s after which the site was mostly cleared with minimal vegetation comprised of isolated trees remaining. The applicant engaged PGV Environmental to undertake a Flora, Vegetation and Black Cockatoo Habitat Assessment (PGV, 2022) of the application area. The Flora, Vegetation and Black Cockatoo Habitat Assessment identified that:

- Most of the site is cleared with Marri trees and some Jarrah. A small area (0.5ha) containing some native understorey species occurs in the north-east corner of the site;
- The condition of the vegetation is mostly completely degraded with the small area of native vegetation in the north-east corner rated as good;
- The vegetation type is not a threatened or priority ecological community or part of a poorly reserve vegetation complex;
- A total of 38 plant species were recorded on the site, including 27 native and 11 introduced. 24 of the native species only occur in the small area of native vegetation in the north-east corner. The other three species are the trees throughout the site (Marri, Jarrah and one Wandoo);
- None of the species are listed as threatened or priority species. While the survey was undertaken in December, no threatened or priority species are expected to occur on the site in other seasons due to the very small area that contains some native understorey in the northeast corner and the low condition of this area;
- The development footprint has avoided the small area of intact native vegetation in the northeast corner of the site.

The Black Cockatoo Habitat Survey resulted in the following findings:

- The site contains 1.4ha of foraging habitat for three species of black cockatoo. Evidence of foraging on Marri nuts by Forest Red-tailed Black Cockatoos was recorded;
- The site does not contain any known roosting or breeding trees and no evidence of roosting or breeding was observed;
- The site contains 19 trees (17 Marri, one Jarrah and one Wandoo) that are defined as potential breeding habitat due to their diameter. Most of the trees were greatly impacted by fire and are highly unlikely to form a hollow in the future. The Wandoo tree had a potential vertical hollow large enough for black cockatoos to breed in. This tree has been avoided from clearing in the development design;
- There are more than 10,000ha of native vegetation in reserves in a 12km radius of the site; and
- The proposed development is likely to result in the clearing of 0.99 ha of foraging habitat and 16 potential breeding habitat trees. None of the habitat trees are likely to form a large hollow in the future due to the impact of fires on the tree canopy.

The applicant states that the proposed expansion of the existing composting facility has been designed with consideration given to the results of the flora, vegetation and black cockatoo habitat survey to avoid the clearing of an area of intact native vegetation, minimise the canopy of trees to be cleared and to avoid the clearing of a large Wandoo tree.

The applicant considers that clearing of native vegetation within the proposed application area is exempt from requiring a clearing permit as it is clearing in accordance with Regulation 5 of the *Environmental Protection (Clearing of Native Vegetation) Regulations 2004* (Clearing Regulations). The clearing fits the definition of Regulation 5, Item 1: Clearing to construct a building. Item 1 is described as:

Clearing of a site for the lawful construction of a building or other structure on a property, being clearing which does not, together with all other limited clearing on the property in the financial year in which the clearing takes place, exceed 5 ha, if –

- (a) the clearing is to the extent necessary; and*
- (b) the vegetation is not riparian vegetation.*

The clearing will occur in an area of approximately 0.99 ha, that is not growing in association with a watercourse and is not located within an ESA.

3. Risk assessment

The department assesses the risks of emissions from prescribed premises and identifies the potential source, pathway and impact to receptors in accordance with the *Guideline: Risk Assessments* (DWER 2020). To establish a risk event there must be an emission, a receptor which may be exposed to that emission through an identified actual or likely pathway, and a potential adverse effect to the receptor from exposure to that emission.

3.1 Source-pathways and receptors

3.1.1 Emissions and controls

The key emissions and associated actual or likely pathway during premises construction and time limited operations which have been considered in this decision report are detailed in Table 1 below. Table 1 also details the control measures the applicant has proposed to assist in controlling these emissions, where necessary.

Table 1: Proposed applicant controls

Emission or environmental aspect	Source	Potential pathways	Applicant proposed controls
Construction			
Dust	Construction of bunker walls around 8 existing composting slabs Construction of a new compost maturation area and finished product storage area Construction of additional leachate pond. Installation of additional water tank/s for contingency purposes Vehicle movement Use of machinery and equipment	Air/ windborne/ ground transmission to public receptors listed in Table 2	Distance to receptors Maintenance of all plant machinery and equipment
Noise	Construction of bunker walls around 8 existing composting slabs Construction of a new compost maturation area and finished product storage area Construction of additional leachate pond. Installation of additional water tank/s for contingency purposes Vehicle movement Use of machinery and equipment	Air/ windborne/ ground transmission to public receptors listed in Table 2	Distance to receptors Maintenance of all plant machinery and equipment
Emissions to land and water	Accidental spills or loss of containment Leaks from machinery/vehicles	Overland flow and infiltration to soil and groundwater	Conditions contained within licence L8769/2013/1 require the applicant to recover or remove and dispose of spills of environmentally hazardous materials outside an engineered containment system.

Emission or environmental aspect	Source	Potential pathways	Applicant proposed controls
Time limited and ongoing operations			
Dust	<p>Increased FOGO waste acceptance, mixing and storage</p> <p>Feedstock/ product unloading/ loading.</p> <p>Operation of the bunker system and additional hardstand area.</p> <p>Processing activities.</p> <p>Storage of final product.</p> <p>Vehicle movements.</p>	Air/ windborne/ ground transmission to public receptors listed in Table 2	<p>Distance to receptors</p> <p>Captured stormwater is used for dust suppression across the hardstand area</p>
Noise	All operations	Air/ windborne/ ground transmission to public receptors listed in Table 2	<p>Distance to receptors</p> <p>Maintenance of all plant machinery and equipment</p>
Odour	<p>Increased FOGO waste acceptance, mixing and storage</p> <p>Types of feedstocks/ waste accepted and processes used to manage the feedstocks.</p> <p>Operation of the bunker system, additional hardstand area and additional leachate pond.</p> <p>Processing activities.</p> <p>Anaerobic materials, including feedstocks and wastewater.</p>	Air/ windborne/ ground transmission to public receptors listed in Table 2	<p>Distance to receptors</p> <p>The applicant proposes to install the pasteurisation bunkers in a phased approach as to not interrupt existing compost windrows and to allow continued operation.</p> <p>All odour generated as part of existing operations is required to be treated by the biofilter prior to being emitted.</p> <p>Odour controls contained within licence L8769/2013/1 will be used to manage odour emissions during construction activities.</p>

Emission or environmental aspect	Source	Potential pathways	Applicant proposed controls
Emissions to land and water	<p>Increased liquid waste acceptance and mixing</p> <p>Increased FOGO waste acceptance, mixing and storage</p> <p>Operation of the bunker system, additional hardstand area and additional leachate pond.</p> <p>Rainfall over feedstocks, processing areas and stored products.</p> <p>Sediment laden stormwater</p> <p>Firewater in the event of a fire at the premises.</p>	<p>Overland flow and infiltration to soil and groundwater, including nearby receptors listed in Table 2</p> <p>Overtopping of leachate containment infrastructure to soil and groundwater, including nearby receptors listed in Table 2</p>	<p>Hardstand constructed to meet not less than 1×10^{-9} m/s permeability with bunds surrounding hardstand constructed of concrete and a minimum 300mm high.</p> <p>HDPE lined leachate collection system constructed from 2mm HDPE liner and designed to meet not less than 1×10^{-9} m/s permeability.</p> <p>Waste loads are not accepted when no windrow space is available.</p> <p>Mixing of waste within an enclosed mixing shed above a concrete hardstand.</p> <p>Composting bunkers are situated above a concrete hardstand.</p> <p>Stormwater that has come into contact with feedstocks, materials undergoing processing (i.e. mechanical, pasteurisation or composting), products or residual physical contaminants is collected in a lined leachate storage pond.</p> <p>Maintain a minimum freeboard of 500 mm on all storage ponds for leachate and contaminated stormwater to prevent overtopping.</p> <p>Firewater will be directed to lined storage pond.</p> <p>Sediment traps will be constructed at the premises capable of trapping mobile sediments.</p>
Point source emissions to air	Biofilter	Air/ windborne to public receptors listed in Table 2	<p>No additional controls have been provided.</p> <p>Further controls should be considered for any future licence amendments for additional feed stocks and increased throughput in line with the <i>Guideline: better practice organics recycling</i></p>

Emission or environmental aspect	Source	Potential pathways	Applicant proposed controls
Litter and debris	Contaminants and management of these within feedstocks/ waste and during operations. Debris accumulating within drains.	Air/ windborne and overland to public and environmental receptors listed in Table 2	No additional controls have been provided. Further controls should be considered for any future licence amendments for additional feed stocks and increased throughput in line with the <i>Guideline: better practice organics recycling</i> .
Fire event – environmental harm and emissions (smoke and fire water)	Feedstock/ waste types. Ignitions within materials compost and mulch, including materials undergoing pasteurisation Machinery and equipment.	Airborne (smoke), overland flow and seepage (fire water) to receptors listed in Table 2	The construction of an additional water storage tank to be used for fire fighting purposes.
Vectors (vermin and pests)	Feedstock/ waste types. Processes used to manage the feedstocks (liquids and solids).	Air and overland to public and environmental receptors listed in Table 2	No additional controls have been provided. Further controls should be considered for any future licence amendments for additional feed stocks and increased throughput in line with the <i>Guideline: better practice organics recycling</i>
Product quality derived impacts: release of physical, chemical and biological contaminants that can result in pollution or environmental harm.	Feedstock/ waste types. Application of products in the environment: with inadequate treatment of contaminants and/ or feedstocks during processing; with residual contaminants within products	Direct contact of products by consumers and leachate/ migration into the receiving environment.	Purearth continues to meet the requirements of both NASAA and the Australian standards, with the premises subject to annual audits.

3.1.2 Receptors

In accordance with the *Guideline: Risk Assessment* (DWER 2020), the Delegated Officer has excluded the applicant's employees, visitors, and contractors from its assessment. Protection of these parties often involves different exposure risks and prevention strategies, and is provided for under other state legislation.

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

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

Human receptors	Distance from prescribed activity
Residential Premises	Approximately 550 m west of the Premises boundary and 1250 m west northwest of the prescribed activities.
	Approximately 400 m southwest of the Premises boundary and 1300 m west southwest of the prescribed activities
	Approximately 1400 m southeast of the Premises boundary and prescribed activities.
Industrial premises	Immediately adjacent to the northern Premises boundary and approximately 575 m northwest of the prescribed activities
Users of products	Site specific where products are used, noting no restrictions are proposed on the use of the products
Environmental receptors	Distance from prescribed activity
Minor non-perennial watercourse flowing northward through the Premises.	Located within the Premises, approximately 150 m west of the prescribed activities and down topographic gradient.
Minor non-perennial watercourse flowing northwest through the Premises.	Located within the Premises, approximately 575 m northeast of the prescribed activities and up topographic gradient.
Wooroloo Brook: formed from the confluence of two minor non-perennial watercourses that flow through the Premises.	Approximately 220 m north of the Premises boundary and 750 m north of the prescribed activities.
Underlying groundwater (non-potable purposes)	Present as a seasonal perched unit above the pallid clay zone of the laterite profile. Depth to the perched groundwater table across the prescribed activity area ranges from approximately 3.5 – 9 mbgl. Depth to the regional groundwater table is approximately 20 – 25 mbgl.
Darling Range regional park	Approximately 400 m southwest of the Premises boundary and 1150 m southwest of the prescribed

	activities
RIWI Act Surface Water Area	The Premises is located within the Swan River System proclaimed area.
Environments receiving products	Site specific where products are used, noting no restrictions are proposed on the use of the products

3.2 Risk ratings

Risk ratings have been assessed in accordance with the *Guideline: Risk Assessments* (DWER 2020) for each identified emission source and takes into account potential source-pathway and receptor linkages as identified in Section 3.1. Where linkages are incomplete, they have not been considered further in the risk assessment.

Where the applicant has proposed mitigation measures/controls (as detailed in Section 3.1), these have been considered when determining the final risk rating. Where the delegated officer considers the applicant's proposed controls to be critical to maintaining an acceptable level of risk, these will be incorporated into the works approval as regulatory controls.

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

Works approval W6815/2023/1 that accompanies this decision report authorises construction and time-limited operations. The conditions in the issued works approval, as outlined in Table 3 have been determined in accordance with *Guidance Statement: Setting Conditions* (DER 2015).

A licence amendment is required following the time-limited operational phase authorised under the works approval to authorise emissions associated with the ongoing operation of the additional infrastructure. A risk assessment for the operational phase has been included in this decision report, however licence conditions will not be finalised until the department assesses the licence amendment application.

Table 3: Risk assessment of potential emissions and discharges from the premises during construction and time limited operations

Risk events					Risk rating ¹ C = consequence L = likelihood	Applicant controls sufficient?	Conditions ² of works approval	Justification for additional regulatory controls
Sources / activities	Potential emission	Potential pathways and impact	Receptors	Applicant controls				
Construction								
Construction of bunker walls around 8 existing composting slabs Construction of a new compost maturation area and finished product storage area Construction of additional leachate pond. Installation of additional water tank/s for contingency purposes Vehicle movements Use of machinery and equipment	Dust	Air / windborne pathway causing impacts to health and amenity	Residence 1250 m west northwest.	Refer to Section 3.1	C = Slight L = Possible Low Risk	Y	Condition 2	The Delegated Officer considers dust emissions can be effectively regulated by the general provisions of the EP Act. Condition 2 gives effect to this outcome.
	Noise		Residence 1300 m west southwest.		Refer to Section 3.1	C = Slight L = Possible Low Risk		Y
		Residence 1400 m southeast. Industrial premises located to the immediate north of the premises	The delegated officer considers noise emissions can be effectively regulated by the <i>Environmental Protection (Noise) Regulations 1997</i> .					
Accidental spills Leaks from machinery/vehicles	Seepage into underlying soils causing localised contamination Infiltration to groundwater causing ecosystem disturbance or impacting groundwater quality	Soil and groundwater beneath the site. Minor non-perennial watercourse located approximately 150 m west of the prescribed activities	Refer to Section 3.1	C = Minor L = Unlikely Medium Risk	Y	N/A	The Delegated Officer considers that the Applicant's proposed mitigation controls for spills/leaks are likely to be sufficient to mitigate potential emissions. Conditions contained within licence L8769/2013/1 require the applicant to recover or remove and dispose of spills of environmentally hazardous materials outside an engineered containment	

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Risk events					Risk rating ¹ C = consequence L = likelihood	Applicant controls sufficient?	Conditions ² of works approval	Justification for additional regulatory controls
Sources / activities	Potential emission	Potential pathways and impact	Receptors	Applicant controls				
								system.
Time limited operations								
Operation of bunker system Operation of additional compost maturation area and finished product storage area Operation of additional leachate pond	Dust	Air / windborne pathway causing impacts to health and amenity	Residence 1250 m west northwest. Residence 1300 m west southwest.	Refer to Section 3.1	C = Slight L = Unlikely Low Risk	Y	Condition 2	The Delegated Officer considers dust emissions can be effectively regulated by the general provisions of the EP Act. Condition 2 gives effect to this outcome.
	Noise	Air / windborne pathway causing impacts to health and amenity	Residence 1400 m southeast. Industrial premises located to the immediate north of the premises	Refer to Section 3.1	C = Slight L = Unlikely Low Risk	Y	N/A	The environmental siting of the premises is considered to be effective in mitigating the impact of noise emissions from the premises on sensitive receptors during time limited operations. The delegated officer considers noise emissions can be effectively regulated by the <i>Environmental Protection (Noise) Regulations 1997</i> .

Risk events					Risk rating ¹ C = consequence L = likelihood	Applicant controls sufficient?	Conditions ² of works approval	Justification for additional regulatory controls
Sources / activities	Potential emission	Potential pathways and impact	Receptors	Applicant controls				
	Odour	Air / windborne pathway causing impacts to health and amenity	Residence 1250 m west northwest. Residence 1300 m west southwest. Residence 1400 m southeast. Industrial premises located to the immediate north of the premises	Refer to Section 3.1	C = Moderate L = Possible Medium Risk	Y	Conditions 1 <u>Conditions 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14</u>	The Delegated Officer considers that the Applicant's proposed mitigation controls for odour are likely to be sufficient with additional regulatory controls in place to mitigate potential emissions from odour that may arise during time limited operations.

Risk events					Risk rating ¹ C = consequence L = likelihood	Applicant controls sufficient?	Conditions ² of works approval	Justification for additional regulatory controls
Sources / activities	Potential emission	Potential pathways and impact	Receptors	Applicant controls				
<p>Operation of bunker system</p> <p>Operation of additional compost maturation area and finished product storage area</p> <p>Operation of additional leachate pond</p>	Leachate/ liquid waste	<p>Seepage into underlying soils causing localised contamination</p> <p>Infiltration to groundwater causing ecosystem disturbance or impacting groundwater quality</p>	<p>Soil and groundwater beneath the site.</p> <p>Minor non-perennial watercourse located approximately 150 m west of the prescribed activities</p>	Refer to Section 3.1	<p>C = Moderate</p> <p>L = Possible</p> <p>Medium Risk</p>	Y	<p>Conditions 1</p> <p><u>Conditions 3, 4, 5, 6, 9, 10, 14</u></p>	<p>The applicant proposes to operate the pasteurisation bunkers in a phased approach as to not interrupt existing compost windrows.</p> <p>The Delegated Officer considers that leachate and stormwater controls contained within licence L8769/2013/1 are appropriate to manage emissions during time-limited operations of the pasteurisation bunkers.</p> <p>The Delegated Officer notes that monitoring bores at the premises have not been drilled to target the part, or parts, of the aquifer most likely to be affected by contamination. As temporary/seasonal perched features are present at the premises, conditions have been added to the works approval requiring new monitoring wells to be nested where required, and the perched features individually screened.</p> <p>Additional regulatory controls have been placed in the works approval requiring the Environmental Compliance Report for the additional hardstand area prior to the commencement of time limited operation of that infrastructure.</p>

Risk events					Risk rating ¹ C = consequence L = likelihood	Applicant controls sufficient?	Conditions ² of works approval	Justification for additional regulatory controls
Sources / activities	Potential emission	Potential pathways and impact	Receptors	Applicant controls				
<p>Operation of bunker system</p> <p>Operation of additional compost maturation area and finished product storage area</p> <p>Operation of additional leachate pond</p>	Fire/smoke	Air / windborne pathway causing impacts to health and amenity	<p>Residence 1250 m west northwest.</p> <p>Residence 1300 m west southwest.</p> <p>Residence 1400 m southeast.</p> <p>Industrial premises located to the immediate north of the premises</p> <p>Darling Range regional park located approximately 400m southwest of the Premises boundary and 1150 m southwest of the prescribed activities</p>	Refer to Section 3.1	<p>C = Major</p> <p>L = Rare</p> <p>Medium Risk</p>	Y	<p>Conditions 1</p> <p><u>Condition 10</u></p>	<p>The Delegated Officer considers fire controls contained within licence L8769/2013/1 along with additional firewater tank and associated operational conditions are appropriate to manage emissions during time limited operations as part of the works approval.</p> <p>The Applicant will also be required to adhere to the requirements of the <i>Bush Fires Act 1954</i> which includes the maintenance of fire breaks.</p>
	Firewater	<p>Seepage into underlying soils causing localised contamination</p> <p>Overland flow to stormwater infrastructure and infiltration to groundwater causing ecosystem disturbance or impacting groundwater quality</p>	<p>Soil and groundwater beneath the site.</p> <p>Minor non-perennial watercourse located approximately 150 m west of the prescribed activities</p>	Refer to Section 3.1	<p>C = Moderate</p> <p>L = Possible</p> <p>Medium Risk</p>	Y	<p>Conditions 1</p> <p><u>Conditions 4, 5, 6, 9, 10</u></p>	<p>The Delegated Officer notes that no controls have been proposed to prevent fire water from contaminating the soil and groundwater. However, as composting and product storage hardstand areas drains to a leachate pond, it is therefore implied that firewater can be captured and removed from site in the event of a fire event occurring at the premises. Further controls may be conditioned within future licence amendments should the applicant apply to increase throughput.</p>

Risk events					Risk rating ¹ C = consequence L = likelihood	Applicant controls sufficient?	Conditions ² of works approval	Justification for additional regulatory controls
Sources / activities	Potential emission	Potential pathways and impact	Receptors	Applicant controls				
Additional feedstocks and increased throughput								
Feedstock/ waste and product unloading/ loading and storage. Composting activities Storage of leachate in leachate pond Vehicle movements	Dust	Air / windborne pathway causing impacts to health and amenity	Residence 1250 m west northwest. Residence 1300 m west southwest. Residence 1400 m southeast. Industrial premises located to the immediate north of the premises	Refer to Section 3.1	C = Slight L = Unlikely Low Risk	N/A	N/A Operational conditions are imposed on licence L8769/2013/1. Further conditions may be imposed once the Licence is amended to accommodate the increased throughput and waste types.	This works approval authorises the construction and operation of additional infrastructure only. Licence L8887/2015/1 must be amended to authorise the increased throughput. Therefore, operational requirements regarding the increased waste acceptance and production of compost products have not been conditioned on the works approval.
Feedstock/ waste and product unloading/ loading and storage. Composting activities Storage of leachate in leachate pond	Odour	Air / windborne pathway causing impacts to health and amenity	Residence 1250 m west northwest. Residence 1300 m west southwest. Residence 1400 m southeast. Industrial premises located to the immediate north of the premises	Refer to Section 3.1	Refer to detailed assessment in Section 3.3 below			

Risk events					Risk rating ¹	Applicant controls sufficient?	Conditions ² of works approval	Justification for additional regulatory controls
Sources / activities	Potential emission	Potential pathways and impact	Receptors	Applicant controls	C = consequence L = likelihood			
<p>Feedstock/ waste and product unloading/ loading and storage.</p> <p>Composting activities</p> <p>Storage of leachate in leachate pond</p> <p>Seepage through hardstand areas and pond</p> <p>Damage/rupture of pond liner</p> <p>Overtopping of leachate storage pond</p> <p>Run-off from hardstand</p>	Leachate/ liquid waste	<p>Seepage into underlying soils causing localised contamination.</p> <p>Infiltration to groundwater causing ecosystem disturbance or impacting groundwater quality</p>	<p>Soil and groundwater beneath the site.</p> <p>Minor non-perennial watercourse located approximately 150 m west of the prescribed activities</p>	Refer to Section 3.1	Refer to detailed assessment in Section 3.4 below			
<p>Fire event</p> <p>Compost fire</p>	Fire/smoke	Air / windborne pathway causing impacts to health and amenity	<p>Residence 1250 m west northwest.</p> <p>Residence 1300 m west southwest.</p> <p>Residence 1400 m southeast.</p> <p>Industrial premises located to the immediate north of the premises</p> <p>Darling Range regional park located approximately 400m southwest of the Premises boundary and 1150 m southwest of the prescribed activities</p>	Refer to Section 3.1	<p>C = Major</p> <p>L = Rare</p> <p>Medium Risk</p>	N/A	<p>N/A</p> <p>Operational conditions are imposed on licence L8769/2013/1.</p> <p>Further conditions may be imposed once the Licence is amended to accommodate the increased throughput and waste types.</p>	<p>This works approval authorises the construction and operation of additional infrastructure only. Licence L8887/2015/1 must be amended to authorise the increased throughput. Therefore, operational requirements regarding the increased waste acceptance and production of compost products have not been conditioned on the works approval.</p>

Risk events					Risk rating ¹ C = consequence L = likelihood	Applicant controls sufficient?	Conditions ² of works approval	Justification for additional regulatory controls
Sources / activities	Potential emission	Potential pathways and impact	Receptors	Applicant controls				
Fire event Compost fire	Firewater	Seepage into underlying soils causing localised contamination Overland flow to stormwater infrastructure and infiltration to groundwater causing ecosystem disturbance or impacting groundwater quality	Soil and groundwater beneath the site. Minor non-perennial watercourse located approximately 150 m west of the prescribed activities	Refer to Section 3.1	C = Moderate L = Possible Medium Risk	N/A	N/A Operational conditions are imposed on licence L8769/2013/1. Further conditions may be imposed once the Licence is amended to accommodate the increased throughput and waste types.	This works approval authorises the construction and operation of additional infrastructure only. Licence L8887/2015/1 must be amended to authorise the increased throughput. Therefore, operational requirements regarding the increased waste acceptance and production of compost products have not been conditioned on the works approval.
Contaminants and management of these within feedstocks/ wastes	Litter and debris	Air/ windborne and overland impacting human amenity and health and/ or the environment, including adjacent threatened ecological communities	Residence 1250 m west northwest. Residence 1300 m west southwest. Residence 1400 m southeast. Industrial premises located to the immediate north of the premises Darling Range regional park located approximately 400m southwest of the Premises boundary and 1150 m southwest of the prescribed activities	Refer to Section 3.1	C = Minor L = Rare Low Risk	N/A	N/A Operational conditions are imposed on licence L8769/2013/1. Further conditions may be imposed once the Licence is amended to accommodate the increased throughput and waste types.	This works approval authorises the construction and operation of additional infrastructure only. Licence L8887/2015/1 must be amended to authorise the increased throughput. Therefore, operational requirements regarding the increased waste acceptance and production of compost products have not been conditioned on the works approval.

Risk events					Risk rating ¹ C = consequence L = likelihood	Applicant controls sufficient?	Conditions ² of works approval	Justification for additional regulatory controls
Sources / activities	Potential emission	Potential pathways and impact	Receptors	Applicant controls				
Product quality: <ul style="list-style-type: none"> • fit-for-purpose compost • pasteurised mulch • blended compost products 	Release of physical, chemical and / or biological contaminants	Direct contact of products by consumers and the receiving environment; impacting public amenity and public and environmental health	Product users and the environment receiving the product and subsequent impacts from contaminants	Refer to Section 3.1	C = Moderate L = Unlikely Medium Risk	N/A	N/A Operational conditions are imposed on licence L8769/2013/1. Further conditions may be imposed once the Licence is amended to accommodate the increased throughput and waste types.	This works approval authorises the construction and operation of additional infrastructure only. Licence L8887/2015/1 must be amended to authorise the increased throughput. Therefore, operational requirements regarding the increased waste acceptance and production of compost products have not been conditioned on the works approval.

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

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

3.3 Detailed risk assessment for odour

3.3.1 Hazard characterisation and potential impacts

Odour generated in the compost process is generally associated with receipt, storage, handling and decomposition of putrescible feedstocks, and leachate and runoff generated from feedstock and compost in the initial pasteurisation stages. Odour can cause amenity and health impacts to surrounding receptors.

Individual responses to odour may vary depending on a person's sensitivity to odours, age, health status and previous exposure patterns to odour. Community impacts from odour can include annoyance, potentially leading to stress, and loss of amenity. Exposure to repeated odour events can create a nuisance effect.

Exposure times and frequency of odour emissions will be dependent on day to day activities and weather conditions. The pathway for odour emissions is air/wind, therefore the prevailing wind direction has been considered. The nearest BoM weather station is located at Bakers Hill, which is approximately 15 kms north, north-east of the Premises and at an altitude of approximately 330 m. The Premises is at an elevation of approximately 300 m.

It is understood that the terrain is highly complex, and the meteorological characteristics at the premises may vary from those at Bakers Hill and the other weather stations nearby the premises. The Bakers Hill site does not provide daily trends for wind speed and direction, however; the Muresk Institute does. The Bakers Hill site best represents rainfall and temperature trends closest to the Site.

Environmental and Air Quality Consulting Pty Ltd (EAQ), 2023 state that it can be “*assumed that prevailing winds nearer to the Purearth Site are likely to emanate from the northwest, southwest and to a lesser degree the narrow east northeast through SE quadrants. It is expected however that some prominence would arise from the north-east quadrant*”.

3.3.2 Current situation

The current operation at the Purearth Organic Composting Facility is licensed (L8769/2013/1) to produce 58,000 tonnes of compost per annual period. The licence was initially granted on 27 February 2015. A search of the departments Incidents and Complaints Management System has not identified any complaints regarding odour emissions from the premises.

3.3.3 Odour assessment

As part of the works approval application the applicant provided an Odour & Emissions Impact Assessment Report (EQA, 2023) The assessment has been undertaken in a manner that broadly follows the principles and procedures of DWER's *Guideline: Odour emissions* (2019) (odour guideline). The Odour & Emissions Impact Assessment Report was referred to the departments specialist Air Quality Branch (AQB) for review. The air quality specialist noted that the odour impact assessments of the proposed operations contains uncertainties, and consequently the accuracy and reliability of conclusions are difficult to assess.

The AQB specialist notes that the following factors complicate the odour impact assessment of the proposed increases in waste acceptance and composting activities:

- The landscape separating the premises and sensitive receptors is not flat and level, making plume pathways and behavior difficult to predict;
- The odour impacts of the existing facility have not been characterised by field studies, ruling out odour impact modelling assessment;
- Flexibility has been requested regarding green waste and FOGO waste input ratios. These different waste streams can have significantly different odour generating

potential;

- FOGO is defined in the *Guideline: better practice organics recycling* as being a high-risk feedstock for odour emissions. FOGO may be highly odorous at acceptance because of anaerobic conditions in bins/trucks before collection and during transport.
- The proposed inputs and outputs at the premises differ markedly from those currently reported for the three previous reporting periods:
 - (i) 2020 reporting period - 25,026 tonnes of finished product;
 - (ii) 2021 reporting period – 16,900 tonnes of finished product; and
 - (iii) 2022 reporting period - 17,404 tonnes of finished product;

The Delegated Officer notes that mixing shed has a manually operated 900 g/m² PVC curtain door. The applicant states that a misting system is operated in the mixing shed from midnight until dawn on a programmed basis, and as required on a manual basis. The operating licence (L8769/2013/1) requires the sliding curtain on the mixing shed to be closed outside of operating hours. There are currently no conditions within the licence pertaining to the infrastructure and operation of the misting system. The effectiveness of these odour controls at the mixing shed remains unknown.

3.3.4 Criteria for assessment

There are no set threshold or concentration criteria for odour assessment. Under section 49(5) of the EP Act, it is an offence to emit or cause to be emitted, an unreasonable emission from any premises. Any unreasonable emission is defined in the EP Act (section 49(1)) as an emission or transmission of noise, odour or electromagnetic radiation which unreasonably interferes with the health, welfare, convenience, comfort or amenity of any person.

3.3.5 Applicant controls

Section 3.1.1 above (Table 1) details the control measures the applicant has proposed to assist in controlling odour emissions.

3.3.6 Key findings

Key findings:

The Delegated Officer considers:

- Caution must be applied regarding the use of the Muresk weather station located 30km further inland than the Purearth premises as the premises may experience different wind conditions to those observed at the Muresk weather station.
- The presence of hilly terrain between the premises and receptors may act to dilute and/or divert odour plumes away from the nearest residential receptor to the west.
- No complaints have been recorded by DWER for the existing operations. However, it must be noted that the proposed increase is markedly greater than those currently being accepted and processed at the premises.
- The installation of the pasteurisation bunkers will result in an increased focus on odour controls including the use of covers, forced windrow aeration, automated temperature, moisture and oxygen level control, capture of and treatment of air from the bunkers, and reduced handling (windrow turning is not required).
- It is not possible to predict with high certainty whether the proposed waste acceptance amendments will increase the odour footprint at the premises. It should be noted that the works approval does not authorise additional feed stocks and

throughput and that future licence amendments may be subject to further odour management conditions eg odour field assessments, development of a biofilter management plan and odour controls on the receipt/mixing shed.

3.3.7 Consequence

Given the uncertainties outlined within the risk assessment, until such time that odour sources and emissions are adequately characterised, the Delegated Officer has determined that off-site impacts of odour may result in mid-level impact to amenity. Therefore, the Delegated Officer considers the consequence of odour emissions to be **moderate**.

3.3.8 Likelihood of Risk Event

Given the uncertainties outlined within the risk assessment, until such time that odour sources and emissions are adequately characterised, the Delegated Officer has determined that odour emissions, impacting receptors, may occur at some time. Therefore, the Delegated Officer considers the likelihood of odour emissions causing impacts to amenity is **possible**.

3.3.9 Overall rating of odour risk

The Delegated Officer has compared the consequence and likelihood ratings described above with the risk rating matrix and determined that the overall rating for the risk of odour emissions is **medium**.

3.3.10 Acceptability of Risk Event

As per DWER's acceptability and treatment of Risk Events the Delegated Officer has determined that the risk event is tolerable and will be subject to regulatory controls.

This works approval authorises the construction and operation of additional infrastructure only. Licence L8887/2015/1 must be amended to authorise the increased throughput. Therefore, operational requirements regarding the increased waste acceptance and production of compost products have not been conditioned on the works approval.

3.4 Detailed risk assessment for leachate

3.4.1 Hazard characterisation and potential impacts

Leachate emissions from composting facilities have the potential to contain nutrients, metals, salts and other soluble or suspended components and decomposition products of the waste. Leachate also generally has a high biochemical oxygen demand.

Without effective containment measures, composting leachate has the potential to infiltrate to soil and groundwater or flow into surface water bodies. This may lead to adverse environmental impacts or affect the beneficial use of these resources. Beneficial use means a use of the environment, or of any portion thereof, which is conducive to public benefit, public amenity, public safety, public health or aesthetic enjoyment and which requires protection.

The applicant has requested flexibility regarding green waste and FOGO waste input ratios. These different waste streams are known to have significantly different leachate generating potential.

Groundwater is present beneath the premises as a seasonal perched unit above the pallid clay zone of the laterite profile. The thickness of the perched aquifer, when present, is expected to range between 1 - 3 m. Depth to the perched groundwater table across the prescribed activity area ranges from approximately 3.5 – 9 mbgl. Groundwater flow is inferred to be north-northeast with a shallow gradient of 0.002. Regional groundwater occurs in a low yielding, fractured rock aquifer located between the pallid clay zone and granite bedrock. Depth to the regional groundwater table is approximately 20 – 25 mbgl.

A minor non-perennial watercourse flows northward through the premises. The watercourse is located approximately 150m west of the prescribed activities and is inferred to be down hydraulic gradient. The Darling Range Regional Park is located approximately 400 m southwest from the prescribed premises boundary 1150 m southwest of the prescribed activities.

Soils beneath the Premises are defined as being lateritic, duplex soil profile with generally medium to coarse, rounded and granular fragments at the surface and layers of coarse to very coarse angular fragments in a low permeability sheet at depths ranging from 2 to 5m, underlain by creamy coloured clays. Sandy clays from 2 to 6 m becoming clayey sands with light brown clay below this to at least 10 m.

The applicant undertook a water balance assessment of the proposed leachate pond in line with the *Guideline: better practice organics recycling* using rainfall figures obtained from the nearest Bureau of Meteorology (BOM) weather station. The findings of the assessment determined that the cumulative leachate volume within the leachate pond will peak at approximately 32.29 kL during the second year of cumulative storage. Based on a total available capacity of 35 kL (excluding freeboard) there is sufficient storage availability for leachate across the new leachate pond under normal conditions. There is also sufficient contingency contained within the freeboard capacity to contain a range of storm events.

3.4.2 Criteria for assessment

The following guidelines are considered appropriate assessment criteria to assess the potential impact on the beneficial use of groundwater:

- Australian and New Zealand Guidelines for Fresh and Marine Water Quality ANZECC & ARMCANZ (2000) for livestock drinking water quality.

The following guidelines are considered appropriate assessment criteria to assess the potential impact on groundwater dependent and freshwater ecosystems and surface water quality.

- Australian and New Zealand Guidelines for Fresh and Marine Water Quality ANZECC

& ARMCANZ (2000) for slightly moderately disturbed ecosystems (95% protection level trigger values).

3.4.3 Applicant controls

Section 3.1.1 above (Table 1) details the control measures the applicant has proposed to assist in controlling leachate emissions.

3.4.4 Key findings

Key findings:

The Delegated Officer considers:

- The storage and handling of compost and leachates has the potential to impact groundwater and surface water quality if not appropriately contained.
- All new hardstands will be constructed from 300 mm compacted clay, 150 mm compacted gravel, and 100 mm recycled asphalt to achieve a coefficient of permeability of 1×10^{-9} m/s or less.
- green waste and FOGO waste inputs are known to have significantly different leachate generating potential.
- The additional leachate pond is adequately sized and constructed to manage leachate under normal conditions with sufficient contingency to manage storm events.
- A freeboard of 500 mm will be maintained for all leachate and storage ponds.

3.4.5 Consequence

Based on the proximity of receptors and sensitivity of receiving environment, the Delegated Officer has determined that leachate emissions could cause mid-level on-site impacts with low level offsite impacts. Therefore, the Delegated Officer considers the consequence to be **moderate**.

3.4.6 Likelihood of Risk Event

Based on the applicant's proposed controls, the Delegated Officer has determined that leachate emissions will probably not occur in most circumstances. Therefore, the Delegated Officer considers the likelihood of leachate impacts to the human and environmental health to be **unlikely**.

3.4.7 Overall rating of leachate risk

The Delegated Officer has compared the consequence and likelihood ratings described above with the risk rating matrix and determined that the overall rating for the risk of leachate emissions from operations is **medium**.

3.4.8 Acceptability of Risk Event

As per DWER's acceptability and treatment of Risk Events the Delegated Officer has determined that the risk event is tolerable and will be subject to regulatory controls.

This works approval authorises the construction and operation of additional infrastructure only. Licence L8887/2015/1 must be amended to authorise the increased throughput. Therefore, operational requirements regarding the increased waste acceptance and production of compost products have not been conditioned on the works approval.

4. Consultation

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

Table 4: Consultation

Consultation method	Comments received	Department response
Application advertised on the department's website on 10 July 2023	None received	N/A
Local Government Authority advised of proposal on 15 August 2023	The City of Northam replied on 24 August 2023 confirming that the information provided in the application is consistent with the approvals that were sought by the applicant through the Shire.	Noted. The works approval is conditioned to prevent conflict with Development Approval conditions where appropriate. The addition of operational hours will be considered in any future licence amendment.
Applicant was provided with draft documents on 2 November 2023	Refer to Appendix 1	Refer to Appendix 1

5. Conclusion

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

In consideration of the approach set out in the [Guideline: better practice organics recycling](#), the delegated officer has determined that the design and construction of the pasteurization bunker system, additional hardstand area and additional leachate pond at the premises can achieve the better practice benchmark for the purposes of Part V of the EP Act.

The works approval authorises the construction and time limited operation of the proposed infrastructure. However, it does not authorise the increase in feedstocks or acceptance of additional waste types. Licence L8769/2013/1 will need to be amended to authorise the increase in feedstocks and acceptance of additional waste types. In accordance with the department's Industry Regulation Guide to Licensing an application to amend Licence L8769/2013/1 can be submitted at the same time as the Environmental Compliance Report as required by condition 4 of the works approval.

The increased throughput and addition of waste types have been risk assessed as part of this works approval in order to determine if it is appropriate to approve the infrastructure required to support the proposed throughput increase. Additional conditions to manage odour and compost quality will be considered as part of any licence amendment to accommodate the increased throughput and waste types.

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.
4. DWER 2022, *Guideline: Better practice organics recycling*, Perth, Western Australia.
5. Environmental & Air Quality Consulting Pty Ltd 2023. *Works Approval Odour & Emission Impact Assessment*, River Nominees Pty Ltd: Purearth, Woottating. 22 February 2023.
6. Local Geotechnics 2023. *Geotechnical Investigation for 324 Horton Road, Woottating WA*. 27 March 2023.
7. PGV Environmental 2022, *Flora, Vegetation And Black Cock Atoo Habitat Survey*. Part Lot 13 Horton Road, The Lakes. 2 May 2023.
8. Purearth, 2022. *Purearth Organic Composting Overview*, October 2022.
9. Purearth, 2023. *Purearth Construction Details Report. Proposed Extension Of Purearth Compost Facility at 324 Horton Rd Woottating*, June 2023.
10. Standards Australia 2012, *Australian Standard AS 4454 Composts, soil conditioners and mulches*, Sydney, Australia.

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

Condition	Summary of applicant's comment	Department's response
Condition1 Table 1	The design and construction requirements for the pasteurization bunkers should reflect that each bunker wall will be 3 metres high.	The Delegated Officer notes the discrepancy between the design and construction figures and the 2m height listed in the design and construction requirements table. The condition has been updated to reflect the 3m height proposed.
Condition 1 Table 1	Purearth has reconsidered the design of the leachate catchment system and elected to proceed with one additional integrated catchment dam, bordering the Western side of the hardstand and the Northern side of the hardstand. As such, this additional catchment dam might well be designated as number 3. The revised drawings will reflect the revised total combined operational capacity, ie catchment dam capacity, which has been reduced, given that the extraction of water for use in dust suppression over drier months was left out of previous projections.	<p>The Delegated Officer has updated the decision report and works approval to reflect the construction and time limited operations for one leachate pond (leachate pond 3).</p> <p>The applicants request to use leachate as dust suppression has not been granted as part of the works approval. Any proposal to reuse leachate as dust suppression onsite will need to be undertaken via an amendment to the operational licence and be supported by additional information (analytical results, proposed controls, infrastructure design, methodology, management practices etc).</p> <p>The reuse of leachate as dust suppression was included within the updated water balance provided by the applicant. The Delegated Officer did not include these volumes in the assessment of the water balance due to the activity not being included in the works approval. The departments assessment of the updated water balance identified that there is sufficient storage availability for leachate within the new leachate pond under normal conditions and without the need for reuse as dust suppression.</p>
Condition 13 Table 6	Purearth seeks to have the frequency of emissions and discharge monitoring during time limited operations amended to occur each 2 months, rather than monthly	Not actioned as requested. The Delegated Officer notes that the monitoring undertaken during time limited operations will be required to input to the risk assessment that will be undertaken when the operational Licence is amended to accommodate increased throughputs and additional waste types.

Appendix 2: Application validation summary

SECTION 1: APPLICATION SUMMARY	
Application type	Works approval
Date application received	3/04/2023
Applicant and Premises details	
Applicant name/s (full legal name/s)	River Nominees Pty Ltd
Premises name	Purearth Organic Composting Facility
Premises location	324 Horton Road, Woottating WA 6562, being Lot 13 on Diagram 87525
Local Government Authority	Shire of Northam
Application documents	
HPCM file reference number:	2013/003438-2
Key application documents (additional to application form):	<p>Purearth has provided the following documentation, along with the application form, in support of our request for a Works Approval:</p> <ol style="list-style-type: none"> 1. Attachment 2A: Existing and additional facilities; 2. Attachment 2B: Expansion project; 3. Attachment 3A: Environmental Commissioning Plan; 4. Attachment 3B: Proposed Activities; 5. Attachment 3C: Map of area proposed to be cleared – refer to the Flora, Vegetation and Black Cockatoo Habitat Survey Report; 6. Attachment 3D: Additional information for clearing assessment – refer to the Flora, Vegetation and Black Cockatoo Habitat Survey Report; 7. Attachment 5A: Other approvals and consultation documentation – extract from the Shire of Northam Council Meeting Minutes, of 15 February 2023; 8. Attachment 5B: Other approvals and consultation documentation – extract from the Shire of Northam Council Meeting Minutes, of 15 February 2023; 9. Attachment 5C: Other approvals and consultation documentation – extract from the Shire of Northam Council Meeting Minutes, of 15 February 2023; 10. Attachment 5D: Other approvals and consultation; 11. Attachment 6A: Emissions and discharges (if required) – refer to Works Approval Odour & Emissions Impact Assessment report; 12. Attachment 6B: Waste acceptance; 13. Attachment 7A: Siting and location – Geotechnical study report 14. Attachment 7B: Siting and location – distances to sensitive

	<p>receptors;</p> <p>15. Attachment 8A: Additional information – Flow chart of current & proposed activities;</p> <p>16. Attachment 8B: Additional information – Aerial Mapping Survey;</p> <p>17. Attachment 8C: Additional information – Survey Aerial Capture;</p> <p>18. Attachment 8D: Additional information – Water Balance Model spreadsheet;</p> <p>19. Attachment 8E: Additional information – Drawing1 of composting bunker walls;</p> <p>20. Attachment 8F: Additional information – Drawing2 of composting bunker walls;</p> <p>21. Attachment 8G: Bore & Odour Monitoring Results (2022);</p> <p>22. Attachment 8H: Purearth Organic Composting Overview;</p> <p>23. Attachment 8I: NASAA Certified Organic Certificate of Registration;</p> <p>24. Attachment 8J: Covering letter, including index of supporting information;</p> <p>25. Attachment 10A: Cost of works information & data;</p> <p>26. Attachment 10B: Premises fee calculation; and</p> <p>27. Attachment 10C: Waste types fee calculation.</p> <p>Documents provided with Request for Further Information:</p> <ol style="list-style-type: none"> 1. DWER RFI Response 2. Construction Details Report - 2023 06 16 (1) 3. Appendix A Geotechnical Investigation report 4. Appendix B Water balance calculation 5. Appendix D West Coast Lining Installation Manual 6. Appendix E Solmax 2.0mm HDPE 2 7. Appendix F Dwg 2142-101G Expansion project 8. Appendix G Dwg 2142-102E Existing facility + expansion project 9. Appendix H Dwg 2142-103B Hardstand + Dam 10. Appendix I Dwg 2142-104A Rev 2 Bunker Wall details 11. Appendix J Dwg 2142-104B Bunker Wall details 12. Appendix K Dwg SP22-EC48930-P Spel Ecoseptor 13. Appendix L SPEL-Vertical-Tank-Installation-Guide 14. Appendix M Purearth Fire Management Plan Version 6 15. Appendix N Dwg Rain water tank 16. Appendix O Rainwater tank product guide\
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Scope of application/assessment		
Summary of proposed activities or changes to existing operations.	<p>Construction activities associated with the:</p> <ul style="list-style-type: none"> • Installation of concrete bunker-type walls around 8 existing composting slabs; • Additional compost maturation area and finished product storage area located on bitumenised hardstand area x 40,000 m³; • Additional water tank/s for contingency purposes; and • Additional contaminated storm water runoff containment dam x 2. <p>Time limited operation of the bunker system</p> <p>Increased throughput from 77,500 tonnes to 85,000 tonnes:</p> <ul style="list-style-type: none"> • Category 61: 20,000 tonnes; and • Category 67A: 65,000 tonnes. 	
Category number/s (activities that cause the premises to become prescribed premises)		
Table 1: Prescribed premises categories		
Prescribed premises category and description	Proposed production or design capacity	
Category 61: Liquid waste facility: premises on which liquid waste produced on other premises (other than sewerage waste) is stored, reprocessed, treated or irrigated.	20,000 tonnes per annual period	
Category 67A: Compost manufacturing and soil blending: premises on which organic material (excluding silage) or waste is stored pending processing, mixing, drying or composting to produce commercial quantities of compost or blended soils.	65,000 tonnes per annual period	
Legislative context and other approvals		
Has the applicant referred, or do they intend to refer, their proposal to the EPA under Part IV of the EP Act as a significant proposal?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	N/A
Does the applicant hold any existing Part IV Ministerial Statements relevant to the application?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	N/A
Has the proposal been referred and/or assessed under the EPBC Act?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	N/A:
Has the applicant demonstrated occupancy (proof of occupier status)?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	N/A
Has the applicant obtained all relevant planning approvals?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>	Shire of Northam will be contacted to ensure all planning requirements have been met.
Has the applicant applied for, or have an existing EP Act clearing permit in	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Minimal clearing will be required to make way for the construction

relation to this proposal?		<p>of a hardstand area and associated containment dam. Please refer to Attachment 3D Flora, Vegetation and Black Cockatoo Habitat Survey Report for further information in relation to this issue.</p> <p>Applicant notes that a clearing exemption applies to the proposed minor clearing activities.</p>
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"/>	Licence / permit not required.
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"/>	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"/>	N/A
Is the Premises situated in a Public Drinking Water Source Area (PDWSA)?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	N/A
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 type="checkbox"/> No <input checked="" type="checkbox"/>	N/A
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 type="checkbox"/> No <input checked="" type="checkbox"/>	N/A