Amendment Notice 2

Licence Number L8887/2015/1

Licence Holder JD Organics Pty Ltd

ACN 154 081 651

File Number: DER2015/000261

Premises Garden Organics
276 Aurisch Road
BOONANARRING WA 6508

Part of Lot 12 on Diagram 92147 as defined by the Global Positioning System Coordinates:

Position No.	Latitude	Longitude
A	31° 12’ 45.59” S	115° 49’ 4.96” E
B	31° 12’ 45.53” S	115° 49’ 50.67” E
C	31° 13’ 5.41” S	115° 50’ 0.86” E
D	31° 13’ 5.61” S	115° 49’ 11.71” E

Date of Amendment 12 April 2019

Amendment

The Chief Executive Officer (CEO) of the Department of Water and Environmental Regulation (DWER) has amended the above Licence in accordance with section 59 of the *Environmental Protection Act 1986* (EP Act) as set out in this Amendment Notice. This Amendment Notice constitutes written notice of the amendment in accordance with section 59B(9) of the EP Act.

Lauren Fox 2019.04.12 12:02:46 +08'00'

Lauren Fox

A/MANAGER WASTE INDUSTRIES

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

Definitions and interpretation

Definitions

In this Amendment Notice, the terms in Table 1 have the meanings defined.

Table 1: Definitions

Term	Definition
ACN	Australian Company Number
Amendment Notice	refers to this document
Category/ Categories/ Cat.	categories of Prescribed Premises as set out in Schedule 1 of the EP Regulations
CEO	means Chief Executive Officer. CEO for the purposes of notification means: Director General Department Administering the *Environmental Protection Act 1986* Locked Bag 10 JOONDALUP DC WA 6919 info@dwer.wa.gov.au
Delegated Officer	an officer under section 20 of the EP Act
Department	means the department established under section 35 of the *Public Sector Management Act 1994* and designated as responsible for the administration of Part V, Division 3 of the EP Act.
DWER	Department of Water and Environmental Regulation
EP Act	*Environmental Protection Act 1986* (WA)
EP Regulations	*Environmental Protection Regulations 1987* (WA)
Licence Holder	JD Organics Pty Ltd
Prescribed Premises	has the same meaning given to that term under the EP Act.
Premises	refers to the premises to which this Decision Report applies, as specified at the front of this Decision Report.
Risk Event	as described in *Guidance Statement: Risk Assessment*

Amendment Notice

This amendment is made pursuant to section 59 of the *Environmental Protection Act 1986* (EP Act) to amend the Licence issued under the EP Act for a prescribed premises as set out below. This notice of amendment is given under section 59B(9) of the EP Act.

The following guidance statements have informed the decision made on this amendment:

- *Guidance Statement: Regulatory Principles (July 2015)*
- *Guidance Statement: Setting Conditions (October 2015)*
- *Guidance Statement: Land Use Planning (February 2017)*
- *Guidance Statement: Decision Making (February 2017)*
- *Guidance Statement: Risk Assessment (February 2017)*
- *Guidance Statement: Environmental Siting (November 2016)*

Amendment description

The Licence Holder applied on the 26 July 2019 for three amendments to the licence L8887/2015/1.

1. **Remove the time clause in Table 5 on Page 9 of the Decision Report (in relation to acceptance of poultry manure).**

This request relates to a statement made about the Department of Primary Industry and Regional Development (DPIRD) authorisation in the decision report. There is no licence condition that relates to the time limit on the acceptance of poultry manure. Therefore no amendment is required in relation to this request.

2. **Conduct a 12 month trial to receive 500 tonnes per annual period of spent hens and egg waste.**

This request has since been removed from this application, and the licence holder will apply in future for the acceptance of spent hens.

3. **Accept 2,000 tonnes per annual period of grease trap waste (requiring addition of Category 61).**

The Licence Holder is proposing to accept up to 2,000 tonnes per year of grease trap waste. The acceptance of grease trap waste meets the definition of a Category 61 liquid facility.

This grease trap waste is stratified prior to arrival on-site with the solid (sediment) fraction removed and disposed of to landfill and so only the liquid portion will be accepted.

The Licence Holder has committed to implementing a number of controls to manage odour risk as detailed in Table 2:

Table 2: Proposed Odour Controls

Stage	Control
Grease Trap Receival	• Delivery of grease trap waste is scheduled to occur at a time that is appropriate for immediate processing • Immediately mixing of grease trap into the compost • In the event that grease trap cannot be immediately mixed it will be stored in a mobile tanker on-site for use at a more appropriate time
Compost Mix Preparation	• Preparation of compost mix will not be carried out during strong wind in the direction of sensitive receptors (i.e. over 25 knots from a westerly direction).

	• If required grease trap waste will be stored in a mobile tanker until wind conditions abate. • Windrows will be prepared to achieve appropriate C:N and moisture content to initiate composting process. • Material will be prepared into a concave bunded shape on mixing pad to facilitate absorption of liquid and prevent overflow • Moisture monitored to prevent over-saturation • A maximum of one part grease trap waste will be used to three parts leachate dam or bore water for each windrow • Mix will be overlaid with greenwaste and composted bedding and a layer of finished composted product acts as a biofilter. • Odour intensity will be monitored by a site supervisor
Ongoing processing	• Turning will not be undertaken during strong wind in direction of sensitive receptors (i.e. over 25 knots from a westerly direction). • Processing undertaken in accordance with site management plans that align with Australian Standard 4454 • Any leachates generated are directed to leachate pond 1 in enclosed piping

Other approvals

The Licence Holder has provided the following information relating to other approvals as outlined in Table 3.

Table 2: Relevant approvals

Legislation	Number	Approval
Biosecurity and Agriculture Management Act 2007	N/A	Approval granted by Department of Primary Industries and Regional Development (DPIRD) under the Biosecurity and Agriculture Management (Stable Fly) Management Plan 2016. DPIRD approval is valid until the 30 June 2019.

Planning Approval

Planning approval was granted by the Shire of Gingin (Shire) on 22 July 2014 for an 'Industry – Noxious (Composting Facility)' under the Shire's *Local Planning Scheme No. 9.* There are no time limitations associated with this approval.

Amendment history

Table 4 provides the amendment history for L8887/2015/1.

Table 3: Licence amendments

Instrument	Issued	Amendment
L8887/2015/1	13/08/2015	Licence to operate facility (excluding Stage 2 operations)
L8887/2015/1	29/04/2016	Amendment to extend licence duration to 2033
L8887/2015/1	12/08/2016	Amendment to operate Stage 2 operations
L8887/2015/1	2/03/2018	Amendment to authorise composting of poultry manure

L8887/2015/1	17/05/2018	Amendment to construct additional hardstand and leachate pond including installation of new groundwater monitoring bores and proposed changes to feedstock sources.
L88872015/1	12/04/2019	Amendment Notice 2: Inclusion of prescribed premises category 61 (liquid waste facility)

Location and receptors

Table 5 below lists the relevant sensitive land uses in the vicinity of the Prescribed Premises which may be receptors relevant to the proposed amendment.

Table 4: Receptors and distance from activity boundary

Residential and sensitive premises	Distance from Prescribed Premises
Residential Premises	Closest residence is located 1000m north-east of the prescribed activities.

Table 6 below lists the relevant environmental receptors in the vicinity of the Prescribed Premises which may be receptors relevant to the proposed amendment. This table does not include receptors considered to be down-gradient from the prescribed activity.

Table 5: Environmental receptors and distance from activity boundary

Environmental receptors	Distance from Prescribed Premises
Yurine Swamp Nature Reserve	2.9 km south-west of the Premises boundary

The distances to groundwater and water sources are shown in Table 7.

Table 7: Groundwater and water sources

Groundwater and water sources	Distance from Premises	Environmental value
Groundwater	Based on the groundwater monitoring data, groundwater across the site within the superficial aquifer was encountered between 11 and 24m below ground level (bgl). Site investigations undertaken on behalf of the Licence Holder identified that the confined aquifer (Leederville) is located approximately 60m bgl. The inferred groundwater flow of the superficial aquifer is east to west towards the series of lakes, with the confined aquifer with an inferred direction towards the south-west. 5 bores are located within 1km of the prescribed activities (based on available GIS dataset –WIN Groundwater Sites): • 720m south-east (up gradient); • 770m east, north-east (up gradient); • 1km south, south-east (up-gradient); and • Two located 1.3km south-east	Water is considered to be fresh (0-500 mg/L TDS) which is considered to have a beneficial value for drinking water, irrigation and livestock use.

	(up gradient). The closest **down-gradient** bore installed in the superficial aquifer is located 2.1km west, south-west of the prescribed activities.	
Unnamed lakes	Ranging from 1.3km south and between 2.5 and 3.3km west of the Premises boundary	Assumed to be groundwater fed. Provides habitat for flora and fauna.
White Lake	Located 1.5km west of the Premises boundary	

Risk assessment

Table 8 below describes the Risk Events associated with the amendment consistent with the *Guidance Statement: Risk Assessments*. The tables identify whether the emissions present a material risk to public health or the environment, requiring regulatory controls.

Table 6: Risk assessment for proposed amendments during operation

Risk Event						Consequence rating	Likelihood rating	Risk	Reasoning
Source/Activities		**Potential emissions**	**Potential receptors**	**Potential pathway**	**Potential adverse impacts**				
Waste acceptance, handling and storage **Composting process**	Acceptance of new waste types (Grease trap waste)	Odour	Nearest residential area located 900m north-east of prescribed activities	Air/wind dispersion	Impacts to amenity and wellbeing	Moderate	Unlikely	Medium	The Delegated Officer considers given the distance to receptors and the profile of the new waste type there is a potential for mid-level impact to amenity. Considering the Licence Holder's proposed controls this risk event will not occur in most circumstances.
		Leachate: Spillage of grease trap waste to soil Seepage through hardstand area. Run-off from hardstand area	Groundwater	Seepage through soil Transport through groundwater Overland migration	Contamination of groundwater supply for nearby users	Minor	Rare	Low	The Delegated Officer considers that impacts to groundwater potentially used for potable sources and lakes used for flora and fauna habitat would be low-level impacts. Considering the Licence Holder's proposed controls this risk event would only occur in exceptional circumstances (failure of infrastructure).
			White Lake located 1.5km west of Premises boundary		Contamination of surface waters at the point of groundwater expression				
			Unnamed lakes ranging between 1.3km south and 2.5 to 3.3km west of the Premises boundary						
			Yurine Swamp Nature Reserve		Impacts to vegetation from excessive nutrients or other contaminates in leachate Contamination of land (soil)				

Decision

The Delegated Officer has determined that potential risk events from the composting of the new waste type is acceptable, subject to regulatory controls.

The current licence contains a number of controls in relation to odour and leachate management (specifically conditions 13, 14 and 15) which apply to the composting of the new waste types. The licence will be amended to add category 61, permit the new waste type, and to specify storage and processing requirements of the new waste type.

Licence Holder's comments

The Licence Holder was provided with the draft Amendment Notice on 8 April 2019. The Licence Holder responded on the same day with minor typographical errors and requested that the amendment be issued as soon as possible.

Amendment

1. The Prescribed Premises of the licence are amended by the insertion of the red text shown in underline below.

   Prescribed Premises

   Category 61: Liquid waste facility
   Category 61A: Solid waste facility
   Category 67A: Compost manufacturing

2. Condition 2, Table 1 of the Licence is amended by the insertion of red text shown in underline below.

Table 1: Feedstock Table

	Column 1	**Column 2**
	Material	**Specification or quantity limit**
Solid wastes		
1	Green waste	10,500 tonnes/annual period
2	Jarrah sawdust	6,000 tonnes/annual period
3	Pine bark	2,000 tonnes/annual period
4	Spent mushroom compost	5,000 tonnes/annual period
5	Poultry manure	1,500 tonnes/annual period
6	Composted cow manure on green waste chips	1,500 tonnes/annual period
7	Sheep manure	500 tonnes/annual period
Liquid wastes		
8	Grease trap waste	2,000 tonnes/annual period

3. Condition 5, Table 3 is amended by the deletion of text in strikethrough and the insertion of the red text shown in underline below

Table 5: Infrastructure and equipment controls table

	Column 1	**Column 2**
	Premises infrastructure and equipment	**Operation details**
	Liquid waste and leachate controls	
1	Asphalt hardstand as depicted on the Site Layout Map in Schedule 1	• 40mm of asphalt underlain by 10mm granite scatter and 300mm compacted limestone; • Surface area of 5,000m^2; • Has a hydraulic conductivity of less than 1 x 10^{-8} m/s; and • 4.8% grade towards Leachate Pond 1.
2	Concrete hardstand as depicted on the Site Layout Map in Schedule 1	• Compacted subgrade overlain by 500mm engineered clayey fill and 200mm recycled concrete road base; • Surface area of approximately 10,000m^2; and • 4.0% grade towards Leachate Pond 2.
3	Pond 1 as depicted on the Site Layout Map in Schedule 1	• 3620 m^3 capacity (excluding freeboard); • Dimensions of 45m x 40m x 4m; and • Lined with 1.5mm HDPE.
4	Pond 2 as depicted on the Site Layout Map in Schedule 1	• 9,000m^3 capacity; • Dimensions of 100m x 30m x 3m; and • Lined with 2.0mm HDPE.
5	Mixing Area as depicted on the Site Layout Map in Schedule 1	• Has a hydraulic conductivity of less than 1 x 10^{-8} m/s; • Bunded to prevent leachate and surface water runoff; • Graded towards leachate collection pond.
6	Storage Bins	Concrete storage bins located at the Materials Bunkers area depicted on the Site Layout Map in Schedule 1 consisting of: • 200mm reinforced concrete slab; • Underlain HDPE liner

	Column 1	Column 2
	Premises infrastructure and equipment	**Operation details**
7	Groundwater monitoring bores as depicted on the Groundwater Monitoring Bore Map in Schedule 1	• One bore at each of the locations MB1, MB2, MB4 and MB5. • Following the installation of groundwater bores as specified in condition 5, one bore at each of the locations MB3A, MB6 and MB7. Total of 7 bores
	Odour Controls	
8	Pond aeration system	• Minimum of one aerator in Leachate Pond 1; • Upon construction of Leachate Pond 2, minimum of one aerator within this pond. • Both aerators must be operational 24 hours a day.
9	Pond sumps	• Two reinforced concrete sumps for the collection of sediment in hardstand runoff: ○ One located between the Asphalt Hardstand and Leachate Pond 1; ○ One located between the Concrete Hardstand and leachate Pond 2.
10	Composting shed with odour extraction system as depicted on the Site Layout Map in Schedule 1	Operated under negative pressure with an air extraction system for odour management consisting of: • Concrete hardstand; • Concrete lined sump for leachate collection with impermeable piping to Leachate Pond 1; • Roof sprinkler system; • Below ground aeration flooring; • Extraction fan with activated carbon; and • Concrete tilt panels surrounding internal walls.
11	Mobile liquid waste tanker	• Capable of holding at least 25,000 litres of liquid waste; and • To be located on a hardstand area
Dust Controls		
~~11~~ 12	Fixed and mobile sprinklers	• Operate when visible dust is generated from stockpile surfaces on the premises. • Operate proactively subject to weather forecasting over a 24 hour period • Reticulated sprinklers must be capable of wetting down the entire surface of all stockpiles on the premises that are subject to dust lift-off simultaneously or within a period of thirty minutes. • Spray reach and rate of flow of sprinklers must be sufficient to reach the top of all stockpiles specified above.

	Column 1	Column 2
	Premises infrastructure and equipment	**Operation details**
		• Spray reach and rate of flow of sprinklers must be maintained in good working order.
~~12~~ 13	Boom sprayer trailer with 2,000L capacity	The boom sprayer must be capable of providing complete coverage of stockpiles and roadways and to assist with dust suppression as required.
~~13~~ 14	Abstraction bore(s)	Must be maintained in good working order to ensure that an adequate water supply for the reticulation main is available at all times.
~~14~~ 15	Water tank with 150,000L capacity	Must be maintained in good working order to ensure that an adequate water supply is available at all times.
~~15~~ 16	Water tank connected to roof of Bagging Shed with 5,000L capacity	Must be maintained in good working order to ensure that an adequate water supply is available at all times.
~~16~~ 17	Bagging Shed as depicted on the Site Layout Map in Schedule 1	Consisting of: • Enclosed building; • hopper; • conveyor system; and • concrete floor.
~~17~~ 18	Screener	One screener (up to 40m^3/hour)
~~18~~ 19	Green waste grinder	Ensure that the grinder brought onto the Premises is in good working order.

4. Condition 11, Table 6 is amended by the insertion of the red text shown in underline below

Table 6: Storage and processing requirements

	Column 1	Column 2
	Material	**Storage and Processing Requirements**
1	Green waste	Stored and mixed on Mixing Area as specified in the Site Layout Map in Schedule 1. Storage of green waste is limited to a period of six weeks upon receipt at the Premises. Pre-treatment (grinding) to occur on Mixing Area, Asphalt Hardstand or Concrete Hardstand as specified in the Site Layout Map in Schedule 1. Pasteurised, composted and matured only on Asphalt Hardstand or Concrete Hardstand as specified in the Site Layout Map in Schedule 1.
2	Jarrah sawdust	Stored and mixed on Mixing Area as specified in the Site Layout Map in Schedule 1. Pasteurised, composted and matured on Asphalt Hardstand or Concrete Hardstand as specified in the Site Layout Map in Schedule 1.

	Column 1	Column 2
	Material	**Storage and Processing Requirements**
3	Pine bark	Stored and mixed on Mixing Area as specified in the Site Layout Map in Schedule 1. Pasteurised, composted and matured only on Asphalt Hardstand or Concrete Hardstand as specified in the Site Layout Map in Schedule 1.
4	Spent mushroom compost	Storage must be undertaken within a concrete Storage Bin as specified in Row 6 of Table 5. Stored for a maximum of 48 hours before being incorporated into the outdoor composting process undertaken on either the Asphalt Hardstand or Concrete Hardstand as specified in the Site Layout Map in Schedule 1.
5	Poultry manure	Storage of this waste is not authorised. Upon receival of this waste onsite it must be immediately incorporated into the indoor composting process within the Composting Shed as specified in the Site Layout Map in Schedule 1.
6	Composted cow manure on green waste chips	Storage must be undertaken within a concrete storage bin as specified in Row 6 of Table 5. Stored for a maximum of 48 hours before being incorporated into the indoor composting operations undertaken within the Composting Shed as specified in the Site Layout Map in Schedule 1.
7	Sheep waste	
8	Grease trap waste	This waste must remain within the delivery liquid waste tanker, or stored within the on-site mobile tanker prior to immediate mixing on Mixing Area as specified in the Site Layout Map in Schedule 1. This waste must be pasteurised, composted and matured on Asphalt Hardstand or Concrete Hardstand as specified in the Site Layout Map in Schedule 1.

5. Table 11 in Schedule 3 of the Licence is amended by the deletion of text shown in strikethrough and the insertion of the red text shown below.

Table 11: Primary Activities

Primary Activity	Premises production or design capacity
Category 61: Liquid waste facility – premises on which liquid waste produced on other premises (other than sewage waste) is stored, reprocessed, treated or irrigated.	2,000 tonnes per annual period
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.	27,000 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 of blended soils.	

Appendix 1: Key documents

	Document title	Availability
1	Licence L8887/2015/1 – Garden Organics	accessed at www.dwer.wa.gov.au
2	DER, July 2015. *Guidance Statement: Regulatory principles.* Department of Environment Regulation, Perth.	
3	DER, October 2015. *Guidance Statement: Setting conditions.* Department of Environment Regulation, Perth.	
4	DER, November 2016. *Guidance Statement: Risk Assessments*. Department of Environment Regulation, Perth.	
5	DER, November 2016. *Guidance Statement: Decision Making*. Department of Environment Regulation, Perth.	