



WORKS APPROVAL

Environmental Protection Act 1986

WORKS APPROVAL NUMBER: W5311/2012/1

FILE NUMBER: 2012/006705

WORKS APPROVAL HOLDER

A. Richards Pty Ltd
203 Acourt Road
JANDAKOT WA 6164
ACN: 008 734 852

PREMISES

Richgro Garden Products
Lot 186 on Plan 109038 Acourt Road,
JANDAKOT WA 6164
(as depicted in Attachment 1)

Environmental Protection Regulations 1987

PRESCRIBED PREMISES CATEGORIES

Category 61 - Liquid waste facility
Category 61A - Solid waste facility
Category 67A – Compost manufacturing and soil blending

COMMENCEMENT DATE OF WORKS APPROVAL: Monday, 21 January 2013

EXPIRY DATE OF WORKS APPROVAL: Thursday, 20 October 2016

CONDITIONS OF WORKS APPROVAL

Subject to the conditions of works approval set out in the attached pages.

GENERAL CONDITIONS (14)

ATTACHMENT(S) 1

Date signed: 18 July 2016

Alan Kietzmann

MANAGER – LICENSING (WASTE INDUSTRIES)

Officer delegated under Section 20
of the *Environmental Protection Act 1986*

Date of Issue: Monday, 21 January 2013

Date of Amendment: Monday, 18 July 2016

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DEFINITIONS

In these conditions of Works Approval, unless inconsistent with the text or subject matter:

'Act' means the *Environmental Protection Act 1986*;

'AS 1726-1993' means the Australian Standard AS 1726-1193 *Geotechnical site investigations*;

'CEO' means Chief Executive Officer of the Department of Environment Regulation;

'CEO' for the purpose of correspondence means;

Chief Executive Officer
Department Administering the Environmental Protection Act 1986
Locked Bag 33
CLOISTERS SQUARE WA 6850
Telephone: (08) 9333 7510
Facsimile: (08) 9333 7550
Email: info@der.wa.gov.au;

'Commissioning' means the process of operation and testing that verifies the works and all relevant systems, plant, machinery and equipment have been installed and are performing in accordance with the design specification set out in the works approval application;

'Normal Operating Conditions' means any operation of a particular process (including abatement equipment) excluding start-up, shut-down and upset conditions, in relation to sampling or monitoring;

'Premises' means the area defined in the Premises Map in Schedule 1 and listed as the Premises address on page 1 of the Works Approval;

'Receival Hall' means the building in which all inbound waste streams to be utilised in the Bioenergy Plant is received.

'shut-down' means the period when plant or equipment is brought from normal operating conditions to inactivity;

'start-up' means the period when plant or equipment is brought from inactivity to normal operating conditions;

'Works Approval' means this Works Approval numbered W5311/2012/1 and issued under the Act;

'Works Approval Holder' means the person or organisation named as the Works Approval Holder on page 1 of the Works Approval;

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Environmental Protection Act 1986

WORKS APPROVAL NUMBER: W5311/2012/1

FILE NUMBER: 2012/006705

GENERAL CONDITIONS

GENERAL CONSTRUCTION AND OPERATIONAL DESCRIPTION

- 1 The Works Approval Holder shall construct the works in accordance with the works approval application form dated 21 September 2012 and the following documentation:
- (i) *Richgro Bioenergy Project, Works Approval Application*, dated 21 September 2012; A Richards Pty Ltd.;
 - (ii) *Richgro Bioenergy Project, Process Flow Description Table*, dated 21 September 2012; A Richards Pty Ltd.;
 - (iii) *Schedule 1: Guidance Matrix and Responses Table*, dated 21 September 2012; A Richards Pty Ltd.;
 - (iv) *Richgro Biogas Plant Jandakot – Air quality Assessment*, dated October 2012, prepared for Emission Assessments Pty Ltd by Air Assessments;
 - (v) *Response to DEC: Clarifications in Development of Environmental Assessment Report – 22 October 2012*, Hamish Jolly, Managing Director, Biogas Renewables;
 - (vi) Email, subject: *Response to Works Approval Queries*; dated 15 November 2012, Hamish Jolly, Managing Director, Biogas Renewables;
 - (vii) Letter from G. Richards, Managing Director, Richgro to the Department of Environment and Conservation (DEC) in response to DEC email of 9 January 2013, letter dated 10 January 2013; and
 - (viii) Letter dated 17 January 2013 from G. Richards, Managing Director, Richgro to DEC (attention S de Haan) in response to DEC letter dated 17 January 2013, subject commitment to noise and odour assessments.

Where the details and commitments of the documents listed in condition 1 above are inconsistent with any other condition of this Works Approval, the latter shall prevail.

SUBMISSION OF COMPLIANCE DOCUMENT

- 2 Subject to Condition 1, the Works Approval Holder shall submit a compliance document to the CEO following the construction and commissioning of the works outlined in the Works Approval application and supporting documentation. The Compliance Document shall certify that the works were constructed in accordance with the conditions of Works Approval and documentation supporting the application to construct the works, and shall be signed by an authorised officer of A. Richards Pty Ltd with the printed name and position of that person within the company, and preferably will contain the Company seal.

QUALITY CONTROL/QUALITY ASSURANCE CERTIFICATE

- 3 Prior to commissioning, the Works Approval Holder shall provide a Quality Control/Quality Assurance Certificate from an independent third party which demonstrates that the Receiving Hall has been fully enclosed and operates under negative pressure.

INSTALLATION OF GROUNDWATER MONITORING WELLS

- 4(a) The Works Approval Holder shall construct three groundwater monitoring bores, to be located upstream and downstream of the facility, where these bores will allow monitoring of the groundwater in the vicinity of the Anaerobic Digestion facility.

CONDITIONS OF WORKS APPROVAL

Environmental Protection Act 1986

WORKS APPROVAL NUMBER: W5311/2012/1

FILE NUMBER: 2012/006705

- 4(b) The Works Approval Holder shall ensure that monitoring bores required by condition 4(a) comply with the following:
- (i) Groundwater monitoring wells shall be installed in accordance with Department of Water's Water Quality Protection Note 30: *Groundwater Monitoring Bores* (February 2006);
 - (ii) A minimum of three groundwater monitoring bores shall be installed on the site to enable triangulation of water levels and provide an indication of groundwater flow direction beneath the site.
 - (iii) At least one groundwater monitoring bore shall be installed up hydraulic gradient from the Anaerobic Digestion Facility.
 - (iv) The location of the up hydraulic gradient monitoring bore(s) shall be located at a distance from the Anaerobic Digestion Facility that is sufficient to enable the monitoring of "background" water quality;
 - (v) A competent professional shall log the bores as per AS1726-1993 for the unified classification system for soils. This log should be submitted prior to commissioning; and
 - (vi) Baseline monitoring to be carried out on all three monitoring bores where the results of this monitoring is to be provided to the CEO at least four weeks prior to commissioning of the Anaerobic Digestion Facility.
 - (vii) Baseline monitoring of the groundwater bores is to include the parameters noted in Column 1 of Table 1 and be provided in the units noted in Column 2 of Table 1 below:

Table 1: Bore parameters to be monitored.

Column 1	Column 2
Parameters to be measured	Units of measure
Electrical conductivity (EC)	milliseimens per metre
BOD	mg/L
Colour (gilvin)	G440/m
*Standing Water Level (SWL)	mAHD
Total nitrogen, nitrate + nitrite as nitrogen,	mg/L
Ammonia as nitrogen	mg/L
Total phosphorus	mg/L
<i>Escherichia coli (E coli)</i>	cfu/100mL
pH	pH units

INCIDENT PREVENTION AND RESPONSE MANAGEMENT PLAN

- 5 The Works Approval Holder shall provide to the CEO an *Incident Prevention and Response Management Plan* which includes:
- (i) details of management practices to be carried out in the event of a failure or upset conditions to the biofilter and biofilter stack; and
 - (ii) all aspects of the operation of the Anaerobic Digestion facility prior to the commissioning of the works.

CONDITIONS OF WORKS APPROVAL

Environmental Protection Act 1986

WORKS APPROVAL NUMBER: W5311/2012/1

FILE NUMBER: 2012/006705

ODOUR AND NOISE BASELINE ASSESSMENT

- 6(a) The Works Approval Holder shall provide to the CEO an Odour and Noise Baseline Assessment Program for the current operations on site. This Program shall include a proposed source and field assessment methodology for all noise and odour emissions generated at the premises.
- 6(b) The Works Approval Holder shall ensure that the Odour and Noise Baseline Assessment required by condition 6(a) of this Works Approval shall be conducted and a report detailing the results provided to the CEO at least one month prior to commissioning of the works.

COMMISSIONING CONDITIONS

- 7 The Works Approval Holder shall notify the CEO in writing at least seven days prior to commencement of commissioning of the works.

ODOUR AND AIR EMISSIONS TESTING

- 8(a) Two months prior to commencing commissioning of the Anaerobic Digestion Facility, the Works Approval Holder shall submit an *Odour and Air Monitoring Program* to the CEO where the Program shall include but not be limited to:
- (i) Proposed sampling locations and methodologies;
 - (ii) Details of plant operating conditions and meteorological conditions during which monitoring will be conducted; and
 - (iii) A proposed timeframe for the completion of all odour, air and noise monitoring to be carried out under the Program.
- 8(b) The Works Approval Holder shall ensure that the monitoring program required by condition 8(a) be conducted under Normal Operating Conditions during commissioning.
- 8(c) The Works Approval Holder shall submit a report on the findings of the *Odour and Air Monitoring Program*, required by Condition 8(a) of this Works Approval, to the Director, within one month prior to completion of commissioning. The report shall include but not be limited to:
- (i) Results of the *Odour and Air Monitoring Program* determined by condition 8(a);
 - (ii) An assessment of emissions against relevant guidelines and best practice criteria;
 - (iii) An assessment of odour emissions against the Odour Baseline Assessment required by condition 6(b); and
 - (iv) Include an improvement program which nominates improvements or upgrades at the premises, determined appropriate by parts (i)-(iii) of this condition.

NOISE ASSESSMENT OF OPERATIONS

- 9 During the commissioning stage, the Works Approval Holder shall conduct an assessment of all noise emissions occurring on site during Normal Operating Conditions.

CONDITIONS OF WORKS APPROVAL

Environmental Protection Act 1986

WORKS APPROVAL NUMBER: W5311/2012/1

FILE NUMBER: 2012/006705

- 10 On completion of commissioning the Works Approval Holder shall submit a Noise Assessment Report to the Director of the results required in Condition 9 of this Works Approval where the Noise Assessment Report shall contain, but not be limited to:
- (i) methods used for noise monitoring at the premises in accordance with Part 3 of the *Environmental Protection (Noise) Regulations 1997*;
 - (ii) an assessment of whether noise emissions from the premises comply with the assigned levels defined in the *Environmental Protection (Noise) Regulations 1997*;
 - (iii) proposed mitigation measures, actions to be taken and associated timeframes for implementation if the noise monitoring results indicate that noise emissions from the premises exceed the assigned levels.

CONDITIONS OF WORKS APPROVAL

Environmental Protection Act 1986

WORKS APPROVAL NUMBER: W5311/2012/1

FILE NUMBER: 2012/006705

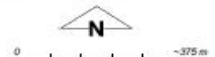
ATTACHMENT 1 PLAN OF PREMISES

A Richards Pty Ltd - Richgro Garden Products



LEGEND

- Cadastre
- Road Centrelines
- Perth Metropolitan Central
15cm Orthomosaic - Landgate
2011



Scale 1:15470
(Approximate when reproduced at Letter)
Geocentric Datum Australia 1994
Note: the data in this map have not been projected. This may result in geometric distortion or measurement inaccuracies.

Prepared by: nianettes
Prepared for:
Date: 19/10/2012 10:35:50 AM

Information derived from this map should be confirmed with the data custodian acknowledged by the agency acronym in the legend.





Contents

Decision Document	1
Contents	2
1 Purpose of this Document	2
2 Administrative summary	3
3 Executive summary of proposal and assessment	4
4 Decision table	5
5 Advertisement and consultation table	6
6 Risk Assessment	7

1 Purpose of this Document

This decision document explains how the DER delegated officer has assessed and determined the application and provides a record of the decision-making process and how relevant factors have been taken into account. Stakeholders should note that this document is limited to DER's assessment and decision making under Part V of the *Environmental Protection Act 1986*. Other approvals may be required for the proposal, and it is the proponent's responsibility to ensure they have all relevant approvals for their Premises.



2 Administrative summary

Administrative details		
Application type	Works Approval <input type="checkbox"/> New Licence <input type="checkbox"/> Licence amendment <input type="checkbox"/> Works Approval amendment <input checked="" type="checkbox"/>	
Activities that cause the premises to become prescribed premises	Category number(s)	Assessed design capacity
	61	28,000 tonnes per year
	61A	7,000 tonnes per year
	67A	35,000 tonnes per year
Application verified	Date: N/A	
Application fee paid	Date: N/A	
Works Approval has been complied with	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>	
Compliance Certificate received	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>	
Commercial-in-confidence claim	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Commercial-in-confidence claim outcome	N/A	
Is the proposal a Major Resource Project?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Was the proposal referred to the Environmental Protection Authority (EPA) under Part IV of the <i>Environmental Protection Act 1986</i> ?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Referral decision No: Managed under Part V <input type="checkbox"/> Assessed under Part IV <input type="checkbox"/>
Is the proposal subject to Ministerial Conditions?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Ministerial statement No: EPA Report No:
Does the proposal involve a discharge of waste into a designated area (as defined in section 57 of the <i>Environmental Protection Act 1986</i>)?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Department of Water consulted Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Is the Premises within an Environmental Protection Policy (EPP) Area	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Is the Premises subject to any EPP requirements?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	



3 Executive summary of proposal and assessment

A. Richards Pty Ltd was granted Works Approval W5311/2012/1 for prescribed premises categories 61 (liquid waste facility) and 61A (solid waste facility), on 21 January 2013, for the construction of two anaerobic digesters (AD) and associated infrastructure (i.e. receipt and processing shed, turbine for electricity generation). The occupier accepts an organic mix of 20% solids and 80% liquid wastes composed of greenwaste, manure, solid and liquid food wastes and grease trap wastes for feedstock. As part of the commissioning process these feedstock materials are fed into the fully enclosed AD plant to produce biogas for electrical power generation. The AD plant has an annual production of 35,000 tonnes.

This Premises has an existing licence, L7308/1998/13 for categories 61, 61A and 67A (compost manufacturing and soil blending) and will require amending, prior to the expiry of the Works Approval, to incorporate the associated operations. The occupier has held a licence for this premises since September 2000.

The nearest sensitive receptors, being residents, are located approximately 30 metres from the north-eastern boundary of the premises however they are located approximately 220 metres from where the composting activities occur. The premises is located within the City of Cockburn.

Depth to groundwater is approximately 4.5 metres. The premises is within a P2 Public Drinking Water Source Area (PDWSA). The south-east and south-western boundaries are adjacent to a P1 PDWSA. The surface geology is primarily Bassendean Sand: quartz sand (dunes) with a moderate to low risk of acid sulfate soils. The premises is adjacent to Bush Forever area on the south-east and south-west boundaries. Emissions associated with this works approval are not expected to impact on the P1 or P2 PDWSA or Bush Forever area.

The works approval was amended in January 2016 following a request from the occupier to extend the expiry date for a period of six months to finalise commissioning and submit all information required under the works approval conditions. At the start of July 2016 the occupier submitted another application to extend the works approval duration by a period of two months enabling more time to provide all documentation required under the works approval conditions. This amendment has been granted for an additional period of three months to ensure that there is sufficient time to provide all documentation. No conditions have been changed under this amendment.



4 Decision table

All applications are assessed in line with the *Environmental Protection Act 1986*, the *Environmental Protection Regulations 1987* and DER's Operational Procedure on Assessing Emissions and Discharges from Prescribed Premises. Where other references have been used in making the decision they are detailed in the decision document.

DECISION TABLE			
Works Approval / Licence section	Condition number W = Works Approval L = Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
Works Approval Duration	N/A	<p>The Works Approval Holder has requested an extension to the expiry date of the Works Approval to 20 September 2016. The original expiry date was 20 January 2016, which was amended to the 20 July 2016 in January 2016.</p> <p>The Works Approval expiry date has again been extended, this time for a period of three months to 20 October 2016. The CEO's Delegated Officer considers it justified to provide an additional one month additional to the request two month extension so that there is more than enough time provide to the occupier to provide all required documentation.</p> <p>Once all requirements have been completed and submitted to DER, the occupier is required to apply for an amendment to licence L7308/1998/13 to include all operations associated with the Works Approval onto the operational licence.</p>	Amendment application supporting documentation



5 Advertisement and consultation table

Date	Event	Comments received/Notes	How comments were taken into consideration
13/07/2016	Proponent sent a copy of draft instrument during consultation period	Signed waiver received 18 July 2016 requesting amendment be granted as soon as possible.	N/A



6 Risk Assessment

Note: This matrix is taken from the DER Corporate Policy Statement No. 07 - Operational Risk Management

Table 1: Emissions Risk Matrix

Likelihood	Consequence				
	Insignificant	Minor	Moderate	Major	Severe
Almost Certain	Moderate	High	High	Extreme	Extreme
Likely	Moderate	Moderate	High	High	Extreme
Possible	Low	Moderate	Moderate	High	Extreme
Unlikely	Low	Moderate	Moderate	Moderate	High
Rare	Low	Low	Moderate	Moderate	High