Decision Report

Application for Licence

Part V Division 3 of the Environmental Protection Act 1986

Licence Number L9316/2022/1

Applicant A. Richards Pty Ltd

ACN 008 734 852

File number DWER2021/000712

Premises Richgro Bannister Composting Facility

Lot 68 on Deposited Plan 36563

Volume 2798 Folio 962 BANNISTER WA 6390

As defined by the coordinates in Schedule 1 of the licence

Date of report 8 April 2022

Decision Licence granted

Stephen Checker
MANAGER WASTE INDUSTRIES

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

Table of Contents

1.	Decis	sion summary	3
2.	Scop	e of assessment	3
	2.1	Regulatory framework	.3
	2.2	Application summary and overview of premises	.3
3.	Risk	assessment	3
	3.1	Source-pathways and receptors	.3
		3.1.1 Emissions and controls	.3
		3.1.2 Receptors	5
	3.2	Risk ratings	6
4.	Cons	ultation1	0
5 .	Conc	lusion1	0
Refe	erence	rs1	1
		1: Summary of applicant's comments on risk assessment and draft	2
App	endix	2: Application validation summary1	4
Tabl	e 1: Pro	pposed applicant controls	.4
Tabl	e 2: Se	nsitive human and environmental receptors and distance from prescribed activity	5
		sk assessment of potential emissions and discharges from the premises during	.7
Tabl	e 4: Co	nsultation1	0

1. Decision summary

This decision report documents the assessment of potential risks to the environment and public health from emissions and discharges during the operation of the premises. As a result of this assessment, licence L9316/2022/1 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.

2.2 Application summary and overview of premises

On 9 December 2021, the applicant submitted an application for a licence to the department under section 57 of the *Environmental Protection Act 1986* (EP Act).

The application was to seek a licence relating to the operation of a composting facility at the premises i.e., organic waste and feedstock acceptance, processing, composting, screening, and blending. The premises is approximately 35 km northwest of the Boddington townsite.

The premises relates to the categories and assessed production and design capacity under Schedule 1 of the *Environmental Protection Regulations 1987* (EP Regulations) which are defined in licence L9316/2022/1. 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 licence L9316/2022/1.

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 operation 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.

Environmental Protection Act 1986 Licence: L9316/2022/1

File number: DER2021/000712

3

Table 1: Proposed applicant controls

Emission	Sources	Potential pathways	Proposed controls			
Operation						
Leachate	Waste acceptance,	Overland flow, seepage, and	Operational Hardstand graded to a dedicated lined leachate pond			
	processing	groundwater flow	Hardstand ring-road to be cleared regularly of organic build-up that may cause pooling of water and prevent natural flow to leachate pond			
	composting		Groundwater monitoring			
Odour		Air/windborne pathway	Feedstock deliveries within covered trailers or vehicles			
			Odour emitting organic waste to be processed within specified timeframe (72-hour period)			
			Covering of odorous materials with non-odorous carbonaceous material (shredded greenwaste or processed compost screenings) where unable to process immediately			
			Harvest Quest composting methodology reduces frequency of turning process for composting windrows			
			Liquid anaerobic digestate (Dynagro) received at the premises from Richgro Garden Products Jandakot facility shall be transferred directly from transport tanker to onsite storage tank or blended directly into composting feedstock and capped with a layer of coarse compost screenings			
			All general waste to be disposed of via appropriate facility on regular basis			
Dust		Air/windborne	Feedstock deliveries within covered trailers			
		pathway	Asphalt trafficable surfaces and access roads			
			Watering devices to be available onsite to suppress potential dust emissions from any materials on site			
			Potentially dusty operations are to be postponed during extreme weather conditions			
			Maximum feedstock stockpile and compost windrow heights of 5m			
Noise		Air/windborne pathway	Operations restricted to approved operational times (0600 to 1800 Monday to Sunday)			
			Combined (activities) noise levels to be avoided			
			Reversing squelchers			
			Regular maintenance of operational machinery			

File number: DER2021/000712

4

Emission	Sources	Potential pathways	Proposed controls
Uncontrolled fire (particulates and noxious gases)	Upset conditions – compost, mulch, or greenwaste	Air/windborne pathway	Fire management plan in place for entire Culford Agri Industrial Site, which includes fire breaks, access gates and roads, a catchment dam and 160,000 L tank with DFES compatible fittings for water sources
	fire		 Quick response fire truck on site during times of high fire risk, and portable fire extinguishers in the site office and on portable equipment
			Sprinkler system within the operational area to dampen windrows and stockpiles
			Monitoring of windrow and stockpile temperatures
Pathogens	Compost- derived products and waste being removed	Physical contact, product dispersal and machinery movements	Prior to release, the compost is to be tested for pH, Electronic Conductivity, Solvita Maturity Index, bioassay (Toxicity), plant pathogens (Phytophthora and Pythium) and human pathogens (Thermotolerant Coliforms and Salmonella)
	from the premises		Where a windrow does not meet the required standard (AS4454, AS3743, AS4419 or other internal standard) it is reworked into the composting process (typically blended with another windrow) for further processing

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 activities

Human receptors	Distance from prescribed activity
Industrial premises – Landfill and composting facility ¹	Immediately adjacent to the western premises boundary
Commercial premises - Shell Service Station and Three-ways Tavern	Approximately 3.8 km south-southeast of the premises boundary
Private residences – Plantation Road, Bannister	Approximately 7.9 km south of the southern premises boundary
Users of Bibbulmun Track – North Bannister Spur Trail (Transient receptors)	Immediately north of the premises boundary

Compost product end-users	Offsite
Environmental receptors	Distance from prescribed activity
Groundwater - Typically fresh to brackish (712 to 2734 mg/L total dissolved solids), predominately influenced by rainfall recharge. (There are currently no registered groundwater abstraction bores within 10 km of the premises)	Generally considered to be 5 to 28 m below ground level across the premises due to variations in topography
Serpentine Dam Catchment Area (Priority 2 Public Drinking Water Source Area)	Immediately north of the premises boundary, though considered to be up hydraulic gradient.
Beelaring Class C Nature Reserve - Remnant native vegetation	Immediately north of the premises boundary
Murray River System RIWI Act area.	The premises are situated within this area
Tributary of the Serpentine River	Tributary located immediately north of the premises, draining to the Serpentine River approximately 4 km north (Considered to be up hydraulic gradient)
Cultivated landscapes and native vegetation where compost-derived products are applied	Offsite

^{1.} A caretaker residence is located within the Culford Agricultural precinct which is an area for the establishment of prescribed premises. The Department has received correspondence that the occupier acknowledges that they will not be considered a receptor for the purposes of this assessment.

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 in-complete 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 licence 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.

Licence L9316/2022/1 that accompanies this decision report authorises emissions associated with the operation of the premises i.e., organic waste acceptance, processing, and composting.

The conditions in the issued licence, as outlined in Table 3 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 events			Risk rating ¹	Annlicent		Justification for		
Sources / activities	Potential emission	Potential pathways and impact	Potential Receptors	Applicant controls	C = consequence L = likelihood	Applicant controls sufficient?	Conditions ² of licence	additional regulatory controls
Operation								
Waste acceptance, greenwaste shredding and		Air/windborne pathway causing impacts to surface water quality through deposition of sediment and organic material	Serpentine and Hotham Rivers	Refer to Section 3.1.1	C = Slight L = Unlikely Low Risk	Y	Condition 1	N/A
composting activities Vehicle movements	Dust	Air/windborne pathway causing amenity impacts through the deposition of dust	Adjacent Industrial and nearby commercial receptors (3.8 km east of the premises).	Refer to Section 3.1.1	C = Slight L = Unlikely Low Risk	Y		
Waste acceptance and composting activities Vehicle movements, including operations before 7am and on weekends	Noise	Air/windborne pathway causing amenity impacts to sensitive receptors	Adjacent Industrial and nearby commercial receptors (3.8 km east of the premises	Refer to Section 3.1.1	C = Slight L = Unlikely Low Risk	Y	Condition 1	N/A

Risk events					Risk rating ¹	Annlicont		Justification for	
Sources / activities	Potential emission	Potential pathways and impact	Potential Receptors	Applicant controls	C = consequence L = likelihood	Applicant controls sufficient?	Conditions ² of licence	additional regulatory controls	
	Seep groun disch impa groun quali Over seep groun disch impa wate Over seep groun disch impa quali Leachate Over seep groun disch impa quali	Overland flow, seepage, and groundwater discharge impacting groundwater water quality	Groundwater users	Refer to Section 3.1.1				Groundwater monitoring bores	
		Overland flow, seepage, and groundwater discharge impacting surface water quality	Tributary of the Hotham River		C = Moderate L = Unlikely Medium Risk	Y	Condition 1 Condition 9	and a monitoring regimen with specified analytes have been conditioned to facilitate early identification of leachate infiltration	
Waste storage and composting Application of liquid waste to greenwaste stockpiles		Overland flow, seepage, and groundwater discharge impacting soil quality	Broader Premises lot and adjoining land						
Storage of leachate in leachate pond		Overland flow, seepage, and groundwater discharge impacting surface water quality	Serpentine Dam Catchment Area Tributary of the Serpentine Rive			N/A	N/A	Groundwater and surface water flow does not provide a pathway for leachate movement to these receptors.	
		Overland flow, seepage, and groundwater flow, causing nutrient enrichment and degradation of forest areas	Dwellingup State Forest Beelaring Class C Nature Reserve Youraling State Forest				N/A		

Environmental Protection Act 1986 Licence: L9316/2022/1

Risk events	Risk events							Justification for	
Sources / activities	Potential emission	Potential pathways and impact	Potential Receptors	Applicant controls	C = consequence L = likelihood	Applicant controls sufficient?	Conditions ² of licence	additional regulatory controls	
Waste acceptance and composting Application of liquid wastes Storage of leachate in a leachate pond	Odour	Air/windborne pathway causing amenity impacts for sensitive receptors	Commercial receptors (3.8 km east of the premises).	Refer to Section 3.1.1	C = Slight L = Unlikely Low Risk	Y N/A		N/A - The Delegated Officer considers that the distance to the nearest sensitive receptors (residences) of 7.9 km is sufficient to discount any potential for impacts.	
Upset conditions – compost windrow or waste stockpile fire	Particulates, noxious gases, and smoke	Air/windborne pathway causing amenity impacts for sensitive receptors	Human receptors (adjacent industrial premises and roadhouse 3.8 km east).	Refer to Section 3.1.1	C = Moderate L = Possible Medium Risk	Y	Condition 1 and 7	N/A	
Sale and distribution of compost-derived products produced on premises	Pathogenic organisms	Direct contact with product, product dispersal and machinery movements	Cultivated landscapes and native vegetation where compostderived products are applied Compost product endusers	Refer to Section 3.1.1	C = Moderate L = Possible Medium Risk	Y	Condition 7	N/A	

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.

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 07/02/2022	N/A	N/A
Shire of Boddington advised of proposal on 17/02/2022	"The CEO Julie Burton asked me to advise you that the Shire has no comments on the application"	N/A
Department of Health (DoH) advised of proposal 03/03/2022	Guidance notes in relation to portable water supply and on-site sewage management provided. "DoH notes that controls will be implemented in relation to odour and dust, among other things, that seem to be adequate from a public health perspective. However, the application was lacking in this regard about the nature of and distance from the proposed facility of sensitive receptors such as residences. It is noted that this and other relevant information is available from the following document related to the proposed facility that was not included in the application package https://www.boddington/Assests/ClientData/Richg-ro-Culford_Composting_Facility_Development_Application.pdf	Noted. Details on sensitive human and environmental receptors, and proposed controls for mitigation of emissions outlined in decision report for Works Approval W6213/2019/1
Applicant was provided with draft documents on 8 March 2022	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 licence will be granted, subject to conditions commensurate with the determined controls and necessary for administration and reporting requirements.

References

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

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

Condition	Summary of applicant's comment	Department's response
2, Table 2	Suggested amendment to the table to reflect the Liquid Dynagro (Digestate) delivery method. Liquid Dynagro (Digestate) – Tankered to premises from Jandakot premises Request amendment to prescribed premises category to reflect the correct Waste Type for category 61A – Solid waste type. This category should include the Green waste, Biosolids, Manures, Sawdust, Pine bark, Acid Sulfate soils, Animal Mortalities and Sand. These waste types are not category 67A. Category 67A is the finished products (compost and blended soils)	Rejected - Anaerobic digestate generated as a waste at the Richgro Garden Products premises in Jandakot is received at the premises as a feedstock for incorporation into the composting process Greenwaste processing shredding captured as a Category 61A activity. Other solid feedstocks are not reprocessed prior to incorporation into composting or blending process. The green waste storage and processing specification under Category 67A has been amended Other feedstocks (green waste, biosolids, manures, sawdust, pine bark, acid sulfate soils, animal mortalities and sand are feedstocks for the compost manufacturing and soil blending processes, and as such 67A is the correct premises category.
4	Richgro seek an amendment in the maximum length and maximum width of the green waste stockpiles. To enable efficient use of the hardstand area Richgro wish to arrange the storage of green waste stockpiles to be more compacted and round piles in shape. Suggested condition wording: 4. The licence holder shall ensure that green waste stockpiles are maintained at: a) a maximum height of 6m b) a maximum bulk quantity of 2,500 cubic metres	Rejected - Stockpile dimensions set out in draft licence are taken from Department of Fire and Emergency Services (DFES) Information Note: Bulk Green Waste Storage Fires, which provides: *DFES recommends the following as a maximum pile dimensions:* • length 50 m • width 10 m • height 5 m
7, Table 3	Suggested amendment to the table to remove the internal temperature and moisture content parameter for mulch, potting mix and blended soil stockpiles. These products do not require this type of measurement (Richgro do not have this requirement in other two DWER Licences for Jandakot and Nowergup sites).	Partially supported - Internal temperature and moisture content monitoring requirements for pasteurised mulch retained as a fire prevention control Moisture and temperature monitoring requirements for raw mulch, potting mixes and blended soils has been removed
13 & 14	Richgro seek an amendment to the submission time frame for the Annual Audit Compliance Report. This amendment shall align the Bannister Licence with our Jandakot and Nowergup reporting requirements	Supported - Submission dates requirements amended to no later than 90 days after the end of each annual period

12

Environmental Protection Act 1986 Licence: L9316/2022/1

Condition	Summary of applicant's comment	Department's response
Definitions	Richgro seek the following amendments to the definition for Annual Period and the term digestate.	
	Annual Period – Richgro seek the 12- month period to be from January to December for each year of the licence operation. This reporting period aligns with our internal reporting systems. Richgro understand that the first reporting period will be a part thereof annual period.	Supported -The annual period in licence is now defined as a 12-month period commencing from 1 January until 31 December
	Digestate – Richgro seek an amendment to the Term Digestate to be reflected as Liquid Dynagro (Digestate)	Rejected - The Delegated Officer does not consider the change in terminology for digestate waste appropriate.

Appendix 2: Application validation summary

SECTION 1: APPLICATION SUMMARY (as updated from validation checklist)									
Application type									
Works approval									
		Relevant works approval number:	W6213/2019/1		None				
		Has the works approva with?	al been complied	Yes	s⊠ No				
Licence	\boxtimes	Has time limited operations acceptable operations?	strated	Yes	s□ No	□ N/A ⊠			
		Environmental Complia Critical Containment In Report submitted?		Yes	s⊠ No				
		Date report received:							
Renewal	₽	Current licence- number:							
Amendment to works approval	₽	Current works approval number:							
Amendment to licence	-	Current licence- number:							
Amenament to ilcence		Relevant works approval number:			N/A	Ф			
Registration [Current works approval number:			None				
Date application received		09/12/2021							
Applicant and premises details									
Applicant name/s (full legal name/s)		A. Richards Pty Ltd							
Premises name		Richgro Bannister Compo	• •						
Premises location		Lot 68 on Deposited Plan 36563 Volume 2798 Folio 962							
Local Government Authority		Shire of Boddington							
Application documents									
HPCM file reference number:	DER2018/001042-6~79								
Key application documents (addition application form):	•ATTACHMENT 3B COMPOSTING FACILITY MANAGEMENT PLAN •Department of Health - In Principle Approval for Composting Using Sewage Sludge •Shire of Boddington – Page 1 of DA Approval document - Development Application Approval for Composting Facility – Lot 68 on Plan 36563 (No. 6364) Albany Highway, BANNISTER •Shire of Boddington - Occupancy Permit •Lease agreement (confidential)								

Scope of application/assessment Licence Operation of: Category 61 – Liquid Waste Facility (125,000 tonnes per annum) 61A – Solid Waste Facility (285,000 tonnes per annum) 67A – Compost manufacturing and soil blending (200,000 tonnes per annum)

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	Proposed changes to the production or design capacity (amendments only)
61 - Liquid waste facility: premises on which liquid waste produced on other premises (other than sewerage waste) is stored, reprocessed, treated, or irrigated.	125,000 tonnes per annum	
61A - Solid waste facility: premises (other than premises within category 67A) on which solid waste produced on other premises is stored, reprocessed, treated, or discharged onto land.	285,000 tonnes per annum	
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.	200,000 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 ⊠	Referral decision 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: EPA Report No:

SECTION 1: APPLICATION SUMMARY (as	s updated from validation	checklist)
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: Shire of Boddingto Council Resolution 2/19
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	Yes □ No ⊠	Application reference No: N/A
existing CAWS Act clearing licence in relation to this proposal?		Licence/permit No: N/A
rolation to time proposar.		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 ⊠	Application reference No:
		Licence/permit No:
		Licence / permit not required.
	Yes □ No ⊠	Name: N/A
Does the proposal involve a discharge of waste into a designated area (as defined in section 57 of the EP Act)?		Type: Proclaimed Groundwater Area/Surface Water Area
		Has Regulatory Services (Wate been consulted?
		Yes □ No □ N/A ⊠
		Regional office: Swan Avon / Mid West Gascoyne / Kwinana Peel North West / South West / Goldfield / South Coast
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/ landus compatible with the PDWSA (refer to WQPN 25)?
		Yes □ No □ N/A □

SECTION 1: APPLICATION SUMMARY (as updated from validation checklist)				
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 □	Controlled waste facility		
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 ⊠	Classification: N/A Date of classification: N/A		