



Works Approval

Environmental Protection Act 1986, Part V

Works Approval Holder: Boutique Biofertilisers Pty Ltd

Works Approval Number: W5945/2016/1

Registered office: 16 Sherriff Circuit
WATTLE GROVE WA 6107

ACN: 162 847 181

Premises address: Crossman Natural Fertiliser Project
No 9902 Albany Highway
CROSSMAN WA 6390
Being part of Lot 9 on Plan 4850 within co-ordinates:

Easting	Northing
463800	6367330
463794	6367816
464083	6367364
464129	6367596
464129	6367596

as depicted in Schedule 1.

Granted date: Monday, 13 June 2016

Commencement date: Monday, 20 June 2016

Expiry date: Wednesday, 19 June 2019

The following category/s from the *Environmental Protection Regulations 1987* cause this Premises to be a prescribed premises for the purposes of the *Environmental Protection Act 1986*:

Category number	Category description	Category production or design capacity	Approved premises production or design capacity
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.	1 000 tonnes or more per year	28 000 tonnes per annual period

Conditions

This Works Approval is subject to the conditions set out in the attached pages.

Date signed : 05 January 2017

.....
Ruth Dowd
Officer delegated under section 20
of the *Environmental Protection Act 1986*



Works Approval Conditions

1 General

1.1 Interpretation

1.1.1 In the Works Approval, definitions from the *Environmental Protection Act 1986* apply unless the contrary intention appears.

1.1.2 In the Works Approval, unless the contrary intention appears:

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

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

'CEO' for the purpose of correspondence means;

Chief Executive Officer
Department Div.3 Pt.V EP Act
Locked Bag 33 Cloisters Square
PERTH WA 6850
info@der.wa.gov.au

'facility' means all constructed buildings and infrastructure in relation to the 'feedstock and receival facilities' and 'process building';

'low permeability' means hydraulic conductivity of $\leq 1 \times 10^{-9}$ metres per second or equivalent;

'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;

'Schedule 1' means Schedule 1 of this Works Approval unless otherwise stated;

'Works Approval' means this Works Approval numbered W5945/2016/1 and granted under the *Act*;

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

1.1.3 Any reference to an Australian or other standard in the Works Approval means the relevant parts of the standard in force from time to time during the term of this Works Approval.

1.1.4 Any reference to a guideline in the Works Approval means the current version of the guideline in force from time to time, and shall include any amendments or replacements to that guidelines made during the term of this Works Approval.

1.2 General conditions

1.2.1 The Works Approval Holder must ensure that the Works specified in Column 1 of Table 1.2.1 meet or exceed the specifications in Column 2 of Table 1.2.1 for the infrastructure in each row of Table 1.2.1.



- 1.2.2 The Works Approval Holder must not depart from the specifications for the infrastructure in each row of Table 1.2.1 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 1.2.1: Construction specifications	
Column 1	Column 2
(a) All	<ol style="list-style-type: none"> 1) All storage infrastructure, tanks, transfer pipelines and conveyance infrastructure must be impermeable and free of leaks or defects; 2) Stormwater must not be able to enter any part of the facility, transfer pipelines and conveyance infrastructure; 3) All equipment used at the premises must be specified as low noise emission devices; and 4) Premises is to be fenced and capable of being securely locked when not manned and sign-posts must be erected to indicate that unauthorised entry is prohibited.
(b) Receival bay	<ol style="list-style-type: none"> 1) To be constructed on a bunded, concrete pad. 2) To be covered with an elevated roof that allows trucks to tip and ensures wastes being received are kept dry at all times. 3) Provided with misting/ fogging water sprays containing a wetting agent sufficient to ensure dust generated during tipping operations is contained within the receival bay.
(c) Raw materials storage bays (540m ²)	<ol style="list-style-type: none"> 1) To be constructed on a bunded, concrete pad and enclosed within a steel framed colourbond building. 2) The interface between the walls and the concrete slab must be sealed. 3) Provided with enclosed storage bins and feed conveyor to load storage bins. 4) All feed conveyors to be covered to prevent spillage and dust releases. 5) Bulk manure storage bins and covered conveyors to be connected to the odour control system (additional specifications in row e) below). 6) 180m³ fly-ash feedstock storage silo (concrete) to be equipped with a reverse pulse bag filter with the outlet ducted to ground level. 7) Provided with a ventilation system connected to the odour control unit and capable of generating sufficient negative pressure to extract dust and odourous air from the area.
(d) Process building (1000m ²) includes: Grinding and Screening plant; Milling & Mixing plant; Pelletising plant; Bagging plant.	<ol style="list-style-type: none"> 1) Process building to be placed upon 0.5-1 m free draining material, above ground level; 2) Process building walls constructed of colour bond (or equivalent) insulated building panels, fully bunded, placed upon a concrete slab; 3) 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; 4) Process building to be graded to a 1:100 slope to promote drainage to three sumps to retain any liquids; 5) All production/process equipment is to be located within the insulated steel framed colour bond (or equivalent) building; 6) 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'; 7) Storage bays, able to be covered when not being loaded or unloaded;



	<ul style="list-style-type: none"> 8) All conveyors and hoppers in the milling and mixing areas to be enclosed; 9) Process building, except receival and storage bays, is insulated for noise attenuation; 10) 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; 11) 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; 12) The cooler/dryer is to be able to subject pellets to a counter air flow with an air temperature not exceeding 70°C; 13) All process sections and conveyors to be connected to the odour control system.
e) Odour control system	<p>To be constructed as shown on Drawing 23334-0-004 Rev 1 in Schedule 1 and:</p> <ul style="list-style-type: none"> 1) To consist of two biofilter units; 2) Contain green waste media to a depth of 1.5m; 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; 4) Inclusion of humidifier sprays with performance monitoring system for temperature, humidity, bed pressure and airflow velocity sensors; 5) Ensure a design efficiency of 80-85% for the removal of odours; 6) Extraction ducting and fan to withdraw and discharge vapours (particulates) through the biofilter to a stack no less than 3 meters in height; 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. 8) To include odour control ducting for all covered conveyors and hoppers in the milling and mixing area.
f) Stormwater drainage pond	<ul style="list-style-type: none"> 1) One HDPE lined pond with a permeability of $\leq 1 \times 10^{-9}$ m/s for the containment of potentially contaminated stormwater; 2) Designed to contain a '72 hour duration, '1 in 10' year ARI critical rainfall event without overflow; 3) Freeboard of 0.5 m to be maintained at all times; 4) Minimum volume of 1,000 m³.
g) Drainage ponds	<p>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 1×10^{-6} m/s.</p>
h) Internal access roads and parking areas (2000m ²)	<ul style="list-style-type: none"> 1) Constructed of compacted aggregate then covered and compacted with pebble gravel, with final 20 m of road bituminised with drainage culvert in place.
i) Rainwater tank	<p>25kL 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.</p>

1.2.3 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.

1.2.4 The Works Approval Holder must ensure that all unsealed roads and construction areas are maintained in a damp state or treated with an appropriate sealant or binding agent to reduce the potential for dust emissions when construction works are taking place.



- 1.2.5 The Works Approval Holder must undertake daily visual inspections during construction to assess dust emissions and maintain accurate and auditable records of all inspections. Those records must show the source of any dust and actions taken to address the issue.
- 1.2.6 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

2 Information

2.1 Reporting

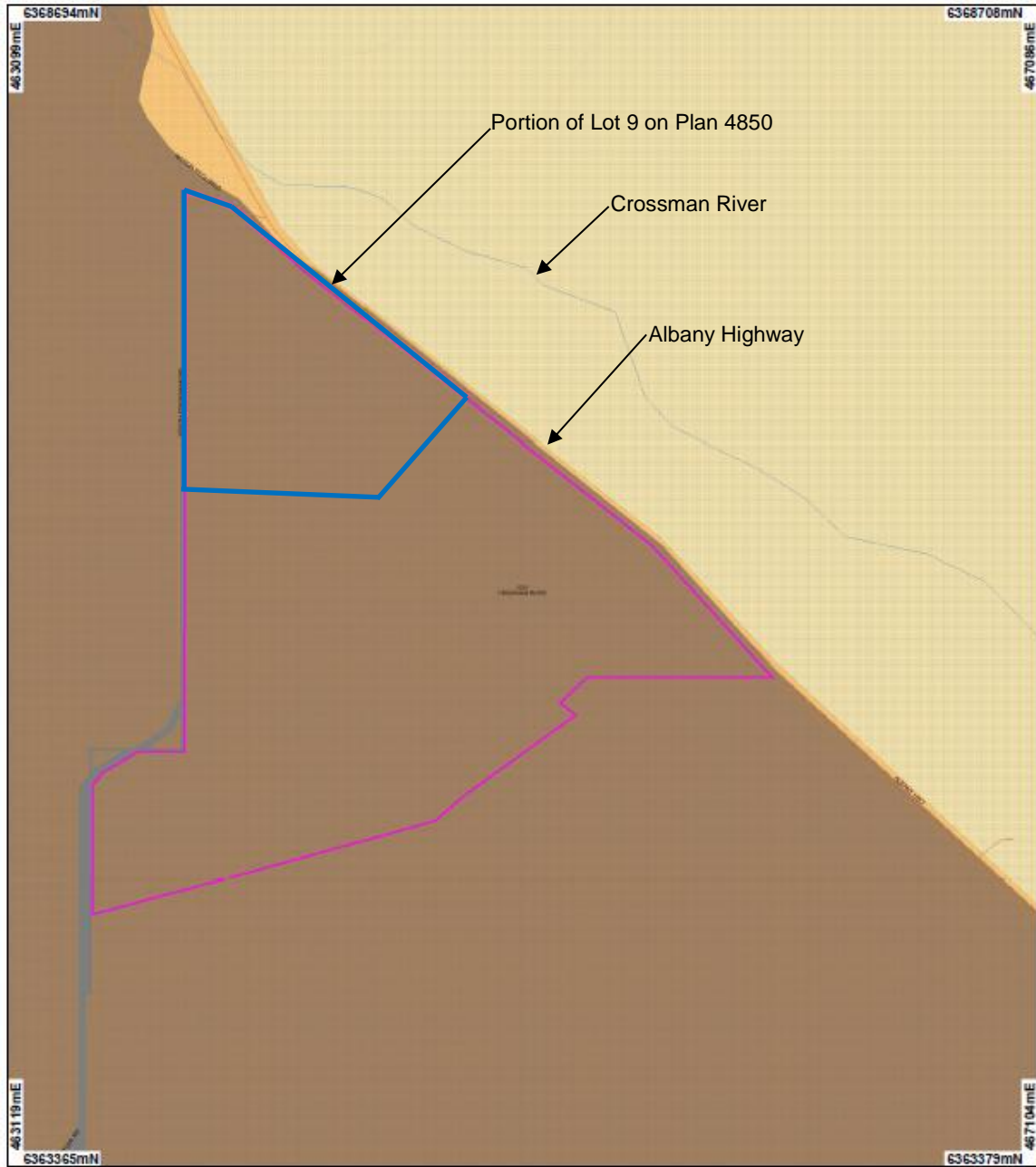
- 2.1.1 The Works Approval Holder shall submit a compliance document to the CEO, within one month following the completion of construction of the works.
- 2.1.2 The compliance document shall:
- (c) certify that the works were constructed in accordance with the conditions of the works approval;
 - (d) 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.
- 2.1.3 The Works Approval Holder shall provide the CEO with a list of departures which are certified as complying with Condition 1.2.2 at the same time and from the same professional as the certifications submitted in accordance with Conditions 2.1.1 and 2.1.2.
- 2.1.4 The Works Approval Holder shall:
- (a) implement a complaints management system that shall record 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.



Schedule 1: Maps and Drawings

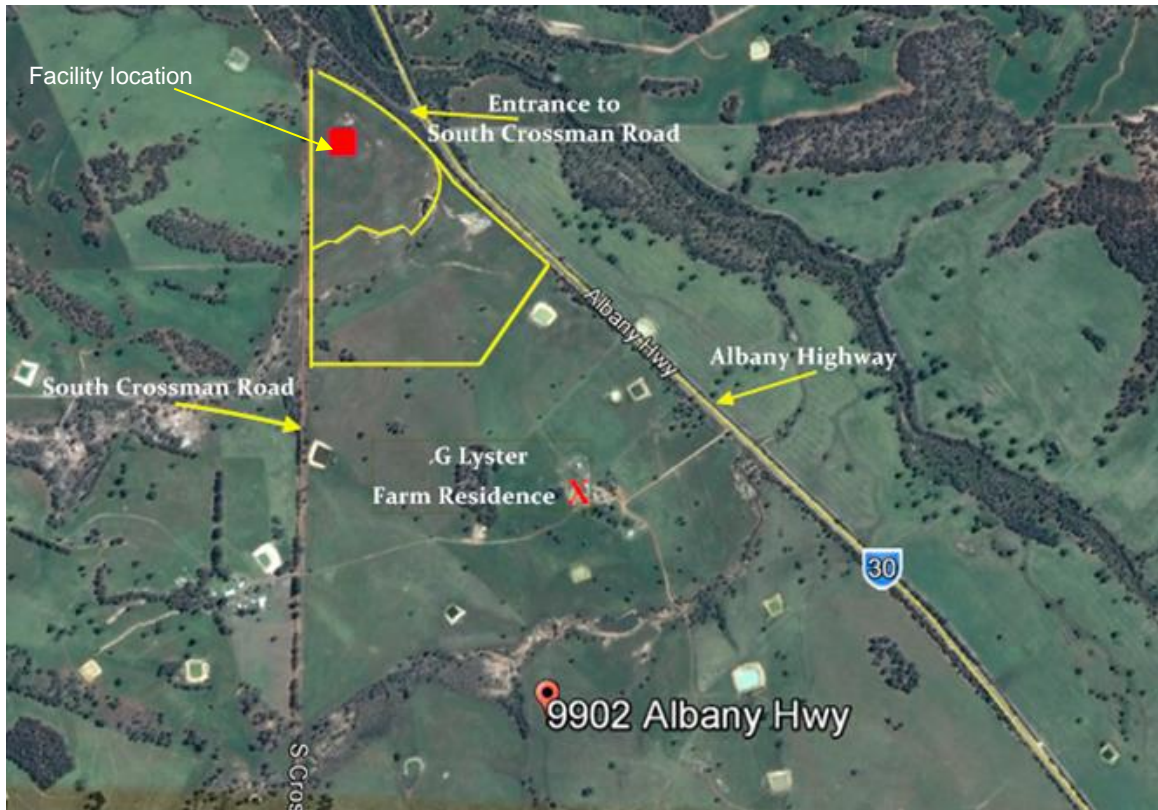
Premises map

The Premises is shown in the maps below. The blue line depicts the Premises boundary.





Premises map – Facility location



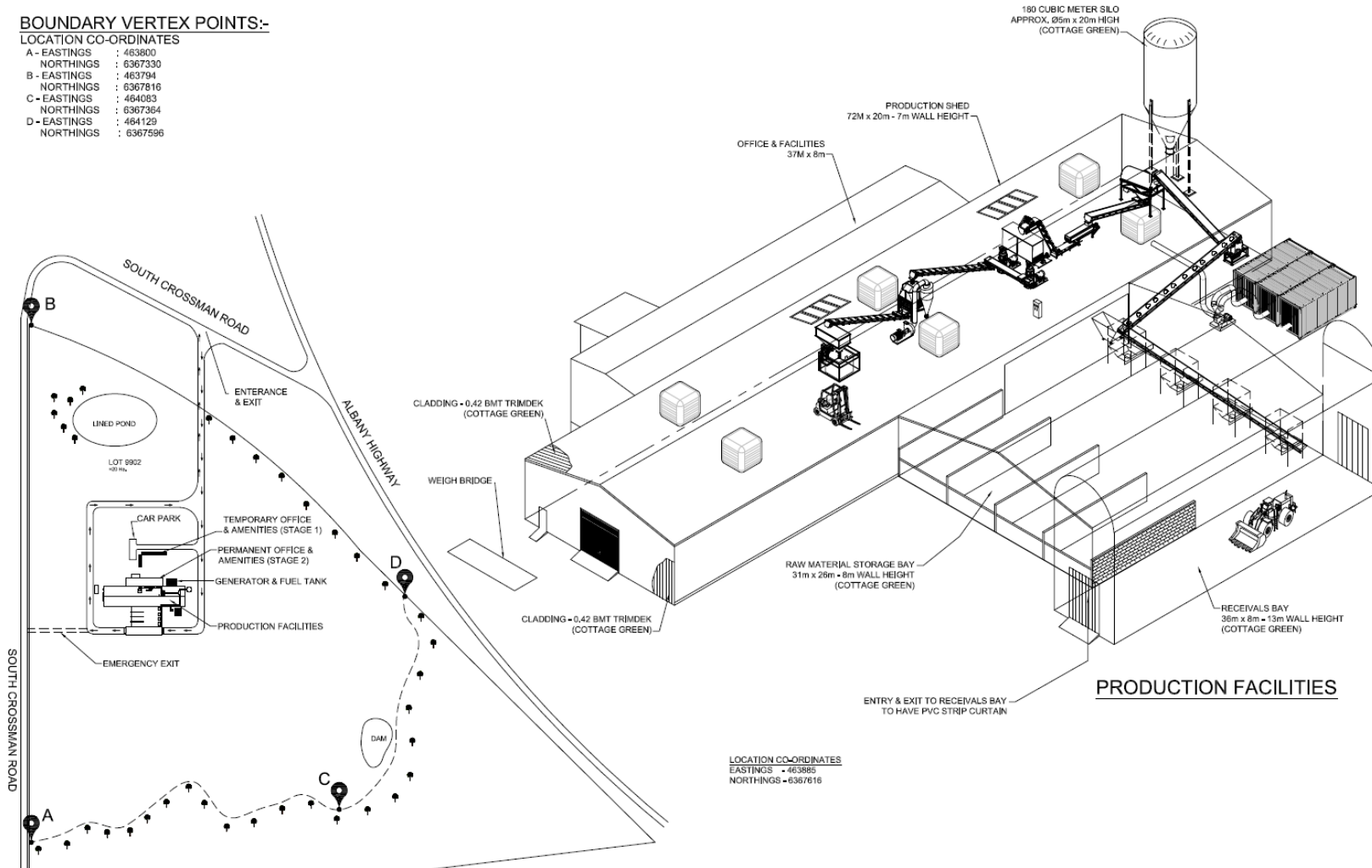


Premises map – Facility layout

BOUNDARY VERTEX POINTS:-

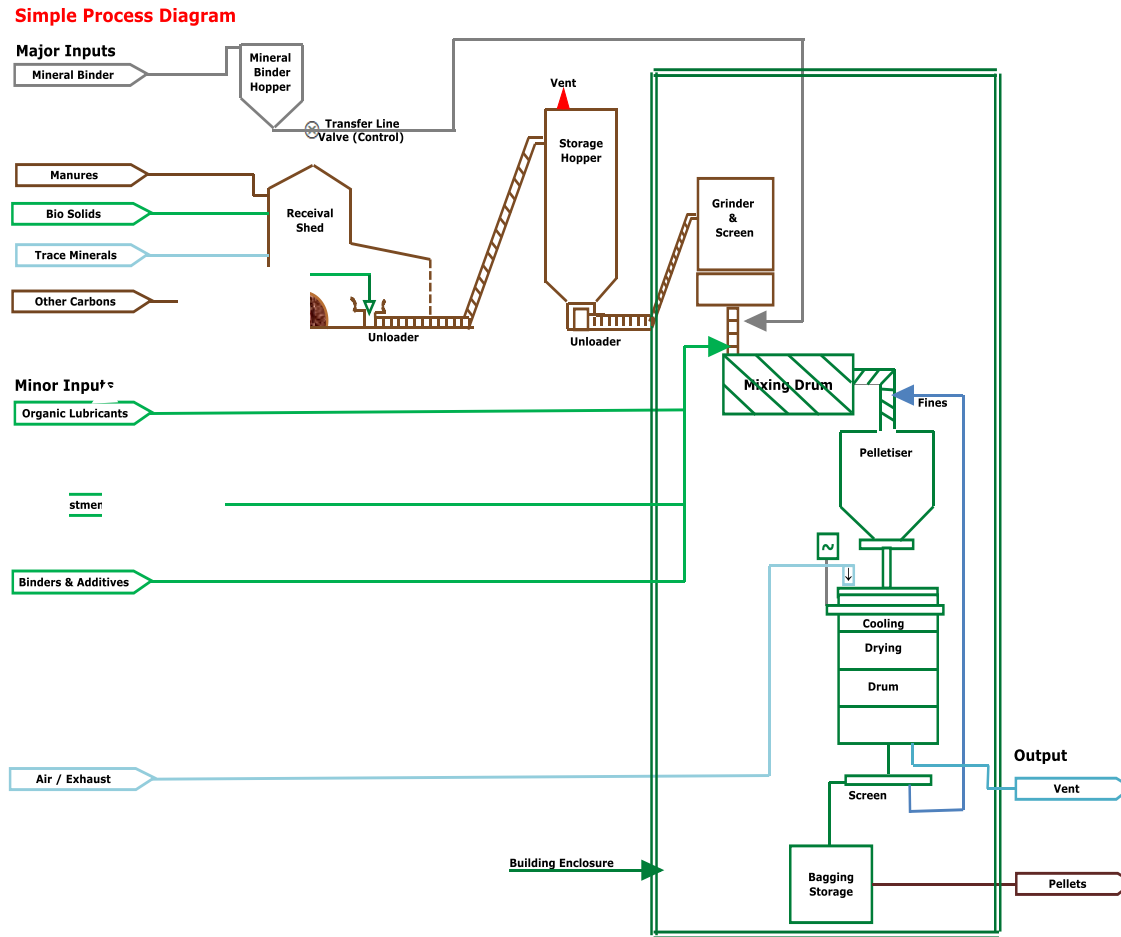
LOCATION CO-ORDINATES

A - EASTINGS	: 463800
NORTHINGS	: 6367330
B - EASTINGS	: 463794
NORTHINGS	: 6367816
C - EASTINGS	: 464083
NORTHINGS	: 6367364
D - EASTINGS	: 464129
NORTHINGS	: 6367596



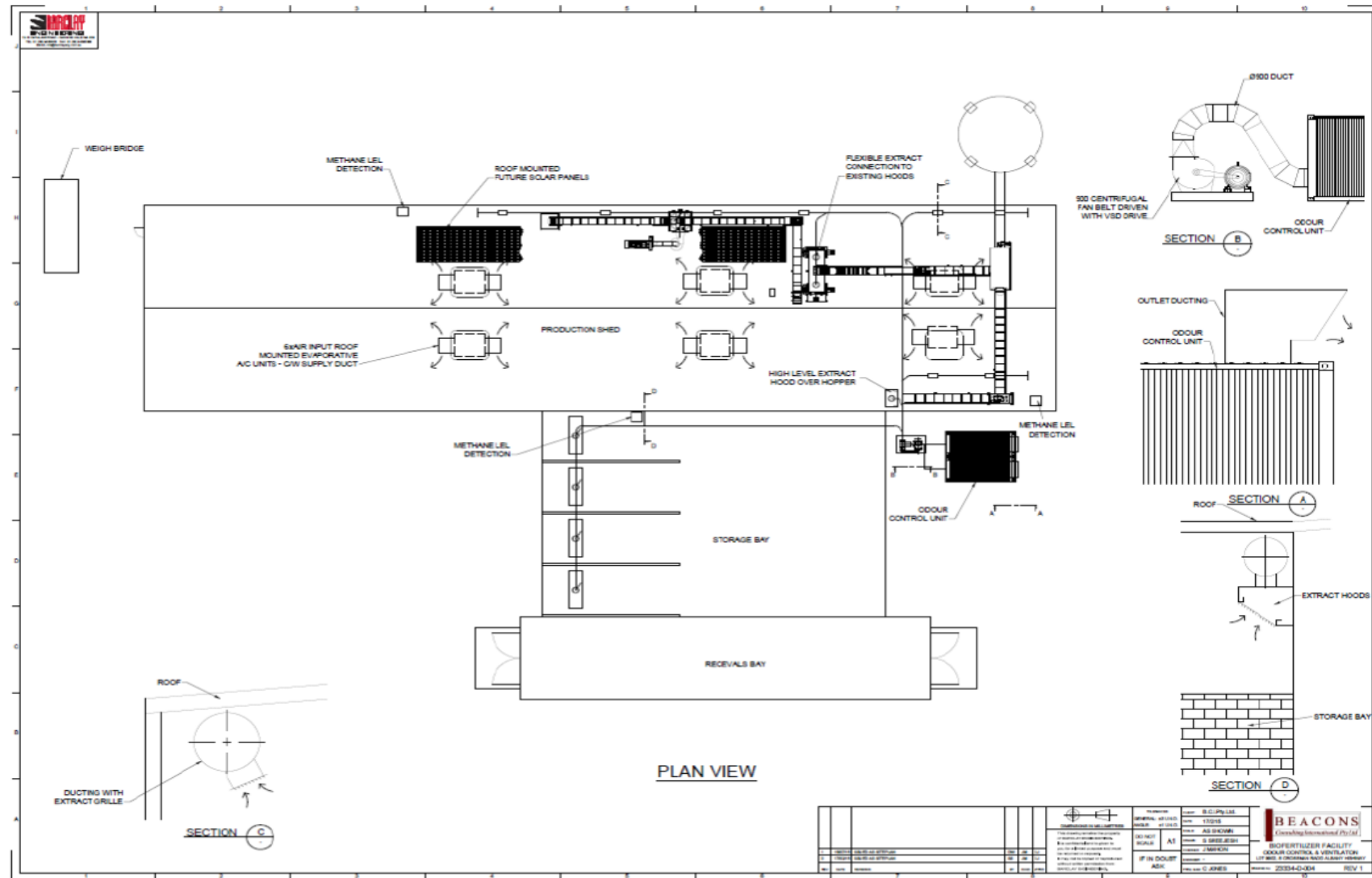


Premises process map





Premises Odour Control System - Drawing 23334-0-004 Rev 1





Decision Document

Environmental Protection Act 1986, Part V

Applicant: **Boutique Biofertilisers Pty Ltd**

Works Approval: **W5945/2016/1**

Registered office: 16 Sherriff Circuit
WATTLE GROVE WA 6107

ACN: 169 847 181

Premises address: Crossman Natural Fertiliser Project
No 9902 Albany Highway
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464083	6367364
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464129	6367596

Issue date: Monday, 13 June 2016

Commencement date: Monday, 20 June 2016

Expiry date: Wednesday, 19 June 2019

Decision

Based on the assessment detailed in this document the Department of Environment Regulation (DER), CEO's Delegated Officer has decided to grant an amended works approval. The Delegated Officer considers that in reaching this decision, he has taken into account all relevant considerations.

Decision Document prepared by: **Caroline Conway-Physick**
Licensing Officer

Decision Document authorised by: **Ruth Dowd**
Delegated Officer



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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 DER's 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
	61A – Solid Waste Facility	28,000 tonnes per annual period
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"/>	
Are the Premises subject to any EPP requirements?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	



3 Executive summary of proposal and assessment

3.1 Background

Boutique Biofertilisers Pty Ltd (BBPL) applied for a Works Approval to operate a new prescribed premises in accordance with the *Environmental Protection Act 1986* (EP Act) for a category 61A – Solid Waste Facility to be known as the Crossman Natural Fertiliser Project (CNFP). The premises is located at 9902 Albany Highway Crossman, approximately 15 kilometers (km) north-east of Boddington and 130 km south-east of Perth.

BBPL proposes to produce solid pelletised fertiliser for retail and wholesale markets in bags, tubs and in bulk following the construction of an enclosed and contained processing facility. The construction phase will include the development of:

- Feedstock receipt and storage facilities constructed on a bunded concrete pad, covered with an elevated roof;
 - Grinding and screening plant;
 - Mixing plant;
 - Pelletising plant;
 - Bagging plant;
 - Odour control system (extracts air from the storage and process areas to an odour absorption 'biofilter' unit);
 - Storage facilities (enclosed);
 - Two 250 kW packaged diesel alternator sets and self-bunded diesel fuel tank (10,000 L) are to be placed on a sealed concrete bunded area with drive over bunds. The diesel storage fuel tank access point will be placed under an elevated covered area;
 - Storage tanks for water supply sourced from rainwater (25 kL), tanker delivered water, dam water or groundwater depending on availability from the owner of the leased premises;
 - One stormwater drainage pond (HDPE lined) for stormwater potentially considered contaminated by process areas;
 - Drainage ponds (lined with in-situ soils) for general stormwater drainage control at the premises; and
 - Internal access roads and parking areas (compacted aggregate covered and compacted pebble gravel, with final 20 m bituminised and drainage culvert in place.)
- } Enclosed within an insulated, colour-bond building to house all production equipment, and on a graded concrete hardstand with three sumps.

The pellets will be manufactured from a variety of feedstock (consisting of chicken litter, fan separated pig manure, sheep manure, dry cattle manure, anhydrous fly ash, canola meal or other oil plant biomass and small quantities of trace elements) that are expected to have a low odour generating ability. Animal manures in bulk form will be received via enclosed trailer or tipping trucks and will be delivered in spadeable form. A maximum single delivery is expected to be no more than 38 tonnes, with a maximum of 4-6 tonnes being processed at any time. Manures are then transferred to storage bays as soon as the delivery is completed, using front end loaders, from which it is then loaded into hoppers for transfer to a conveyor belt system all within the enclosed facility.

From the conveyor belt the manures are transferred to the main hopper for the hammer mill, which is covered (with a closed lid) when not being loaded. The hammer mill is electric powered and fully enclosed with a screen to remove oversized material which are then recirculated for further milling.

The milled product is brought by enclosed conveyor to an enclosed storage bin which has a 20 tonne capacity. Feedstock is then transferred for mixing with additional small amounts of trace elements, chemical reagents and mineral binders within an enclosed electric mixer through a gentle/ slow rotation process, which assists in reducing dust emissions. The combination of all the feedstock has been identified by the applicant as assisting in the reduction of odour emissions by reducing moisture content further due to the nature of the feedstocks that are mixed.



The mixed product is then considered dry, stable and non-odourous and is pelletised for bagging and packaging. The product undergoes a heating (90 degrees Celsius) and cooling (70 degrees Celsius) phase prior to packaging within either sealed bags or tubs. All fumes/ gases are directed through to the (biofilter) odour control system.

The facility will be manned between the hours of 7am to pm, 5 days per week with an alarm system activated when not manned.

3.2 Occupancy and Planning

The Shire of Boddington issued planning approval on the 17 May 2016 for the premises to be used for the production of fertiliser. This planning approval does not have an expiry date.

Boutique Biofertilisers Pty Ltd has provided a Principles for Lease document for the project site and indicated that they will enter into a lease agreement with the owner of the premises (Mr G. Lyster) for a period of 30 years with an option to purchase. The Delegated Officer has determined that a copy of the final signed lease agreement will need to be submitted to the CEO prior to works being undertaken to demonstrate occupancy of the premises.

3.3 Consultation

A number of parties were consulted in relation to the initial works approval application. A summary of the consultation is included in Attachment 1, and the Delegated Officer has taken these comments into consideration in the review.

Planning approval conditions and advice issued by the Shire of Boddington has also been considered by the Delegated Officer in completing this review, with comments noted in Attachment 2.

3.4 Environmental Setting

The premises is located on land zoned as 'rural' in the Shire of Boddington Local Planning Scheme No. 2. The facility is accessed from South Crossman Road, directly off Albany Highway, and is surrounded by a stock fence with lockable boom gates.

The nearest residential properties are located approximately 630 m to the north, being a caravan park and primary residence. Other nearby receptors include the landowners residence 1km south and another residence 1.2km south west. The surrounding land use is predominately cleared farmland and remnants of natural vegetation.

Nearby bores identified on DER's GIS system indicate that groundwater is located at approximately 42.7 m below ground level.

The nearest surface water is the Crossman River which is approximately 200 m from the site boundary, and the premises is within the catchment area of this river system.

3.5 Risk Assessment and Decision

Emissions expected from construction activities are limited to general dust and noise emissions. The revised works approval conditions are included in the decision table below.

This decision report also assesses the operation of the premises and determines licence conditions that may be necessary. A licence application has not yet been received by DER. The potential emissions which may arise from the operation of the premises are dust, noise, odour and nutrient emissions to surface water or groundwater. These risks and updated proposed regulatory controls are considered in the decision table below.

Fitness and competency of the applicant has also been considered.



Works approval W5945/2016/1 was granted on the 13 June 2016. Following submission of an appeal, the Chief Executive Officer (CEO) initiated a review of the decision making on the works approval application. A review and reassessment of the risks associated with emissions and discharges was undertaken and an amended works approval granted on 14 October 2016. The amended instrument included additional controls and infrastructure specifications that related to odour, dust and noise, which the CEO understood to relate largely to the grounds of the appeal.

The Minister for Environment; Heritage appeal determination (No. 019 of 2016) dated 25 November 2016 determined that issues of noise and odour can be appropriately managed and the appellants concerns had been largely addressed. However, with regards to fugitive dust emissions the Minister noted that there may be additional methods of dust control that are effective to manage fugitive dust emissions during construction, such as the use of a binding agent, and in that regard agreed that an additional condition should be included on the works approval. (See 'Dust Emission Risk' of the Decision table and Appendix 1 within the Decision Document).

This works approval amendment has therefore been initiated to give effect to the Ministers decision under section 110 of the EP Act.



4 Decision table

The overarching legislative framework of this assessment is the Environmental Protection Act 1986 (EP Act) and the Environmental Protection Regulations 1987 (EP Regulations). DER Guidance Statements which inform the assessment in accordance with the legislation include:

- *Guidance Statement: Regulatory Principles (July 2015)*
- *Guidance Statement: Setting Conditions (October 2015)*
- *Guidance Statement: Licence and works approvals process (September 2015)*
- *Guidance Statement: Land Use Planning (August 2016)*
- *Guidance Statement: Licence duration (November 2015)*
- *Guidance Statement: Risk Assessment (November 2016)*

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	Justification (including risk description & decision methodology where relevant)	Reference documents
Occupier	N/A	<p>Boutique Biofertilisers Pty Ltd has provided documentation to indicate that they are in the process of entering into a lease agreement with the owner of the premises (Mr G. Lyster) for a period of 30 years with an option to purchase.</p> <p>The Delegated Officer has determined that a copy of the final lease agreement will need to be submitted to the CEO prior to works being undertaken.</p>	Principles for lease of project site - DER Records (A1165750)
Fitness and competency	N/A	<p>A search of DER's Industry Licensing System (ILS) Incident Complaint Management System (ICMS) and records held by DER has been undertaken in relation to previous instruments and/or compliance issues regarding Boutique Biofertilisers Pty Ltd.</p> <p>DER records show that Boutique Biofertilisers Pty Ltd has not previously held any approvals under the <i>Environmental Protection Act 1986</i>, and has not been subject to any compliance action by the Department.</p>	N/A



DECISION TABLE			
Works Approval / Licence section	Condition number	Justification (including risk description & decision methodology where relevant)	Reference documents
		The Delegated Officer has determined that a works approval and licence will not be refused based on fitness and competency grounds.	
General Conditions/ Premises Operation	W – 1.2.1, 1.2.2 L - TBA	<p>Construction Condition 1.2.1 and 1.2.2 within the works approval defines the specifications for the infrastructure that is required to be constructed at the premises. The specifications are generally consistent with those proposed in the application and are in line with the regulatory controls proposed for operational emission risks.</p> <p>Operation Conditions will be placed within the Premises Operation section of the licence in line with regulatory controls determined as part of this risk assessment, and any other matters assessed as part of a subsequent licence application. Specifically, there will be a requirement for the infrastructure specified in condition 1.2.1 and Table 1.2.1 to be maintained to the specification required by condition 1.2.1.</p>	Application supporting documentation – specific sections referenced in relevant section below.
Dust Emission Risk	W1.2.4-1.2.5 W2.1.4	<p>Construction <u>Emission Description</u> <i>Emission:</i> Fugitive dust may arise from construction activities (including clearing of footprints for roads and building pads), exposed cleared areas or from vehicle movements during the construction period. Construction activities are proposed to occur for a short period of 3 months.</p> <p><i>Impact:</i> Dust may cause reduced local air quality and potential nuisance impacts to nearby properties. The nearest residential receptors are located 630 m north east (caravan park and managers residence), 1km south west (landowners residence) and 1.2km south west (residence).</p>	<p>Application supporting documentation – Environmental Risks and Management Page 25-26.</p> <p>Application supporting documentation – Dust</p>



DECISION TABLE			
Works Approval / Licence section	Condition number	Justification (including risk description & decision methodology where relevant)	Reference documents
		<p><i>Controls:</i> The applicant proposes to apply water to the ground or dumped materials where weather conditions are conducive to dust generation (dry warm weather, low soil moisture and strong breezes), and to cease work if dust emissions become excessive until additional water is applied.</p> <p><u>Risk Assessment</u> <i>Consequence:</i> The Delegated Officer has determined that impacts from any dust emissions during construction would be minor with impacts to amenity occurring for short periods to a small population. <i>Likelihood:</i> The Delegated Officer has determined that the likelihood of minor impacts occurring to be unlikely based on the distance to the nearest receptor (630 m away) and the short duration of construction activities. <i>Overall Risk:</i> The Delegated Officer has determined the risk of dust emissions during construction is medium.</p> <p><u>Regulatory Controls</u> The Delegated Officer has determined that a medium risk of dust emissions during construction is acceptable subject to regulatory controls. The Delegated Officer was of the view that a requirement to bitumise all roads was considered to be disproportionate to the risks, however measures to control and minimise dust were warranted, however the Delegated Officer also determined that it would be difficult to enforce the controls that are proposed with the works approval application. The Delegated Officer has therefore determined that condition 1.2.4, requiring all unsealed roads and construction areas to maintained in a damp state at all times whilst construction works are taking place is enforceable and appropriate to mitigate dust emissions from the construction works.</p> <p>As a result of the Ministers Appeal determination (dated 25 November 2016, See Appendix 1 within the Decision Document) additional regulatory controls have been included within this</p>	<p>Management Page 30.</p> <p>Shire of Boddington Approval, DER Records (A1167715).</p> <p>Minister's Appeal Determination 25 November 2016 (Appeal Number 019 of 2016)</p>



DECISION TABLE			
Works Approval / Licence section	Condition number	Justification (including risk description & decision methodology where relevant)	Reference documents
		<p>works approval amendment process as follows:</p> <ul style="list-style-type: none"> • Amended condition 1.2.4: for the option of the application of an appropriate sealant/ binding agent to all unsealed roads to reduce potential dust emissions or to ensure roads are maintained in a damp state; • New condition 1.2.5: for the recording of dust emissions on a daily basis as a result of construction activities, and any action undertaken to mitigate dust emissions at the premises. <p>As a result of the Minister's Appeal Determination, Condition 1.2.4 has been amended to include the use of a dust binding agent to reduce dust emissions during construction where it is not feasible to keep undisturbed areas in a permanent damp state. This gives the Works Approval Holder the flexibility to use either water or a dust binding agent as required, on unsealed areas to prevent dust emissions.</p> <p>Condition 1.2.5 has been added to the works approval to require the Works Approval Holder to conduct daily dust inspections (and maintain records) to identify sources of dust and take necessary actions, which may be applying more water or reapplying dust binding agent or sealant to areas where the crust has been damaged. It will also allow the effectiveness of the dust mitigation measures to be evaluated and amended as required.</p> <p>In addition, the Delegated Officer considers it appropriate for the works approval holder to maintain a complaints system during the construction works as detailed in condition 2.1.4 to ensure action is taken to investigate and address complaints in relation to impacts of the construction works.</p> <p>The Delegated Officer has considered whether all roadways on the premises should be sealed with bitumen to further mitigate dust emissions from construction. The Delegated Officer considers that with the regulatory controls imposed on the works approval as specified above</p>	



DECISION TABLE			
Works Approval / Licence section	Condition number	Justification (including risk description & decision methodology where relevant)	Reference documents
	L-TBA	<p>and the limited duration of construction works (3 months) it is not considered necessary for any further roadways to be sealed with bitumen to further reduce risks associated with fugitive dust at the construction stage. The Delegated Officer considers that such a requirement would not be proportionate to the risk posed.</p> <p>Residual Risk <i>Consequence:</i> The Delegated Officer has determined that impacts from any dust emissions during construction would be minor with impacts to amenity occurring for short periods to a small population.</p> <p><i>Likelihood:</i> The Delegated Officer has determined that the likelihood of minor impacts occurring remains unlikely based on the distance to the nearest receptor (630 m away) and the short duration of construction activities.</p> <p><i>Overall Risk:</i> The Delegated Officer has determined the risk of dust emissions during construction remains medium provided the proposed control measures are implemented.</p> <p>Operation <u>Emission Description</u> <i>Emission:</i> Particulate Matter may be generated from the receipt and handling of wastes and vehicle movements.</p> <p><i>Impact:</i> Particulate Matter can cause nuisance impacts as well as impact respiratory health. The nearest residential receptors are located 630 m north east (caravan park and managers residence), 1km south west (landowners residence) and 1.2km south west (residence).</p> <p><i>Controls:</i> The applicant has proposed the following dust control measures during operation:</p> <ul style="list-style-type: none"> Waste will be received within a receival facility enclosed on three sides with a roof and 	



DECISION TABLE			
Works Approval / Licence section	Condition number	Justification (including risk description & decision methodology where relevant)	Reference documents
		<p>fitted with misting sprays with wetting agent added.</p> <ul style="list-style-type: none"> • Unloaded waste is immediately transferred to an enclosed storage bin and will not be stored within the Receiving Bay. • Storage bays in the Raw Material Storage Area will contain ventilation system to extract dust to a bio-filter. This extraction system will produce negative pressure in the building during dumping • All conveyors used to transfer waste will be covered to prevent spillage and dust emissions. • Fly-ash will be delivered in bulk and fed pneumatically into the storage silo. The silos will be equipped with high efficiency reverse pulse bag filter. • Internal roads will be constructed from compacted limestone or gravel equivalent. • A binding agent such as DustMag or equivalent will be applied to bind the surface of roads and other disturbed areas.. • The final 20 m of the access road will be bitumen sealed to minimise dust emissions from the premises • All vehicular traffic on the premises will be limited to 20 km/hr <p>The planning approval granted by the Shire of Boddington requires internal access and car parking spaces to be designed and constructed to minimise dust, and the applicant must appropriately control for dust in these areas. The approval also requires vehicles transporting waste to be fully enclosed or sealed.</p> <p><u>Risk Assessment</u> <i>Consequence:</i> The Delegated Officer has determined that impacts from any dust emissions would be minor with impacts to amenity occurring for short periods to a small population.</p> <p><i>Likelihood:</i> The Delegated Officer has determined that the likelihood of minor impacts occurring during ongoing operations to be unlikely based on the distance to the nearest receptor (630 m</p>	



DECISION TABLE			
Works Approval / Licence section	Condition number	Justification (including risk description & decision methodology where relevant)	Reference documents
		<p>away).</p> <p><i>Overall Risk:</i> The Delegated Officer has determined the risk of dust emissions is medium.</p> <p><u>Regulatory Controls</u> The Delegated Officer has determined that a medium risk of dust emissions is acceptable, and regulatory controls will be imposed on a subsequent licence that generally replicate the applicants proposed controls, including:</p> <ul style="list-style-type: none"> • Waste must be accepted into the partially enclosed receiveal area; • Vehicles transporting waste must be fully enclosed or sealed; • The applicant must operate and maintain biofilter extraction system and maintain negative pressure during dumping of waste; • Conveyors and hoppers must remain covered during operation; • Requirement to apply a binding agent to unsealed surfaces; • Limiting traffic speeds to 20km/hr; • Ensuring fly ash deliveries are fed directly into the storage silo; • Ensuring the reverse pulse bag filter on the fly ash silo is maintained. <p>An additional regulatory control will be imposed on the licence to specify that in the event that the CEO determines that unreasonable dust emissions are being generated by the premises, additional dust controls must be implemented. Additional controls that may be specified in the licence include sealing of all internal access roads, and requiring additional enclosures around the Receiveal Bay.</p> <p>The Delegated Officer has considered whether all roadways on the premises should be sealed with bitumen and whether the Receiveal Bay should be completely enclosed to further mitigate dust emissions at the commencement of operations. The Delegated Officer considers that to impose such a requirement at this stage would not be proportionate to the risk posed and</p>	



DECISION TABLE			
Works Approval / Licence section	Condition number	Justification (including risk description & decision methodology where relevant)	Reference documents
		<p>would not be in line with DER's risk based regulatory approach. The Delegated Officer considers that the approach of allowing operations to commence as proposed (based on the acceptability of risk assessed by the Delegated Officer) and then if unreasonable dust emissions are determined to be occurring by the CEO, to require additional dust controls to be implemented, represents an effective risk based strategy for managing dust emissions.</p> <p><u>Residual Risk Assessment</u> <i>Consequence:</i> The Delegated Officer has determined that impacts from any dust emissions would be minor with impacts to amenity occurring for short periods to a small population.</p> <p><i>Likelihood:</i> The Delegated Officer has determined that the likelihood of minor impacts occurring during ongoing operations would remain unlikely.</p> <p><i>Overall Risk:</i> The Delegated Officer has determined the risk of dust emissions during operation remains medium provided the proposed control measures are implemented.</p>	
Odour Emission Risk	W- N/A L-TBA	<p>Construction No waste products will be brought onto the premises during construction, therefore no odour emission are expected during construction.</p> <p>Operation <u>Emission Description</u> <i>Emission:</i> Odour may be generated from the storage and use of odourous waste types.</p> <p><i>Impact:</i> Odour can impact the amenity on surrounding properties. The nearest residential receptors are located 630 m north east (caravan park and managers residence), 1km south west (landowners residence) and 1.2km south west (residence). Composting up to 30,000 tonnes per annual period in enclosed windrows do not typically poses an unacceptable risk of</p>	<p>Application supporting documentation – Appendix 6.</p> <p>Application supporting documentation – Air Pollution Control/Odour Emissions Page 26.</p>



DECISION TABLE			
Works Approval / Licence section	Condition number	Justification (including risk description & decision methodology where relevant)	Reference documents
		<p>odour emissions to premises located more than 550 m away from the activity. In this case, less than 30,000 tpa of wastes will be accepted and will be stored and treated within a building with active odour control.</p> <p><i>Controls:</i> The applicant has proposed the following odour controls during operation:</p> <ul style="list-style-type: none"> • Manures delivered to the premises will be in a spadeable form and as a dry material (moisture less than 40% w/w) which has a lower odour potential than wet manure. • Manure will be received within a 3 sided covered Receivals Bay. • Received manure is immediately transferred to an enclosed storage bin via a covered conveyor. • Storage bays in the Raw Materials Storage area will contain a ventilation system to extract odour to an Odour Control System (biofilter). This extraction system will produce negative pressure in the building to draw odourous air into the biofilter. • Processing a small volume of waste (4-6 tonnes) at any one time. • Transfer of waste within the milling and mixing plant will be done via covered conveyors and hoppers. • The plant will only operating during the day, at night all products will be stored within enclosed bins. • The enclosed areas of the premise will be provided with an Odour Control System with a design odour removal efficiency of 85-90%. <p>The applicant has also stated that once the premises is in operation they will conduct an odour field assessment by personnel trained in field olfactometry and if evidence of odour impacts are found the applicant will conduct an odour review and implement additional mitigation measures such as upgrading the design or capacity of the biofilter system.</p> <p>The planning approval granted by the Shire of Boddington permits the production of fertiliser pellets only and does not permit production of liquid fertilisers. The approval also requires that</p>	Shire of Boddington Approval (Attachment 2)



DECISION TABLE			
Works Approval / Licence section	Condition number	Justification (including risk description & decision methodology where relevant)	Reference documents
		<p>the receival area is to be fully enclosed.</p> <p><u>Risk Assessment</u> <i>Consequence:</i> The Delegated Officer has determined that impacts from any odour emissions would be minor with impacts to amenity occurring for short periods to a small population.</p> <p><i>Likelihood:</i> The Delegated Officer has determined that the likelihood of minor impacts occurring to be possible due to the regular processing of odourous wastes</p> <p><i>Overall Risk:</i> The Delegated Officer has determined the risk of odour emissions is medium.</p> <p><u>Regulatory Controls</u> The Delegated Officer has determined that a medium risk of odour emissions is acceptable subject to regulatory controls that generally replicate the applicants proposed controls including:</p> <ul style="list-style-type: none"> • Specifying the waste types permitted to be received at the premises and the processes that can be undertaken at the premises (prohibiting the production of liquid fertiliser). • Waste must be accepted and unloaded into the enclosed receival area. • The applicant must operate and maintain biofilter extraction system and maintain negative pressure during unloading and storage of waste outside of enclosed containers. • Limits on the volume of waste that can be processed. • Conveyors and hoppers must remain covered during operation. • All products must be stored in enclosed bins overnight. • Requiring an odour field assessment to be undertaken by personnel trained in field olfactometry, and if evidence of odour impacts are found the applicant must upgrade the design or capacity of the biofilter system. 	



DECISION TABLE			
Works Approval / Licence section	Condition number	Justification (including risk description & decision methodology where relevant)	Reference documents
		<p>Additional regulatory controls will be included on the licence to require further odour mitigating measures to be implemented on the premises in the event that the CEO determines that unreasonable odour emissions are being generated by the operations on the premises. Additional controls that may be specified in the licence include enclosing the Receival Bay, connecting it to the Odour Control System and upgrading of the Odour Control System.</p> <p>The Delegated Officer has considered whether the Receival Bay should be completely enclosed and connected to the Odour Control System to further mitigate odour emissions from the commencement of operations. The Delegated Officer considers that to impose such a requirement at this stage would not be proportionate to the risk posed and would not be in line with DER's risk based regulatory approach. The Delegated Officer considers that the approach of allowing operations to commence as proposed (based on the acceptable level of risk determined by the Delegated Officer) and then, if unreasonable odour emissions are determined to be occurring by the CEO, to require additional odour controls to be implemented, represents an effective risk based strategy for managing odour emissions.</p> <p><u>Residual Risk Assessment</u> <i>Consequence:</i> The Delegated Officer has determined that impacts from any odour emissions would be minor with impacts to amenity occurring for short periods to a small population.</p> <p><i>Likelihood:</i> The Delegated Officer has determined that the likelihood of minor impacts occurring remains possible due to the regular processing of odourous wastes.</p> <p><i>Overall Risk:</i> The Delegated Officer has determined the risk of odour emissions remains medium provided the proposed control measures are implemented.</p>	



DECISION TABLE			
Works Approval / Licence section	Condition number	Justification (including risk description & decision methodology where relevant)	Reference documents
Noise Emission Risk	WA – 1.2.6	<p>Construction</p> <p><u>Emission Description</u> <i>Emission:</i> Noise may be generated from construction activities and vehicle movement. Construction activities are proposed to occur for a short period of 3 months.</p> <p><i>Impact:</i> Potential impacts of noise emissions include amenity impacts to nearby properties. The nearest residential receptors are located 630 m north east (caravan park and managers residence), 1km south west (landowners residence) and 1.2km south west (residence).</p> <p><i>Controls:</i> The applicant has specified that construction works will only occur between the hours of 0700-1700 Monday to Friday and 0700-1400 on Saturday and all plant and equipment used in construction will be modern and well maintained.</p> <p><u>Risk Assessment</u> <i>Consequence:</i> The Delegated Officer has determined the consequence to be minor, with potentially short term localised impacts.</p> <p><i>Likelihood:</i> The Delegated officer has determined the likelihood of noise emissions occurring to be unlikely with the nearest residential receptor being 630 m away.</p> <p><i>Overall Risk:</i> The Delegated Officer has determined that the risk of noise emissions is medium.</p> <p><u>Regulatory Controls</u> The Delegated Officer has determined that a medium risk of noise emissions during the construction works is acceptable subject to regulatory controls that generally replicate the applicants proposed controls including:</p> <ul style="list-style-type: none"> • A requirement to limit construction activities to the hours of 0700 – 1700 Monday to Friday and 0700 – 1400 Saturdays. 	Application supporting documentation – Environmental Risks and Management Page 25-26.



DECISION TABLE			
Works Approval / Licence section	Condition number	Justification (including risk description & decision methodology where relevant)	Reference documents
	L-TBA	<p>In addition, the Delegated Officer considers it appropriate for the works approval holder to maintain a complaints system during the construction works as detailed in condition 2.1.4 to ensure action is taken to investigate and address complaints in relation to impacts of the construction works.</p> <p>Operation <i>Emission:</i> Noise may be generated from heavy vehicle movement, two diesel generators (250 kW each) and from the production plant (milling, mixing, conveyors and pelletising machinery).</p> <p><i>Impact:</i> Potential impacts of noise emissions include amenity impacts to nearby properties. The nearest residential receptors are located 630 m north east (caravan park and managers residence), 1km south west (landowners residence) and 1.2km south west (residence).</p> <p><i>Controls:</i> The applicant has proposed the following noise control measures during operation:</p> <ul style="list-style-type: none"> All equipment to be located within insulated enclosed buildings and be specified for low noise emission levels. <p>The applicant has also stated that once the premises is in operation they will conduct an acoustic assessment to confirm the modelled noise levels and in the event that noise levels appear likely to exceed the assigned noise criteria in the <i>Environmental Protection (Noise) Regulations 2007</i> will implement additional controls including:</p> <ul style="list-style-type: none"> housing diesel generators within enhanced acoustic buildings, constructing acoustic barriers in close proximity to equipment, and creating natural barriers in proximity to the plant including earthen bunds or fences. <p>The planning approval issued by the Shire of Boddington limits operating hours to Monday to Friday, 07:00 to 17:00 and requires that the receival area be fully enclosed.</p>	<p>Application supporting documentation – Noise Emissions Page 28-29.</p> <p>Shire of Boddington Approval (Attachment 2)</p>



DECISION TABLE			
Works Approval / Licence section	Condition number	Justification (including risk description & decision methodology where relevant)	Reference documents
		<p><u>Risk Assessment</u> <i>Consequence:</i> The Delegated Officer has determined the consequence to be minor with impact to amenity expected for short periods to a small population.</p> <p><i>Likelihood:</i> The Delegated officer has determined the likelihood of noise emissions occurring to be unlikely with the nearest residential receptor being 630 m away.</p> <p><i>Overall Risk:</i> The Delegated Officer has determined that the risk of noise emissions is medium.</p> <p><u>Regulatory Controls</u> The Delegated Officer has determined that a medium risk of noise emissions during operation is acceptable, and regulatory controls will be imposed on a subsequent licence that generally replicate the applicants proposed controls as follows:</p> <ul style="list-style-type: none"> • Requiring all processing equipment to be located within insulated enclosed buildings. • Specifying operational hours to 0700 – 1700 Monday to Friday and 0700 – 1400 Saturdays consistent with the planning approval for the premises. • A requirement to retain the services of a person competent in environmental noise monitoring and assessment whose qualifications and experience qualifies them for a membership of the Australian Acoustical Society or the Australian Association of Acoustical Consultants (Consultant) to undertake a noise verification study during commissioning of the Premises to determine if activities meet the prescribed standard (assigned levels) in the <i>Environmental Protection (Noise) Regulations 1997</i>. • In the event that the noise assessment identifies noise levels that levels exceed the assigned levels, to implement additional noise controls and conduct additional monitoring to confirm improvements have ensured noise levels meet the assigned levels. The additional controls will be specified to include insulating and enclosing the Receiving Bay, enclosing diesel generators within enhanced acoustic buildings and construction of noise attenuating bunds or walls. 	



DECISION TABLE			
Works Approval / Licence section	Condition number	Justification (including risk description & decision methodology where relevant)	Reference documents
		<p>The Delegated Officer has considered whether the Receiving Bay should be completely enclosed from the commencement of operations to further mitigate noise emissions. The Delegated Officer considers that to impose such a requirement at this stage would not be proportionate to the risk posed and would not be in line with DER's risk based regulatory approach. The Delegated Officer considers that the approach of verifying the noise levels during commissioning and requiring additional controls to meet assigned noise levels to be implemented only if required represents an effective risk based strategy for managing noise emissions.</p> <p><u>Residual Risk Assessment</u> <i>Consequence:</i> The Delegated Officer has determined the consequence to be minor with impact to amenity expected for short periods to a small population.</p> <p><i>Likelihood:</i> The Delegated officer has determined the likelihood of noise emissions occurring remains unlikely with the nearest residential receptor being 630 m away.</p> <p><i>Overall Risk:</i> The Delegated Officer has determined that the risk of noise emissions remains medium provided the proposed control measures are implemented.</p>	
Nutrient Emission Risk	W1.2.1 L-TBA	<p>Construction No waste products will be brought onto the premises during construction, therefore a nutrient emissions are expected during construction. Construction requirements related to the future control of nutrient emissions are included in condition 1.2.1.</p> <p>Operation – Emission risk to surface water <i>Emission:</i> Leachates generated from the waste storage and handling areas may contain high levels of nutrients (Phosphorus and Nitrogen) that may be carried in surface water to nearby</p>	Application supporting documentation – Soil, Surface Water and Groundwater, Page 31-33.



DECISION TABLE			
Works Approval / Licence section	Condition number	Justification (including risk description & decision methodology where relevant)	Reference documents
		<p>water ways.</p> <p><i>Impact:</i> High levels of nutrients such as nitrogen and phosphorus may impact the ecology of water systems and result in eutrophication and algal blooms. The nearest surface water is the Crossman River which is approximately 200 m from the site boundary, and the premises is within the catchment area of this river system.</p> <p><i>Controls:</i> The applicant has proposed the following control measures during operation:</p> <ul style="list-style-type: none"> • All collection and storage of wastes will be performed under cover on a bunded hardstand which drains towards three sumps. • Any spillage of wastes will be collected by dry sweeping • Potentially contaminated stormwater from operational areas will be directed to a HDPE lined stormwater pond and re-used within the composting process. • Stormwater run-off from the premises which has not been in contact with the waste storage areas will be directed via gutters/swales to a dam constructed of natural clays to a permeability of 10^{-6} m/s. <p>The planning approval issued by the Shire of Boddington requires that all waste materials and by-products of vehicle wash-down areas must be contained on site.</p> <p><u>Risk Assessment</u> <i>Consequence:</i> The Delegated Officer has determined the consequence of nutrient emissions to be minor with off-site impacts at a local scale.</p> <p><i>Likelihood:</i> The Delegated officer has determined the likelihood of nutrient emission to be unlikely as this would only occur due to a failure of other controls.</p> <p><i>Overall Risk:</i> The Delegated Officer has determined that the risk of nutrient emissions to</p>	<p>Email correspondence – Noel Davies 5 January 2016, DER Records (A1029538)</p> <p>Shire of Boddington Approval (Attachment 2)</p>



DECISION TABLE			
Works Approval / Licence section	Condition number	Justification (including risk description & decision methodology where relevant)	Reference documents
		<p>surface water is medium.</p> <p><u>Regulatory Controls</u> The Delegated Officer has determined that a medium risk of nutrient emissions during operation is acceptable, and regulatory controls will be imposed on a subsequent licence that generally replicate the applicants proposed controls including:</p> <ul style="list-style-type: none"> • All waste collection and storage must occur on a bunded hardstand which drains to three sumps; • Any spillage of waste must be recovered; • Potentially contaminated stormwater from all operational areas will be directed to a HDPE lined stormwater pond; • Stormwater that has not come into contact with waste storage areas must be directed to a dam constructed of in-situ clays. <p>The applicant has not provided information regarding the treatment or nutrient limits on the potentially contaminated stormwater that is proposed to be irrigated. The Delegated Officer will determine specific licence conditions based on controls proposed in a licence application, and may place monitoring requirements on the potentially contaminated stormwater source or limit the use of this water to process only.</p> <p><u>Residual Risk Assessment</u> <i>Consequence:</i> The Delegated Officer has determined the consequence of nutrient emissions to be minor with off-site impacts at a local scale.</p> <p><i>Likelihood:</i> The Delegated officer has determined the likelihood of nutrient emission remains unlikely as this would occur due to a failure of other controls.</p> <p><i>Overall Risk:</i> The Delegated Officer has determined that the risk of nutrient emissions to</p>	Application Supporting Documentation -



DECISION TABLE			
Works Approval / Licence section	Condition number	Justification (including risk description & decision methodology where relevant)	Reference documents
		<p>surface water remains medium provided the proposed control measures are implemented.</p> <p>Operation – Emission risk to groundwater <i>Emission:</i> Leachates generated from the waste storage and handling areas may contain high levels of nutrients (Phosphorus and Nitrogen) that may migrate to groundwater.</p> <p><i>Impact:</i> High levels of nutrients such as nitrogen and phosphorus may impact the ecology of water systems and result in eutrophication and algal blooms as well as decreasing the quality of groundwater extracted for use. A desktop assessment by the Delegated Officer identified groundwater to a depth of 42.7 meters with predominately clay soils over granite. Advice from Department of Water indicates that there is limited use of groundwater in the area. The applicant has stated that visual observations at the premises indicate a perched aquifer may develop following rainfall.</p> <p><i>Controls:</i> The applicant has proposed a number of stormwater containment infrastructures as mentioned above which reduce the risk of nutrients migrating to groundwater. The applicant has also proposed to install groundwater bores if necessary.</p> <p><u>Risk Assessment</u> <i>Consequence:</i> The Delegated Officer has determined the consequence of nutrient emissions to be minor with off-site impacts at a local scale.</p> <p><i>Likelihood:</i> The Delegated officer has determined the likelihood of nutrient emission to be rare as this would occur with a failure of other controls, and due to the distance of groundwater through clayey soils.</p> <p><i>Overall Risk:</i> The Delegated Officer has determined that the risk of nutrient emissions to groundwater to be low.</p>	<p>Soil, Surface Water and Groundwater, Page 31-33.</p> <p>Email correspondence – Noel Davies 5 January 2016, DER Records (A1029538)</p> <p>Shire of Boddington Approval (Attachment 2)</p>



DECISION TABLE			
Works Approval / Licence section	Condition number	Justification (including risk description & decision methodology where relevant)	Reference documents
		<p><u>Regulatory Controls</u> The Delegated Officer has determined that a low risk of nutrient emissions during operation is acceptable, and therefore regulatory controls relating to infrastructure will be sufficient to mitigate risk and will be imposed on any licence granted for the premises. The Delegated Officer has determined that given the nature of the underlying soils and the low risk of nutrient emissions that the installation of groundwater monitoring boreholes is not necessary.</p>	
Monitoring of inputs and outputs	W – N/A L – TBA	<p>Construction The Works Approval does not permit the acceptance of waste and therefore no monitoring conditions are required on the Works Approval.</p> <p>Operation Licence conditions will be imposed requiring the applicant to record the volume of waste accepted and rejected from the premises to enable DER to monitor compliance with waste acceptance and throughput criteria.</p> <p>These conditions are valid and are necessary administration and reporting requirements to ensure compliance.</p>	N/A
Information	W2.1.1 W2.1.2 L – TBA	<p>Construction Conditions 2.1.1 and 2.1.2 of the Works Approval requires the applicant to submit a compliance document to the CEO following construction of the works and specifies the content and authorisation of this document.</p> <p>Operation Licence conditions will be imposed requiring the applicant to maintain legible records, implement a complaints management system, submit a Compliance Report (Annual Audit Compliance Report – AACR) and an Annual report which includes a summary of inputs and outputs and a summary of the complaints.</p>	N/A



DECISION TABLE			
Works Approval / Licence section	Condition number	Justification (including risk description & decision methodology where relevant)	Reference documents
		These conditions are valid and are necessary administration and reporting requirements to ensure compliance.	
Licence Duration	N/A	Any licence granted for the premises will determined in line with DER Guidance Statement <i>Licence Duration</i> (November 2015). Planning approval has been granted by the Shire of Boddington with no expiry date. The applicant has indicated they will have a lease agreement for a period of 30 years. Therefore these agreements would not limit the expiry date.	Principles for lease of project site - DER Records (A1165750)



5 Advertisement and consultation table

The Delegated Officer has considered the comments received during consultation on the application as follows;

Date	Event	Comments received/Notes	How comments were taken into consideration
10 October 2016	Applicant sent a copy of draft amendment	Comments received on 12 October 2016: Minor changes to Table 1.2.1 to ensure clarity and accuracy of requirements. Condition 1.2.6 – request to allow construction to take place Monday to Friday 0700-1700 and preferably 1900 to take advantage of day light hours	Updates to Table 1.2.1 made as requested. Construction hours amended for Monday – Friday 0700-1700 as requested as these hours are consistent with the hours of operation set in the planning approval.
13/12/2016	Applicant sent a copy of the amended Works Approval as a result of 'Appeal 019 of 2016'		See Appendix 1 of the Decision Document.



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				
	Slight	Minor	Moderate	Major	Severe
Almost Certain	Medium	High	High	Extreme	Extreme
Likely	Medium	Medium	High	High	Extreme
Possible	Low	Medium	Medium	High	Extreme
Unlikely	Low	Medium	Medium	Medium	High
Rare	Low	Low	Medium	Medium	High



Attachment 1: Previous Consultation undertaken by DER

The Delegated Officer has considered the comments received during previous consultation on the application as follows;

Date	Event	Comments received/Notes	Consideration
15/02/2016	Works Approval Application advertised in West Australian	Nil	N/A
15/02/2016	Application referred to Shire of Boddington	Council Planning approval with conditions – received 7 June 2016 Revised Planning approval – received 28 June 2016	Consideration of planning approval is detailed in Attachment 2.
04/01/2016	Department of Water (DoW)	Email received on 7 January 2016 advising that the proposal is generally consistent with the Departments Water Quality Protection Note 90: Organic material - storage and recycling (DoW, 2011). The following specific design considerations are recommended: <ul style="list-style-type: none"> • Lined storage dam to be constructed using a liner of no more than 10⁻⁹ metres/second permeability, consistent with Water Quality Protection Note 26: Liners for containing pollutants, using synthetic membranes (DoW, 2013). • The capacity of the wastewater management system and holding ponds should be designed to: <ol style="list-style-type: none"> a) manage a 72 hour duration, 1 in 10 year ARI critical rainfall event without overflow b) have sufficient storage freeboard for a 90th percentile wet year and any wave 	The Delegated officer has taken these requirements into consideration in determining the operational nutrient emission risk. The requirement to construct a HDPE lined stormwater drainage pond is included within the Works Approval Condition 1.2.2, Table 1.2.1, Column 1 (g), and the Delegated Officer has determined that a licence will require potentially contaminated stormwater from process areas to be directed to a HDPE lined stormwater pond.



Date	Event	Comments received/Notes	Consideration
		<p>action without overflowing. (Water Quality Protection Note 90: Organic material - storage and recycling)</p> <p>The Department also wishes to advise the site is located within the Karri Groundwater Area which is unproclaimed. Thus the applicant will not require a licence under the Rights in Water and Irrigation Act 1914 to abstract groundwater, however it should be noted locating a viable resource is potentially difficult in this location.</p>	
08/02/2016	Applicant sent a copy of draft instrument	One comment received back from applicant relating to insulation of the entire process building.	The Delegated Officer has taken the applicant's comments into consideration in determining the operational noise risk of the premises. The Delegated Officer has determined that a licence for the premises will require an acousting assessment during operation, and in the event that noise levels demonstrate an exceedance of the assigned levels to implement additional controls and conduct additional monitoring to confirm improvements. The additional controls would include insulating the feedstock receipt and storage shed, enclosing diesel generators within enhanced acoustic buildings and construction of a noise attenuating bund or wall.
06/06/2016	Applicant sent a draft copy of revised instrument taking into account the Shire of Boddingtons planning approval conditions.	Minor administrative changes requested within Condition 1.2.2, Table 1.2.1, Column 1 (c) and (d) with the inclusion of 'or equivalent' and changes to typographical errors.	Minor text changes have been retained.



Attachment 2: Consideration of planning approval conditions

The Delegated Officer has considered the conditions and advice contained in the approval granted by the Shire of Boddington as follows:

Council Resolution 35/16: Conditions	Consideration
1. The development hereby approved must be carried out in accordance with the plans submitted with the application, addressing all conditions, or otherwise amended by the local government and shown on the approved plans and these shall not be altered and/or modified without the prior knowledge and written consent of the local government.	The Delegated Officer considers that this matter is not relevant or is outside of the scope of DER's decision making process.
2. This approval shall expire and be of no further effect if the development hereby approved has not been substantially commenced within a period of three (3) years from the date hereof, or within any extension of that time (requested in writing prior to the approval expiring) that may be granted by the local government. Where the development approval has lapsed, no further development is to be carried out.	The Delegated Officer has taken these requirements into consideration in determining the expiry date of the Works Approval
3. The hours of operation are limited to between 7.00am to 5.00pm Mondays to Fridays.	The Delegated Officer has taken these requirements into consideration in determining operational noise emission risk. The Delegated Officer has determined that a condition limiting operational hours may be required in a licence for the premises.
4. The approval is for the production of fertiliser pellets only and does not include producing liquid fertiliser.	The application submitted to DER does not propose the production of liquid fertiliser. The Delegated Officer has taken this requirement into consideration in determining the odour risk assessment and proposed licence controls. Limitations on waste receipt and processing may be incorporated on a licence for the premises.
5. The design of the receipt area is modified to a fully enclosed area with details shown on the Building Permit to the satisfaction of the local government.	The Delegated Officer has undertaken a risk based assessment of the proposal and does not consider that the risks to public health and the environment associated with the receipt bay being 3 sided are sufficient to justify the receipt area being enclosed. The Delegated Officer has determined however that regulatory controls will be imposed on the licence to require the receipt bay to be enclosed in the event that the CEO notifies the licence holder of unreasonable emissions occurring from the premises.
6. The vehicular crossover onto South Crossman	The Delegated Officer considers that this



	Road to be located, designed, constructed, sealed (to a distance of a least 30 meters from South Crossman Road) and drained to the satisfaction of the local government prior to occupation	matter is not relevant or is outside of the scope of DER's decision making process.
7.	The South Crossman Road/Albany Highway intersection is to be designed, constructed, sealed and drained to the satisfaction of the local government and Main Roads Western Australia prior to occupation.	The Delegated Officer considers that this matter is not relevant or is outside of the scope of DER's decision making process.
8.	No direct vehicular access is permitted between the site and Albany Highway.	The Delegated Officer considers that this matter is not relevant or is outside of the scope of DER's decision making process.
9.	The emergency access is only to be used in emergency situations.	The Delegated Officer considers that this matter is not relevant or is outside of the scope of DER's decision making process.
10.	The car parking spaces, access ways and vehicle manoeuvring areas are to be designed, constructed to minimise dust and drained prior to occupation. The operator shall appropriately control dust for these areas on an on-going basis to the satisfaction of the local government.	The Delegated officer has taken these requirements into consideration in determining the operational dust emission risk. The requirement for internal access roads and parking to be constructed to minimise dust is included within the Works Approval Condition 1.2.2, Table 1.2.1, Column 1 (h) and condition 1.2.4.
11.	All waste materials and by-products of vehicle wash-down areas must be contained on site and directed to a suitable waste treatment facility to the satisfaction of the local government.	The Delegated officer has taken these requirements into consideration in determining the operational nutrient emission risk. The requirement to construct a HDPE lined stormwater drainage pond is included within the Works Approval Condition 1.2.2, Table 1.2.1, Column 1 (g), and the Delegated Officer has determined that a licence will require potentially contaminated stormwater from process areas to be directed to a HDPE lined stormwater pond.
12.	Toxic and hazardous chemicals are to be stored within contained compounds on chemically resistant surfaces to the satisfaction of the local government.	Storage of hydrocarbons is not a prescribed activity and in accordance with DER's Guidance Statement
13.	Any lighting device shall be positioned and shielded so as not to cause any direct, reflected or incidental light beyond the property boundaries. In particular lighting should be designed in accordance with <i>AS 4282-1997 Control of the Obtrusive Effects of Outdoor Lighting</i> .	No night time work or activity is proposed as part of the application and the Delegated Officer does not consider there to be a light emission source requiring assessment. Light emissions may be considered as part of a licence application.
14.	A Rodent, Vermin and Fly Management Plan is submitted and implemented to the satisfaction of the local government prior to occupation. Following this, the Plan is implemented on an on-going basis to the satisfaction of the local government.	The Delegated Officer may consider Rodent, Vermin and Fly management in assessment of a licence application.



<p>15. Heavy vehicles and trailers used to transport waste products are to be fully enclosed to minimise odour and dry fly ash to be delivered in sealed trucks to the satisfaction of the local government.</p>	<p>The Delegated officer has taken these requirements into consideration in determining the operational dust and odour emission risk. Conditions may be placed on the licence requiring waste to be accepted in enclosed or sealed vehicles.</p>
<p>16. Buildings are filled and drained to the satisfaction of the local government with details provided with the Building Permit.</p>	<p>The Delegated Officer considers that this matter is not relevant or is outside of the scope of DER's decision making process.</p>
<p>17. The submission of a Stormwater Management Plan, prior to the commencement of site works, to the specification and satisfaction of the local government which is to be suitably implemented prior to occupation. Following this, the stormwater management measures are to be appropriately maintained. Amongst matters, the Plan should:</p> <ul style="list-style-type: none">(i) ensure that all stormwater from buildings, hard stand vehicle access ways, manoeuvring and parking areas and other impervious areas are collected, detained and suitably treated on site;(ii) provide a concrete apron surrounding the processing facility;(iii) be designed in accordance with the <i>Stormwater Management Manual for Western Australia</i> and <i>Water Quality Protection Note 52: Stormwater management at industrial sites</i>;(iv) ensure that the sizing is designed and constructed to contain a "1 in 10" year or 72 hour extreme rainfall event along with a freeboard limit of 500 mm; and(v) address leachate and incorporate a collection and storage system which is separate from stormwater. The leachate is not to contaminate the underlying land, groundwater or stormwater system or surface waters. The storage system is to be appropriately lined for its working life and to have sufficient storage capacity.	<p>The Delegated Officer has taken these requirements into consideration in determining Nutrient Emission Risk Controls.</p>
<p>18. Groundwater monitoring bores to be installed and located around the natural fertiliser plant site, both upslope and downslope to the satisfaction of the Department of Environment Regulation and the local government prior to occupation. Monitoring information is to be provided in an agreed format and as required as set out in writing by the Department of Environment Regulation and/or the local government.</p>	<p>The Delegated Officer has taken these requirements into consideration in determining Nutrient Emission Risk to Groundwater. The Delegated Officer has determined that regulatory controls are not necessary for Nutrient Emission Risk to Groundwater, and will therefore not impose requirements to install groundwater monitoring bores. In the event that additional information alters the risk profile the Delegated Officer may require additional</p>



	groundwater controls be imposed.
19. An adequate on-site potable water supply must be provided in accordance with the <i>Australian Drinking Water Guidelines</i> prior to occupation.	The Delegated Officer considers that this matter is not relevant or is outside of the scope of DER's decision making process.
20. The submission of a Bushfire Management Plan and associated implementation to the satisfaction of the local government prior to occupation. Following this, the Plan is implemented on an on-going basis to the satisfaction of the local government.	The Delegated Officer considers that this matter is not relevant or is outside of the scope of DER's decision making process.
21. The submission of a Revegetation and Landscaping Plan to the satisfaction of the local government which is implemented prior to occupation. The Plan should have objectives of managing visual amenity, improving water management and addressing fire management requirements. Generally, the species should be locally indigenous.	The Delegated Officer considers that this matter is not relevant or is outside of the scope of DER's decision making process.
22. The planted and landscaped areas shall be maintained to the satisfaction of the local government at all times.	The Delegated Officer considers that this matter is not relevant or is outside of the scope of DER's decision making process.
23. Other than the temporary office and amenities, the buildings are clad in green colourbond colours or painted green on external walls and the roofs to the satisfaction of the local government.	The Delegated Officer considers that this matter is not relevant or is outside of the scope of DER's decision making process.
24. The site shall be fenced, gated and sign-posted against unauthorised entry, and such features shall thereafter be permanently maintained to the satisfaction of the local government.	The Delegated officer has considered these requirements under Premises Operation conditions. Requirements to construct secure fencing and sign posts restricting unauthorised entry have been included in the Works Approval Condition 1.2.2, Table 1.2.1, Column 1 (a). A licence for the premises may require that the premises is securely locked when unmanned.
Advice:	
(a) This development approval does not include stage 2 of the project including any dwelling.	The Delegated Officer considers that this matter is not relevant or is outside of the scope of DER's decision making process.
(b) The applicant is advised that this development approval is not a Building Permit. A Building Permit must be formally applied for and obtained before the commencement of any site and/or development works.	The Delegated Officer considers that this matter is not relevant or is outside of the scope of DER's decision making process.
(c) The natural fertiliser plant facility is required to gain a Works Approval and an operating licence from the Department of Environment Regulation. The applicant/operator is required to also ensure that other legislative requirements are met.	DER has received a works approval application and will assess an application for a licence under the <i>Environmental Protection Act 1986</i> .



<p>(d) The level of noise emanating from the premises shall not exceed that prescribed in the <i>Environmental Protection Act 1986</i>, and the <i>Environmental Protection (Noise) Regulations 1997</i>.</p>	<p>The overarching legislative framework of DER's assessments is the <i>Environmental Protection Act 1986</i> and subsidiary legislation. Specially, the <i>Environmental Protection (Noise) Regulations 1997</i> is considered in the Delegated Officers determination of noise emission risk controls.</p>
<p>(e) Weeds should be appropriately controlled in accordance with Department of Agriculture and Food guidelines. This in part should address the management of declared weeds under the <i>Biosecurity and Agriculture Management Act 2007</i> and the <i>Biosecurity and Agriculture Management Regulations 2013</i>.</p>	<p>The Delegated Officer considers that this matter is not relevant or is outside of the scope of DER's decision making process.</p>
<p>(f) The granting of the approval shall not, in any way, render the local government liable for damage or injury of any kind to any member of the public and/or the operators such liability shall be the sole responsibility of the operator. The operator shall ensure that they hold sufficient public liability insurance cover for any claim against them.</p>	<p>The Delegated Officer considers that this matter is not relevant or is outside of the scope of DER's decision making process.</p>
<p>(g) The local government encourages the operator to:</p> <ul style="list-style-type: none">(i) seal the internal private vehicular access road;(ii) install low speed signage within the site;(iii) liaise with school bus operators to establish a traffic schedule to avoid potential conflict with school bus operations;(iv) ensure that all technical reports associated with the facility are maintained on the operator's website;(v) establish and maintain a complaints management system; and(vi) report any environmental incident promptly to the Department of Environment Regulation and to the local government.	<p>The Delegated Officer has taken these requirements into consideration in determining dust emission risk. The requirement to install low speed signage and appropriately construct internal roads has been incorporated into the Works Approval condition 1.2.2, Table 1.2.1, Column 1 (a).</p> <p>The Delegated officer has determined a complaints management system and relevant is required - see condition 2.1.4.</p>
<p>(h) In relation to Condition 3, any proposed changes to operating hours will be subject to a new Development Application. Any request to extend operating hours should be based on environmental monitoring reports that are approved by the Department of Environment Regulation. In particular, the environmental monitoring reports should indicate that noise emissions are compliant with the <i>Environmental Protection (Noise) Regulations 1997</i>. The environmental monitoring reports should be complemented with a noise modelling assessment relating to anticipated impacts of longer hours of operation.</p>	<p>The Delegated Officer has determined that operating hours may be imposed on a licence for the premises. In the event that the applicant wishes to amend these hours an amendment application with specified supporting information is required to be submitted.</p>



(i) In relation to Condition 4, this is expected to require the doors on the receival bay to be fitted with curtains or installing quick closing doors.	The Delegated officer has taken this advice into consideration in determining the operational dust and odour emission risk. The Delegated Officer has determined that additional controls specifying curtains or doors are not risk based. In the event that additional information alters the risk profile the Delegated Officer may require additional controls including curtains or doors be imposed.
(j) In relation to Condition 6, any gates should be off-set to ensure heavy vehicles are not blocking the road when entering the site.	The Delegated Officer considers that this matter is not relevant or is outside of the scope of DER's decision making process.
(k) In relation to Condition 7, Main Roads Western Australia require the proponent to prepare a Restricted Access Vehicle (RAV) assessment. The outcomes will determine the required upgrading of the Albany Highway/South Crossman Road intersection and as required the associated design drawings and details.	The Delegated Officer considers that this matter is not relevant or is outside of the scope of DER's decision making process.
(l) In relation to Condition 18, sampling water from these monitoring bores will allow the quality of groundwater downstream of the natural fertiliser plant to be compared to groundwater sampled upstream of the natural fertiliser plant	The Delegated Officer considers that this matter is not relevant or is outside of the scope of DER's decision making process.
(m) Occupation of the premises is not permitted until all conditions are appropriately addressed to the satisfaction of the local government.	The Delegated Officer considers that this matter is not relevant or is outside of the scope of DER's decision making process.
(n) If the applicant is aggrieved by this determination there is a right of review by the State Administrative Tribunal in accordance with the <i>Planning and Development Act 2005</i> Part 14. An application must be made within 28 days of the determination.	The Delegated Officer considers that this matter is not relevant or is outside of the scope of DER's decision making process.
(o) Encourage the Department of Environment Regulation to add to the works approval /operating licence. Testing of rain water within 2.5kms of site with the cost being met by Natural Fertilisers operators.	The Delegated Officer considers that this request is not consistent with DER's risk based assessment process. The Shire may consider to impose this request as part of their own approval process.
(p) Community consultation be undertaken once per quarter during development phase, through presentation and question and answer sessions on the progress of the project to the community of Boddington.	The Delegated Officer considers that this matter is not relevant or is outside of the scope of DER's decision making process.



Appendix 1

MINISTERS APPEAL DETERMINATION: Appeal against conditions of Works Approval W5945/2016/1 Boutique Biofertilisers Pty Ltd (Crossmand Natural Fertiliser Project) Part Lot 9 on Plan 4850 Crossman.

Date of Decision: 25 November 2016

Appeal No. 019 of 2016

Pursuant to section 106(1)(b) of the *Environmental Protection Act 1986* (the Act), the Minister obtained a report from the Department of Environment Regulation (DER) on the matters raised in the appeal. The Minister was advised that the Office of the Appeals Convenor had discussed the appeal with the appellant, and had also discussed the issues raised in the appeal with the works approval holder.

After considering the appeal, the Appeals Convenor reported to the Minister under section 109 of the Act. This report sets out the background and other matters relevant to the appeal.

In summary, the Minister understood the appeal raised a number of concerns in respect to the conditions of the works approval, primarily relating to odour, dust and noise.

The Minister was aware that on receiving the appeal, DER reassessed the risks of the premises and reviewed the works approval, reissuing an amended works approval on 14



October 2016. The amended instrument included additional controls and infrastructure specifications that relate to odour, dust and noise, which the Minister understood relate largely to the grounds of appeal.

In relation to the appellant's concerns about potential impacts from odour, the Minister was aware that DER has amended the works approval to specify that the storage bays will be fully enclosed. The Minister also understood that the planning approval issued by the Shire of Boddington requires that the receival bays be fully enclosed. Along with the odour control system and other mitigation measures, the Minister was of the view that odour can be appropriately managed and that the appellant's concerns have been largely addressed.

In relation to dust, the Minister understood that DER was of the view that a requirement to bitumise all roads was considered to be disproportionate to the risks, however, DER acknowledged that measures to control and minimise dust were warranted. The Minister noted that DER has applied a condition that requires the works approval holder to keep all roads damp during the construction period, as well as a requirement to maintain a complaints management system. DER will consider any complaints in its assessment of a future licence for the premises and will impose additional regulatory controls if required.

The Minister noted that there may be additional methods of dust control that are effective or suitable to manage fugitive dust emissions during construction, such as the use of a binding agent, and in that regard the Minister agreed with the Appeals Convenor that an additional condition should be included on the works approval to this effect.

In regard to concerns about noise, the Minister understood that the premises is required to comply with the Noise Regulations, and that an assessment commissioned by the works approval holder indicates that the premises can comply with the assigned noise levels. DER has applied a new condition restricting the hours of construction with the intent of reducing noise impacts, and that in accordance with the Shire's planning approval, the hours of operation will also be restricted. The Minister was of the view that these measures, along with any further regulatory controls imposed at the licence stage, will ensure that the noise impacts from the premises are appropriately managed.

After considering all of the information presented with respect to this appeal, noting that the facility will be fully enclosed and that additional conditions have been imposed to address the appellant's concerns, the Minister was of the view that the conditions applied to the amended works approval are appropriate. However, the Minister required that DER include another condition in relation to dust control to the works approval and otherwise dismissed the appeal.

The precise wording of any amended condition will be a matter for DER to consider in giving effect to the Minister's decision under section 110 of the Act.

Note: this decision is published pursuant to the terms of section 110 of the *Environmental Protection Act 1986* and regulation 8 of the *Environmental Protection Regulations 1987*.