

# Works Approval

Works Approval number W6438/2020/1

Works Approval Holder Boutique Biofertilisers Pty Ltd

**ACN** 162 847 181

Registered business address

18 Cinnamon Road
GWELUP WA 6018

DWER file number DER2020/000323

**Duration** 13/11/2020 to 12/11/2025

**Date of issue** 13/11/2020

Crossman Natural Fertiliser Project

**Premises details** 9902 Albany Highway

CROSSMAN WA 6390

Being part of Lot 9 on Plan 4850

As defined by the premises map provided in

Schedule 1, and coordinates provided in Schedule 2

Prescribed premises category description (Schedule 1, <i>Environmental Protection Regulations 1987</i> )	Assessed production capacity
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.	28, 000 tonnes per annual period

This works approval is granted to the works approval holder, subject to the attached conditions, on 13 November 2020 by:

Stephen Checker
MANAGER WASTE INDUSTRIES
REGULATORY SERVICES

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

## Works approval history

Date	Reference number	Summary of changes
13/06/2015	W5945/2016/1	Works Approval granted
14/10/2016	W5945/2016/1	Amended Works Approval issued following CEO initiated review in response to appeal submission
19/06/2019	W5945/2016/1	Works Approval expired
13/11/2020	W6438/2020/1	New Works Approval issued

## Interpretation

In this works approval:

- (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 works approval:
  - (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 works approval requires specific conditions to be met but does not provide any implied authorisation for other emissions, discharges, or activities not specified in this works approval.

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## **Works Approval conditions**

The Works Approval Holder must ensure that the following conditions are complied with:

#### **Construction phase**

#### Infrastructure and equipment

- 1. The Works Approval Holder must ensure that the Works specified in Column 1 of Table 1 meet or exceed the specifications in Column 2 of Table 1 for the infrastructure in each row of Table 1.
- 2. The Works Approval Holder must not depart from the specifications for the infrastructure in each row of Table 1 except:
  - (a) where such departure is minor in nature and does not materially change or affect the infrastructure; or
  - (b) where such departure improves the functionality of the infrastructure and does not increase risks to public health, public amenity, or the environment, and in accordance with all other Conditions in this Works Approval.

**Table 1: Construction specifications** 

Infrastructure	Design and construction / installation requirements
a) All	<ol> <li>All storage infrastructure, tanks, transfer pipelines and conveyance infrastructure must be impermeable and free of leaks or defects.</li> <li>Stormwater must not be able to enter any part of the Facility, transfer pipelines and conveyance infrastructure.</li> <li>All equipment used at the premises must be specified as low noise emission devices; and</li> <li>Premises is to be fenced and capable of being securely locked when not manned and signposts must be erected to indicate that unauthorised entry is prohibited.</li> </ol>
b) Receival bay	<ol> <li>To be constructed on a bunded, concrete pad.</li> <li>To be covered with an elevated roof that allows trucks to tip and ensures wastes being received are kept dry at all times.</li> <li>Provided with misting/ fogging water sprays containing a wetting agent sufficient to ensure dust generated during tipping operations is contained within the receival bay.</li> </ol>
c) Raw materials storage bays (540m²)	<ol> <li>To be constructed on a bunded, concrete pad and enclosed within a steel framed colourbond building.</li> <li>The interface between the walls and the concrete slab must be sealed.</li> <li>Provided with enclosed storage bins and feed conveyor to load storage bins.</li> <li>All feed conveyors to be covered to prevent spillage and dust releases.</li> <li>Bulk manure storage bins and covered conveyors to be connected to the odour control system (additional specifications in row e) below).</li> <li>180m³ fly-ash feedstock storage silo (concrete) to be equipped with a reverse pulse bag filter with the outlet ducted to ground level.</li> <li>Provided with a ventilation system connected to the odour control unit and capable of generating sufficient negative pressure to extract dust and odorous air from the area.</li> </ol>

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Infrastructure	Design and construction / installation requirements
d) Process building (1000m²) includes:  Grinding and Screening plant; Milling & Mixing plant; Pelletising plant; Bagging plant.	<ol> <li>Process building to be placed upon 0.5-1 m free draining material, above ground level.</li> <li>Process building walls constructed of colourbond (or equivalent) insulated building panels, fully bunded, placed upon a concrete slab.</li> <li>Process building sealed between the insulated wall panels and the slab to prevent moisture ingress with drive/ walk over bunds to prevent storm water access.</li> <li>Process building to be graded to a 1:100 slope to promote drainage to three sumps to retain any liquids.</li> <li>All production/process equipment is to be located within the insulated steel framed colourbond (or equivalent) building.</li> <li>Process buildings to be surrounded by a bunded, graded concrete apron to contain drainage to be directed to the lined 'detention basin' to trap any solid materials prior to discharge to the HDPE lined 'storm water drainage pond'.</li> <li>Storage bays, able to be covered when not being loaded or unloaded.</li> <li>All conveyors and hoppers in the milling and mixing areas to be enclosed.</li> <li>Process building, except receival and storage bays, is insulated for noise attenuation.</li> <li>The mill is to be fully enclosed and incorporate a screen that allows fine product to pass through to the mixing stage and recirculates oversize material for further milling.</li> <li>The pelletiser is to be fully enclosed, capable of processing 6 tph, capable of heating pellets to more than 90°C, and include a granulator.</li> <li>The cooler/dryer is to be able to subject pellets to a counter air flow with an air temperature not exceeding 70°C.</li> <li>All process sections and conveyors to be connected to the odour control</li> </ol>
e) Odour control system	<ul> <li>system.</li> <li>To be constructed as shown on Drawing 23334-0-004 Rev 1 in Schedule 1 and:</li> <li>1) To consist of two biofilter units.</li> <li>2) Contain green waste media to a depth of 1.5 m.</li> <li>3) Constructed from modified metal shipping containers using a slotted plenum floor with a vertical linear bed velocity of 1-2cm/second and a residence time of 20-50 seconds.</li> <li>4) Inclusion of humidifier sprays with performance monitoring system for temperature, humidity, bed pressure and airflow velocity sensors.</li> <li>5) Ensure a design efficiency of 80-85% for the removal of odours.</li> <li>6) Extraction ducting and fan to withdraw and discharge vapours (particulates) through the biofilter to a stack no less than 3 meters in height.</li> <li>7) To include elevated duct at eave level above bulk manure storage bins with lower level ducts on the separating walls of the storage bays.</li> <li>8) To include odour control ducting for all covered conveyors and hoppers in the milling and mixing area.</li> <li>1) One HDPE lined pond with a permeability of ≤1 x 10-9 m/s for the containment of potentially contaminated stormwater.</li> </ul>
g) Drainage ponds h) Internal access roads and parking areas (2000 m²)	<ul> <li>containment of potentially contaminated stormwater.</li> <li>Designed to contain a '72-hour duration, '1 in 10' year ARI critical rainfall event without overflow.</li> <li>Freeboard of 0.5 m to be maintained at all times.</li> <li>Minimum volume of 1, 000 m³.</li> <li>Ponds for the drainage, control, and containment of uncontaminated stormwater outside of the production Facility shall be constructed of in-situ clay soils with a permeability of 1 x 10<sup>-6</sup> m/s.</li> <li>Constructed of compacted aggregate then covered and compacted with pebble gravel, with final 20 m of road bituminised with drainage culvert in place.</li> </ul>

Infrastructure	Design and construction / installation requirements	
i) Rainwater tank	<ol> <li>25 kilolitre tank to be installed to capture stormwater from the roof of the colourbond building to allow its use in the treatment process and for dust suppression.</li> </ol>	

- 3. The Works Approval Holder shall not commence construction activities until a signed copy of the lease agreement for the premises is submitted to the CEO.
- **4.** The Works Approval Holder must ensure that all unsealed roads and construction areas are maintained in a damp state at all times when construction works are taking place.
- **5.** The Works Approval Holder shall only undertake construction activities between the hours of:
  - (a) 0700 and 1700 on Mondays to Fridays; and
  - (b) 0700 and 1400 on Saturdays.

#### **Information**

- **6.** The Works Approval Holder shall submit an Environmental Compliance Report to the CEO, within one month following the completion of construction of the works.
- 7. The Environmental Compliance Report shall:
  - (a) certify that the works were constructed in accordance with the conditions of the works approval; and
  - (b) be signed by a person authorised to represent the Works Approval Holder and contain the printed name and position of that person within the company.
- 8. The Works Approval Holder shall provide the CEO with a list of departures which are certified as complying with Condition 2 at the same time and from the same professional as the certifications submitted in accordance with Conditions 6 and 7.
- **9.** The Works Approval Holder shall implement a complaints management system that, as a minimum, records the following information (if known or provided) about complaints received at the Premises concerning any environmental impact of the construction works at the Premises:
  - (i) name and address of the complainants (if consented);
  - (ii) date and time of complaint;
  - (iii) date and time of alleged incident;
  - (iv) alleged source of the incident;
  - (v) general description of the alleged incident, including any environmental or health impacts reported by the complainant;
  - (vi) wind direction, wind speed and temperature at time of alleged incident;
  - (vii) likely source of the alleged incident; and
  - (viii) actions taken by the Works Approval Holder to address the complaint, including the outcome of any investigation(s) and action(s) to verify any impacts.

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### **Time Limited Operations phase**

#### Commencement and duration

- 10. The Works Approval Holder may only commence Time Limited Operations once the Environmental Compliance Report required by Condition 6 has been submitted to the CEO by the Works Approval Holder.
- **11.** The Works Approval Holder may conduct Time Limited Operations:
  - (a) For a period not exceeding 90 calendar days from the day the works approval holder meets the requirements of Condition 10; or
  - (b) Until such time, not exceeding the period outlined in Condition 11(a), as a prescribed premises licence is granted in accordance with Part V of the *Environmental Protection Act 1986*, and only where this occurs prior to the time period specified in sub provision (a).

#### Time limited operations requirements and emission limits

- **12.** Subject to submission of the report required by Condition 6, the Works Approval Holder shall:
  - (a) provide written advice to the CEO within 7 days of commencing operation of the Facility, specifying the date on which time limited operations commenced; and
  - (b) shall only operate the Facility between:
    - (i) 0700 and 1700 on Mondays to Fridays; and
    - (ii) 0700 and 1400 on Saturdays;

excluding public holidays.

#### **Feedstock controls**

- **13.** The Works Approval Holder shall only accept and process feedstock materials at the premises if:
  - (a) It is of a type listed in Table 2; and
  - (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 acceptance table

Prescribed premises category	Feedstock type	Quantity limit (tonnes per annual period)	Acceptance specification
	Animal and poultry manure	Combined total of 28, 000 tonnes per annual period	<ul> <li>Limited to spadable fresh animal manure, mixtures of animal manure and animal bedding organics, and aged animal manure</li> <li>Shall be delivered to the Premises in covered trucks or trailers</li> <li>Shall only be received and unloaded in the enclosed receival bay</li> </ul>
61A	Anhydrous fly ash		Limited to fine particle residue generated by the combustion of coal by Australian power stations only
	Natural fibrous organics		<ul> <li>Limited to seaweed and crop process residues including canola meal</li> <li>Shall be delivered to the Premises in covered trucks or trailers</li> </ul>
	Trace elements and nutrients		Shall be delivered to the Premises in covered trucks or trailers

14. The Works Approval Holder shall ensure that where feedstock does not meet the specifications set out in Condition 13 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.

#### **Monitoring during time limited operations**

- 15. The Works Approval Holder must record the following information in relation to complaints received by the Works Approval Holder (whether received directly from a complainant or forwarded to them by the Department or another party) about any alleged emissions from the Premises during Time Limited Operations:
  - (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 works approval holder to investigate or respond to any complaint.

#### **Compliance reporting**

- **16.** Within 14 days of ceasing the operation of the Facility under Time limited operations, the Works Approval Holder shall submit to the CEO a report including, but not limited to:
  - (a) the dates on which waste receipt and processing operations commenced and ceased;
  - (b) the total amount (in tonnes) of raw material processed during Time limited operations; and
  - (c) a summary of any complaints received and recorded in accordance with Condition 15.

### **Records and reporting (general)**

- 17. The Works Approval Holder must maintain accurate and auditable Books including the following records, information, reports, and data required by this works approval:
  - (a) the works conducted in accordance with Condition 1;
  - (b) any maintenance of infrastructure that is performed in the course of complying with condition 1; and
  - (c) any complaints received under Condition 15.

Environmental Protection Act 1986
Works Approval number: W6438/2020/1 (13/11/2020)

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## **Definitions**

In this works approval, the terms in Table 3 have the meanings defined.

**Table 3: Definitions** 

Term	Definition	
Annual Period	a 12-month period commencing from 1 November until 31 December of the immediately following year	
Books	has the same meaning given to that term under the EP Act.	
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	
	<u>info@dwer.wa.gov.au</u>	
Department	means the department established under section 35 of the <i>Public Sector Management Act 1994</i> and designated as responsible for the administration of Part V Division 3 of the EP Act.	
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.	
Facility	means all constructed buildings and infrastructure in relation to the 'feedstock and receival facilities' and 'process building'	
Environmental Compliance Report	means a report to satisfy the CEO that the conditioned infrastructure and/or equipment has been constructed and/or installed in accordance with the Works Approval.	
EP Act	Environmental Protection Act 1986 (WA).	
EP Regulations	Environmental Protection Regulations 1987 (WA).	
HDPE	High density polyethylene	
Low permeability	means hydraulic conductivity of ≤1 x 10 <sup>-9</sup> metres per second or equivalent	
Premises	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 works approval.	
Prescribed Premises	has the same meaning given to that term under the EP Act.	
Schedule 1	means Schedule 1 of this Works Approval unless otherwise	

Term	Definition
	stated
Time Limited Operations	refers to the operation of the infrastructure and equipment identified under this works approval that is authorised for that purpose, subject to the relevant conditions.
Waste	has the same meaning given to that term under the EP Act.
Works Approval	refers to this document, which evidences the grant of the works approval by the CEO under section 54 of the EP Act, subject to the conditions.
Works Approval Holder	refers to the occupier of the premises being the person to whom this works approval has been granted, as specified at the front of this works approval.

### **END OF CONDITIONS**

# **Schedule 1: Maps and Drawings**

### **Premises map**

The boundary of the Prescribed Premises is shown in the map below (Figure 1). The blue line depicts the Premises Boundary. The pink line depicts the greater Lot 9 boundary.

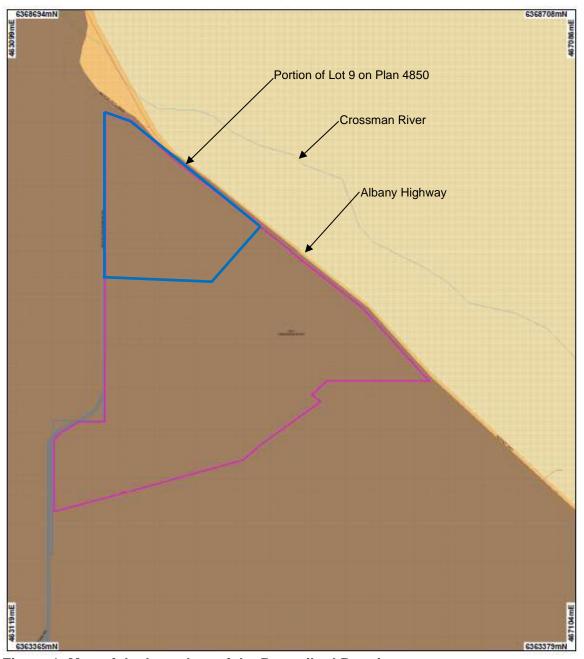


Figure 1: Map of the boundary of the Prescribed Premises



Figure 2: Facility location

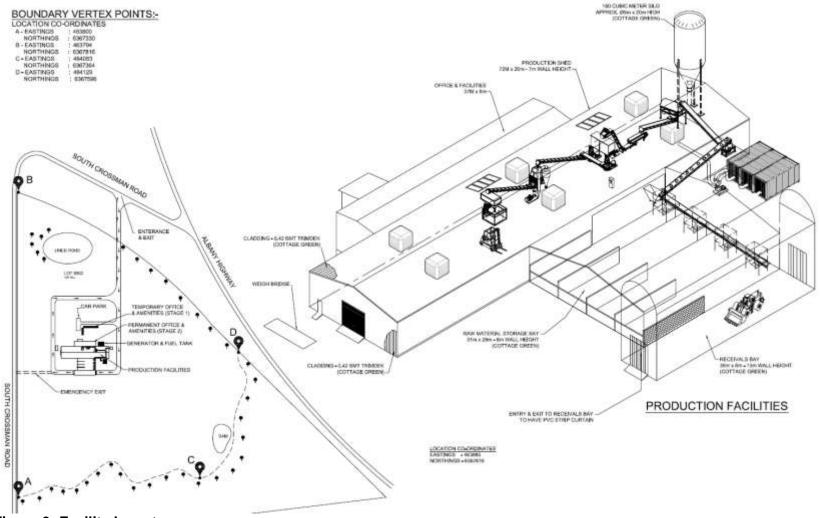


Figure 3: Facility layout

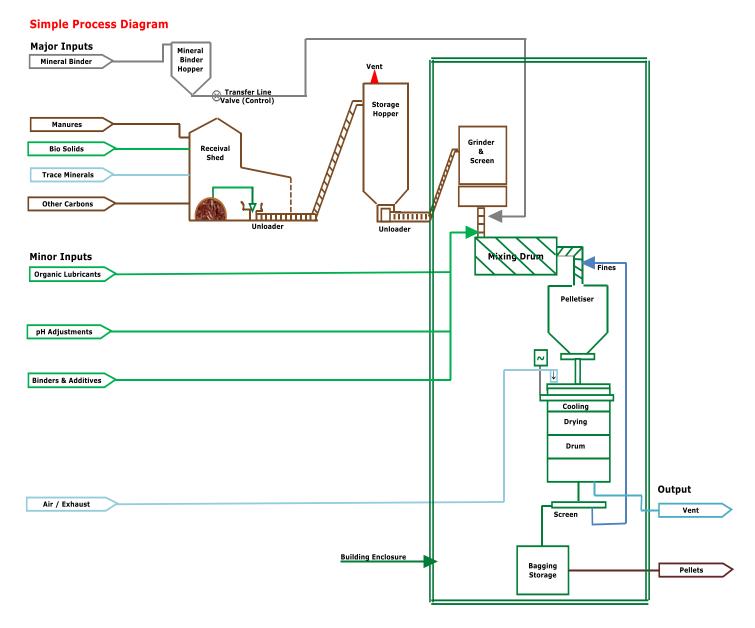


Figure 4: Process map

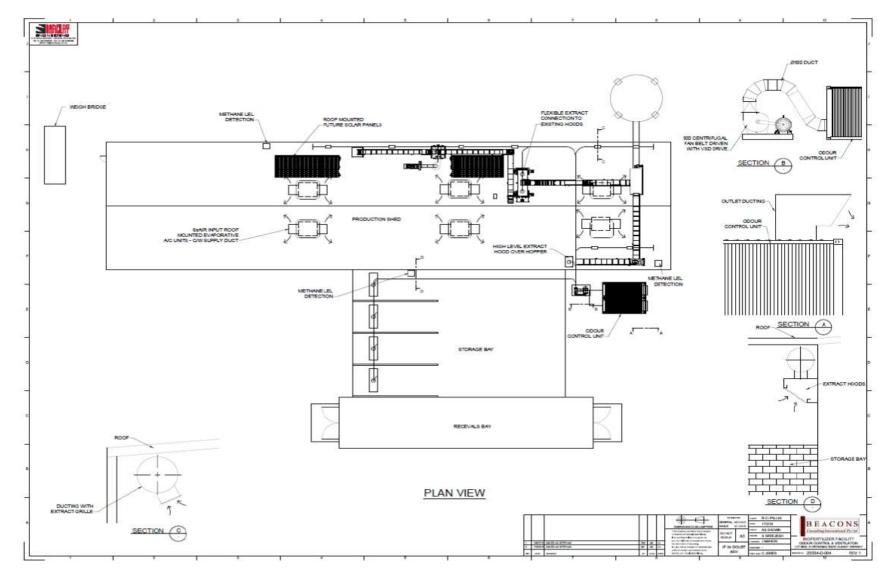


Figure 5: Premises Odour Control System - Drawing 23334-0-004 Rev 1

# **Schedule 2: Premises boundary**

The Premises Boundary is defined by the coordinates in Table 4.

**Table 4: Premises boundary coordinates** 

Easting <sup>1</sup>	Northing
463800	6367330
463794	6367816
464083	6367364
464129	6367596
464129	6367596

Note 1: GDA94/MGA zone 50 (WKID 28350)