# Licence

Licence number L9316/2022/1

**Licence holder** A. Richards Pty Ltd

**ACN** 008 734 852

Registered business address Lot 186 Acourt Road

JANDAKOT WA 6164

**DWER file number** DER2021/000712

**Duration** 08/04/2022 to 07/04/2032

**Date of issue** 08/04/2022

Premises details Richgro Bannister Composting Facility

6364 Albany Highway BANNISTER WA 6390

Legal description -

Lot 68 on Deposited Plan 36563

Volume 2798 Folio 962 BANNISTER WA 6390

As defined by the coordinates in Schedule 1

Prescribed premises category description (Schedule 1, <i>Environmental Protection Regulations 1987</i> )	Assessed 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.	125,000 tonnes per annum
Category 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
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.	200,000 tonnes per annum

This licence is granted to the licence holder, subject to the attached conditions, on 8 April 2022, by:

# Stephen Checker MANAGER WASTE INDUSTRIES

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

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## **Licence history**

Date	Reference number	Summary of changes
03/07/2019	W6213/2019/1	Works Approval granted
26/06/2020	W6213/2019/1	Works Approval amended with time limited operations approved
08/04/2022	L9316/2022/1	Licence granted

## Interpretation

#### In this licence:

- (a) the words 'including', 'includes' and 'include' in conditions mean "including but not limited to", and similar, as appropriate;
- (b) where any word or phrase is given a defined meaning, any other part of speech or other grammatical form of that word or phrase has a corresponding meaning;
- (c) where tables are used in a condition, each row in a table constitutes a separate condition;
- (d) any reference to an Australian or other standard, guideline, or code of practice in this licence:
  - (i) if dated, refers to that particular version; and
  - (ii) if not dated, refers to the latest version and therefore may be subject to change over time;
- (e) unless specified otherwise, any reference to a section of an Act refers to that section of the EP Act; and
- (f) unless specified otherwise, all definitions are in accordance with the EP Act.

**NOTE:** This licence requires specific conditions to be met but does not provide any implied authorisation for other emissions, discharges, or activities not specified in this licence.

## **Licence conditions**

The licence holder must ensure that the following conditions are complied with:

### Infrastructure and equipment

1. The licence holder must ensure that the site infrastructure and equipment listed in Table 1 and located at the corresponding infrastructure location is maintained and operated in accordance with the corresponding operational requirement set out in Table 1.

Table 1: Infrastructure and equipment requirements

Site infrastructure and equipment	Operational requirement	Infrastructure location
Composting Hardstand	Any physical damage resulting from machinery traffic or subsidence to be repaired so as to maintain a maximum infiltration rate of 1 x 10 <sup>-9</sup> m/s or equivalent	Hardstand as depicted in Schedule 1, Figure 2
Stormwater Drainage System and Stormwater Dam	Maintained free of accumulated sediment and organic debris	Stormwater Drainage and Dam as depicted in Schedule 1, Figure 2
Leachate Sumps	Maintained free of accumulated sediment and organic debris	Leachate Sumps as depicted in Schedule 1, Figure 2
Leachate Pond	300 mm minimum freeboard shall be maintained	Leachate Pond as depicted in Schedule 1, Figure 2
Mechanical Evaporator	<ul> <li>Operated between 07:00 and 17:00 only; and</li> <li>Operated in a manner which prevents visible overspray of water droplets beyond the leachate pond surface; and</li> <li>Maintained and serviced in accordance with the manufacturer's specifications</li> </ul>	Leachate Pond as depicted in Schedule 1, Figure 2
Trommel, Shredder, Wheel Loaders, and Excavators	<ul> <li>To be located on the sealed Composting Hardstand area when in active use</li> <li>Sprinkler system to be installed to minimise dust emissions from screening or shredding activities</li> </ul>	Mobile equipment operated on the sealed Hardstand as depicted in Schedule 1, Figure 2
Free Standing Liquid Waste Storage Tanks	Positioned on sealed composting hardstand	On the sealed Hardstand as depicted in Schedule 1, Figure 2

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Site infrastructure and equipment	Operational requirement	Infrastructure location
Feedstock Bays	Bunded to prevent liquid overflow	On the sealed Hardstand as depicted in Schedule 1, Figure 2
Groundwater monitoring bores	Four (4) monitoring bores, designated MB1, MB2, MB3, and MB4 maintained in good working order to allow representative samples to be collected.	As depicted in Figure 2: Site plan and monitoring bore locations and described in Table 8: Monitoring bore locations
Firefighting equipment	The licence holder shall ensure an adequate water supply, and a means of distribution, be provided at all times to extinguish a fire at any part of the premises.	n/a

## **Operations**

#### **Feedstock controls**

- **2.** The licence holder shall only accept and process feedstock materials at the premises if:
  - a) It is of a type listed in Table 2;
  - b) The quantity accepted is below any quantity limit listed in Table 2 for that feedstock type; and
  - c) It meets the acceptance specification listed in Table 2 for that feedstock type.

**Table 2: Feedstock table** 

Prescribed premises category	Waste type	Quantity limit (tonnes per annual period)	Acceptance specification <sup>1</sup>	Storage and processing specifications
61	Food and beverage processing waste	25,000	Tankered to premises	Discharge of liquid waste outside of an engineered containment system is not permitted  Immediately blended into composting
	Animal effluent and residues	40,000		feedstocks prior to formation of windrows capped with a layer of coarse compost screenings within approved Stage 1 Hardstand area, or

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Prescribed premises category	Waste type	Quantity limit (tonnes per annual period)	Acceptance specification <sup>1</sup>	Storage and processing specifications
	Waste from grease traps	20,000		stored in dedicated FibreFurn flexi-N Tanks
	Anaerobic digestate	40,000	Tankered to premises from Richgro Garden Products in Jandakot	
61A	Green waste	20,000	Uncontaminate d shredded and unshredded green waste from land clearing, timber harvesting, verge collections and lopping contractors	Storage and processing (shredding) restricted to approved Stage 1 Hardstand area  Stored in accordance with specifications outlined in condition 4
67A	Green waste	100,000	Uncontaminate d shredded and unshredded green waste from land clearing, timber harvesting, verge collections and lopping contractors	Storage and processing restricted to approved Stage 1 Hardstand area  Must not be stored for longer than one month before being incorporated into the composting process
	Biosolids	50,000	Solid, stabilised biosolids from licensed wastewater treatment plants	Storage and processing restricted to approved Stage 1 Hardstand area  Must not be stored for longer than 72-hours before being incorporated into the composting process
	Manures	30,000	Solid waste (manure and used organic bedding material) only	Discharge outside of an engineered containment system is not permitted

Prescribed premises category	Waste type	Quantity limit (tonnes per annual period)	Acceptance specification <sup>1</sup>	Storage and processing specifications
	Sawdust	40,000	Sawdust from raw timbers which have not been treated or coated with preserving agents, biocides, fire retardants, paint, adhesives, or binders	Storage and processing restricted to approved Stage 1 Hardstand area
	Pine bark	15,000	N/A	Storage and processing restricted to approved Stage 1 Hardstand area
	Acid sulfate soil and potential acid sulfate soil	10,000	Limited to naturally occurring peaty acid sulfate soils from land development and excavation activities	Storage and processing restricted to approved Stage 1 Hardstand area  Must not be stored for longer than 14 days before being incorporated into the composting process  Discharge of outside an engineered containment system is not permitted
	Animal mortalities and animal processing waste	20,000	Excludes tissue, carcasses or other waste arising from animals used for laboratory investigation or for medical or veterinary research	Storage and processing restricted to approved Stage 1 Hardstand area  Immediately blended with other feedstocks, and formed into windrows capped with a layer of coarse compost screenings, or covered with shredded green waste for blending the following day  Discharge outside of an engineered containment system is not permitted
	Sand	20,000	Clean, uncontaminate d sand sourced from approved sand quarries	No specifications

Note 1: Additional requirements for the acceptance of controlled waste are set out in the *Environmental Protection (Controlled Waste) Regulations 2004* 

3. The licence holder shall ensure that where feedstock does not meet the specifications set out in condition 2 it is removed from the premises by the delivery vehicle or, where that is not possible, stored in a segregated storage area or vessel and removed to an appropriately authorised facility as soon as practicable.

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#### **Waste processing**

- **4.** The licence holder shall ensure that green waste stockpiles are maintained at:
  - a) a maximum length of 50 m;
  - b) a maximum width of 10 m; and
  - c) a maximum height of 5 m.
- **5.** The licence holder shall maintain:
  - a) a minimum 10 m separation between parallel green waste stockpiles;
  - b) a minimum 10 m separation between adjoining green waste stockpiles; and
  - c) a minimum 30 m low-fuel buffer between green waste stockpiles and surrounding vegetation (plantation and native vegetation).
- **6.** The licence holder must manage the composting process and composting windrows such that:
  - a) composting and pasteurising activities are restricted to the approved Stage 1 Hardstand area;
  - b) windrows are made up of blended materials and turned after the 30<sup>th</sup> and 44<sup>th</sup> day of windrow construction;
  - c) the core temperature of the composting windrows is maintained between 55°C and 65°C for a period of at least two consecutive weeks, with at least two measurements being taken per week, at least three days apart;
  - d) moisture levels in the composting piles are maintained between 40 to 65 percent;
  - e) an input nutrient balance (carbon-to-nitrogen ratio) of between 25:1 to 35:1 is to be achieved when forming windrows;
  - f) windrows shall not exceed three metres high, six metres wide and 120 metres long; and
  - g) windrows are separated by at least 0.5 metres of clear ground.

### **Monitoring**

#### **Process monitoring**

7. The licence holder shall undertake the process monitoring requirements outlined in Table 3 in accordance with the specifications outlined in that table.

**Table 3: Process monitoring requirements** 

Monitoring point	Process description	Parameter	Unit of measurement	Frequency	Method
Compost windrows	Harvest Quest composting process	Internal temperature	°C	At least two times per week	None specified
		Moisture content	%	Weekly	None specified
		Product quality testing	-	AS per AS4454	In accordance with AS4454

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Monitoring point	Process description	Parameter	Unit of measurement	Frequency	Method
Pasteurised mulch stockpiles	Grinding, shredding, and pasteurisation	Internal temperature	°C	At least two times per week	None specified
		Moisture content	%	Weekly	None specified
		Product quality testing	-	As per AS4454	As set out in AS4454
Raw mulch, potting mix and blended soil stockpiles	Grading/screenin g, blending, and storage	Product quality testing	-	As per AS3743 or AS4419	As set out in AS3743 or AS4419

#### Feedstock and product monitoring

- **8.** The licence holder shall undertake input and output monitoring and data recording:
  - a) for all inputs and outputs specified in Table 4;
  - b) for the parameters listed in Table 4;
  - c) in the units of measurement specified in Table 4; and
  - d) at the frequency specified in Table 4.

**Table 4: Monitoring of inputs and outputs** 

Input/output	Parameter	Unit of measurement	Frequency
Feedstock inputs	Feedstocks listed in Table 2: Feedstock table	Tonnes	Each load arriving at the premises
Product outputs	Compost products produced onsite     Mulch products produced onsite     Blended soils produced onsite		Each load leaving the premises
Other outputs	Rejected feedstocks     Collected feedstock contaminants		Each load removed from the premises

#### **Groundwater monitoring**

- **9.** The licence holder must conduct a groundwater monitoring programme in accordance with the requirements specified in Schedule 3 and record the results of all monitoring activity conducted under that programme.
- 10. The licence holder must adhere to the field quality assurance and quality control

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- procedures specified in Schedule 3 for the monitoring required by condition 9.
- 11. All sample analysis must be undertaken by laboratories with current accreditation from the National Association of Testing Authorities (NATA) for the relevant parameters, unless otherwise specified in Schedule 3.

### **Records and reporting**

- 12. The licence holder must record the following information in relation to complaints received by the licence holder (whether received directly from a complainant or forwarded to them by the Department or another party) about any alleged emissions from the premises:
  - a) the name and contact details of the complainant, (if provided);
  - b) the time and date of the complaint;
  - c) the complete details of the complaint and any other concerns or other issues raised; and
  - d) the complete details and dates of any action taken by the licence holder to investigate or respond to any complaint.
- **13.** The licence holder must:
  - a) undertake an audit of their compliance with the conditions of this licence during the preceding annual period; and
  - b) prepare and submit to the CEO by no later than 90 days after the end of that annual period an Annual Audit Compliance Report in the approved form.
- 14. The licence holder must submit to the CEO by no later than 90 days after the end of each annual period, an Annual Environmental Report for that annual period for the conditions listed in Table 5, and which provides information in accordance with the corresponding requirement set out in Table 5.

**Table 5: Annual Environmental Report requirements** 

Condition	Requirement	
n/a	Summary of any failure or malfunction of any containment infrastructure and any environmental incidents that have occurred during the annual period, and any corrective actions taken	
1	Details of any freeboard limit exceedances, and any corrective actions undertaken	
7	Process monitoring summary  a) Tabulated summary of process monitoring data	
8	Feedstock and product monitoring  a) Tabulated summary of feedstock inputs to premises per month  b) Tabulated summary of product outputs from premises per month  c) Tabulated summary of any other outputs from premises (including feedstock loads rejected in accordance with Condition 3) per month	

Condition	Requirement
9	Groundwater monitoring summary
	a) Tabulated groundwater monitoring data results and time series graphs for each monitoring well
	b) Laboratory data sheets for six monthly monitoring in accordance with Table 9
	c) A tabulated data summary of monitoring results.
	<ul> <li>d) An interpretation of monitoring data results including comparison to historical trends.</li> </ul>
12	A summary of any complaints recorded for the annual period

- 15. The licence holder must submit to the CEO with the Annual Environmental Report required by condition 14, a groundwater monitoring report demonstrating their compliance with conditions 9 to 11 for the preceding annual period, and must include:
  - a) a clear statement of the scope of work carried out;
  - b) a description of the field methodologies employed;
  - a summary of the field and laboratory quality assurance / quality control (QA/QC) programme;
  - d) copies of the field monitoring records and field QA/QC documentation;
  - e) an assessment of reliability of field procedures and laboratory results;
  - f) a tabulated summary of results, as well as all raw data provided in an accompanying Microsoft Excel spreadsheet digital document/file (or a compatible equivalent digital document/file), with all results being clearly referenced to laboratory certificates of analysis;
  - a diagram with aerial image overlay showing all monitoring locations and depicting groundwater level contours, flow direction and hydraulic gradient (relevant site features including discharge points and other potential sources of contamination must also be shown);
  - an interpretive summary and assessment of the results against relevant assessment levels for water, as published in the Guideline Assessment and management of contaminated sites;
  - an interpretive summary and assessment of results against previous monitoring results;
  - an interpretive summary and assessment of the results against relevant assessment levels for water, as published in the Guideline Assessment and management of contaminated sites; and
  - k) trend graphs to provide a graphical representation of historical results and to support the interpretive summary.

Note: General guidance on report presentation can be found in the Department's Guideline: Assessment and management of contaminated sites.

- **16.** The licence holder must maintain accurate and auditable books including the following records, information, reports, and data required by this licence:
  - a) the calculation of fees payable in respect of this licence;

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- b) any maintenance of infrastructure that is performed in the course of complying with condition 1 of this licence:
- c) monitoring programmes undertaken in accordance with conditions 7 and 8 of this licence; and
- d) complaints received under condition 12 of this licence.
- **17.** The books specified under condition 16 must:
  - a) be legible;
  - b) if amended, be amended in such a way that the original version(s) and any subsequent amendments remain legible and are capable of retrieval;
  - c) be retained by the licence holder for the duration of the licence; and
  - d) be available to be produced to an inspector or the CEO as required.
- 18. In the event of a fire<sup>1</sup> on the premises, the licence holder shall advise the CEO of the fire by the end of the following working day after which the fire was discovered.

Note 1: Spot fires which have been extinguished within one hour of being discovered are not required to be reported.

## **Definitions**

In this licence, the terms in Table 6 have the meanings defined.

**Table 6: Definitions** 

Term	Definition		
AS 3743	means the Australian Standard AS 3743-2003 Potting mixes		
AS 4419	means the Australian Standard AS 4419:2018 Soils for Landscaping and Garden Use		
AS 4454	means the Australian Standard AS 4454:2012 Composts, soil conditioners and mulches		
AS/NZS 5667.6	Means the Australian Standard AS/NZS 5667.6:1998 Water quality - Sampling - Guidance on sampling of rivers and streams		
ACN	Australian Company Number		
Annual Audit Compliance Report (AACR)	means a report submitted in a format approved by the CEO (relevant guidelines and templates may be available on the Department's website)		
annual period	a 12-month period commencing from 1 January until 31 December		
biosolids	Means sludge from a wastewater treatment plant that has undergone further treatment to reduce disease causing pathogens and volatile organic matter significantly, resulting in a stabilised material suitable for beneficial use. Does not include industrial and food processing sludges		
books	has the same meaning given to that term under the EP Act		
CEO	means Chief Executive Officer of the Department.  "submit to / notify the CEO" (or similar), means either:  Director General Department administering the Environmental Protection Act 1986 Locked Bag 10 Joondalup DC WA 6919  or:  info@dwer.wa.gov.au		
compost	an organic material that has undergone controlled aerobic and thermophilic biological transformation through the composting process to achieve pasteurisation and reduce phytotoxic compounds, and achieved a specified level of maturity for compost		
condition	means a condition to which this licence is subject under s.62 of the EP Act		

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Term	Definition		
Department	means the department established under section 35 of the <i>Public Sector Management Act 1994</i> (WA) and designated as responsible for the administration of the EP Act, which includes Part V Division 3		
Department request	means a request for books or other sources of information to be produced, made by an Inspector or the CEO to the licence holder in writing and sent to the licence holders address for notifications, as described at the front of this licence, in relation to:		
	a) compliance with the EP Act or this licence;		
	<ul> <li>b) the books or other sources of information maintained in accordance with this licence; or</li> </ul>		
	c) the books or other sources of information relating to emissions from the premises		
digestate	means decomposed feedstock generated as a product of anaerobic digestion comprising slow degradable, stable organic components such as lignin, nitrogen and phosphorus in various forms, inorganic salts containing phosphate, ammonium, potassium, and other minerals		
discharge	has the same meaning given to that term under the EP Act		
emission	has the same meaning given to that term under the EP Act		
EP Act	Environmental Protection Act 1986 (WA)		
EP Regulations	Environmental Protection Regulations 1987 (WA)		
feedstock	means the organic and inorganic material used in the compost and blended soil manufacturing processes and listed in Table 2: Feedstock table		
green waste	biodegradable waste comprising plants and their component parts such as flower cuttings, hedge trimmings, branches, grass, leaves, plants, seeds, shrub, and tree loppings, tree trunks, tree stumps and similar materials and includes any mixture of those materials		
licence	refers to this document, which evidences the grant of a licence by the CEO under section 57 of the EP Act, subject to the specified conditions contained within		
licence holder	refers to the occupier of the premises, being the person specified on the front of the licence as the person to whom this licence has been granted		
premises	refers to the premises to which this licence applies, as specified at the front of this licence and as shown on the premises map Figure 1 in Schedule 1 to this licence, and defined by the coordinated provided in Table 7		

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Term	Definition
prescribed premises	has the same meaning given to that term under the EP Act
waste	has the same meaning given to that term under the EP Act

#### **END OF CONDITIONS**

# **Schedule 1: Maps**

## **Premises map**

The boundary of the prescribed premises is shown in the map below (Figure 1).



Figure 1: Premises boundary

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Figure 2: Site plan and monitoring bore locations

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# **Schedule 2: Premises boundary**

The premises boundary is defined by the coordinates in Table 7.

**Table 7: Premises boundary coordinates** 

Easting	Northing	Spatial reference	
443844.399	6396685.842	GDA94/MGA zone 50	
444193.107	6396685.924		
444385.990	6396571.315		
444386.044	6396296.036		
443844.374	6396296.096		

**Table 8: Monitoring bore locations** 

Monitoring bore	Latitude	Longitude
MB1	-32.568949	116.405963
MB2	-32.567	116.403916
MB3	-32.5684	116.4029
MB4	-32.5686	116.4018

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# **Schedule 3: Groundwater monitoring**

1. The licence holder must monitor groundwater for concentrations of the identified parameter(s) in accordance with Table 9.

Table 9: Groundwater monitoring of ambient concentrations

Monitoring bore location	Parameter	Unit	Frequency	Method
MB1, MB2, MB3, and MB4	Standing water level <sup>1</sup>	m(AHD) and m(BGL)	Six-monthly	Spot sample, in accordance
	Temperature	°C		with AS/NZS 5667.11
	pH <sup>1</sup>	pH units		
	Electrical conductivity <sup>1</sup>	μS / cm		
	Redox potential	millivolts (mV)		
	Biological oxygen demand (BOD)	mg/L		
	Total dissolved solids (TDS)			
	Total nitrogen			
	Ammonia as nitrogen			
	Nitrate and nitrite (as nitrogen)			
	Total phosphorus			
	Total organic carbon			
	Bicarbonate and carbonate			
	Arsenic			
	Calcium			
	Chloride			

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Monitoring bore location	Parameter	Unit	Frequency	Method
	Iron			
	Magnesium			
	Manganese			
	Potassium			
	Sodium			
	Sulfate			

Note 1: In-field non-NATA accredited analysis permitted.

- 2. The licence holder must adhere to the following field quality assurance and quality control procedures, as specified in Schedule B2 of the *Assessment of Site Contamination* NEPM, and must include as a minimum:
  - decontamination procedures for the cleaning of tools and sampling equipment before sampling and between samples;
  - b) field instrument calibration for instruments used on site
  - blind replicate samples and rinsate blanks must be collected in the field and sent to the primary laboratory to determine the precision of the field sampling and laboratory analytical program;
  - d) completed field monitoring sheets / sampling logs for each sample collected, showing:
    - i. time of collection;
    - ii. location of collection;
    - iii. initials of sampler;
    - iv. sampling method;
    - v. field analysis results;
    - vi. duplicate type / location (if relevant); and
    - vii. site observations and weather conditions, and
  - chain-of-custody documentation must be completed which details the following information:
    - i. site identification;
    - ii. the sampler;
    - iii. nature of the sample;
    - iv. collection time and date;
    - v. analyses to be performed;

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- vi. sample preservation method;
- vii. departure time from site;
- viii. dispatch courier(s); and
- ix. arrival time at the laboratory.

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