



Licence

Environmental Protection Act 1986, Part V

Licensee: Jamala Enterprises Pty Ltd

Licence: L8923/2015/1

Licensee Address: 2/ 100 Havelock Street
WEST PERTH WA 6005

ACN: 078 002 730

Premises address: West Nodes Farm
Via Stockyard Road
YATHROO WA 6507
Being Lot 3 on Plan 60276 as depicted in Schedule 1.

Issue date: Thursday, 21 January 2016

Commencement date: Monday, 25 January 2016

Expiry date: Sunday, 20 January 2036

Prescribed premises category

Schedule 1 of the *Environmental Protection Regulations 1987*

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	65,000 tonnes per annual period

Conditions

Subject to this Licence and the conditions set out in the attached pages.

Date signed: 21 January 2016
.....

Steve Checker
MANAGER LICENSING (WASTE INDUSTRIES)
Officer delegated under section 20
Of the *Environmental Protection Act 1986*



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Introduction

This Introduction is not part of the Licence conditions.

DER's industry licensing role

The Department of Environment Regulation (DER) is a government department for the state of Western Australia in the portfolio of the Minister for Environment. DER's purpose is to advise on and implement strategies for a healthy environment for the benefit of all current and future Western Australians.

DER has responsibilities under Part V of the *Environmental Protection Act 1986* (the Act) for the licensing of prescribed premises. Through this process DER regulates to prevent, control and abate pollution and environmental harm to conserve and protect the environment. DER also monitors and audits compliance with works approvals and licence conditions, takes enforcement action as appropriate and develops and implements licensing and industry regulation policy.

Licence requirements

This Licence is issued under Part V of the Act. Conditions contained within the Licence relate to the prevention, reduction or control of emissions and discharges to the environment and to the monitoring and reporting of them.

Where other statutory instruments impose obligations on the Premises/Licensee the intention is not to replicate them in the licence conditions. You should therefore ensure that you are aware of all your statutory obligations under the Act and any other statutory instrument. Legislation can be accessed through the State Law Publisher website using the following link:

<http://www.slp.wa.gov.au/legislation/statutes.nsf/default.html>

For your Premises relevant statutory instruments include but are not limited to obligations under the:

- *Environmental Protection (Unauthorised Discharges) Regulations 2004* – these Regulations make it an offence to discharge certain materials such as contaminated stormwater into the environment other than in the circumstances set out in the Regulations.
- *Environmental Protection (Controlled Waste) Regulations 2004* - these Regulations place obligations on you if you produce, accept, transport or dispose of controlled waste.
- *Environmental Protection (Noise) Regulations 1997* – these Regulations require noise emissions from the Premises to comply with the assigned noise levels set out in the Regulations.

You must comply with your licence. Non-compliance with your licence is an offence and strict penalties exist for those who do not comply.



Licence holders are also reminded of the requirements of section 53 of the Act which places restrictions on making certain changes to prescribed premises unless the changes are in accordance with a works approval, licence, closure notice or environmental protection notice.

Other Guidelines which you should be aware of include:

- *Western Australian Guidelines for Biosolids Management, Department of Environment and Conservation, December 2012 (as amended from time to time).*

Licence fees

If you have a licence that is issued for more than one year, you are required to pay an annual licence fee prior to the anniversary date of issue of your licence. Non-payment of annual licence fees will result in your licence ceasing to have effect meaning that it will no longer be valid and you will need to apply for a new licence for your Premises.

Ministerial conditions

If your Premises has been assessed under Part IV of the Act you may have had conditions imposed by the Minister for Environment. You are required to comply with any conditions imposed by the Minister.

Premises description and Licence summary

West Nodes Farm is owned by Jamala Enterprises, which is a company for I & J Minty & Sons. It is located off Stockyard Road, approximately 160 km north of Perth within a rurally zoned area in the Shire of Dandaragan. The property consists of 23 paddocks covering 1335 ha, with approximately 925 ha of arable land.

West Nodes Farm accepts Lime Amended Biosolids (LAB) and Biosolids Cake sourced from Water Corporation metropolitan wastewater treatment plants (Beenyup, Woodman Point and Subiaco). This material is stored, spread and incorporated into the soils onsite in accordance with the *Western Australian Guidelines for Biosolids Management, 2012*. The biosolids are applied to improve structure of soils and provide nutrients for crop growth. Applications to land of biosolids is expected to be undertaken once per year on a rotationary basis of approximately every three years, dependent on nutrient loading.

The operation has a nominated rate of throughput for the premises of up to 65,000 tonnes (wet weight) of biosolids per year. This has been determined using average application rates (5 0t/ha) and the arable area (1,300 ha) on the property. Application rates are dependent on the Review of Environmental Factors and approval by the Department of Health prior to application which was completed in November 2015. The 'Review of Environmental Factors' (REF) report, completed by Aroona Alliance, has been undertaken with sampling across three paddocks (WN2, WN8 and WN15). Further REF documents will be submitted as required prior to the application of biosolids on other paddocks.

Soils on the farm are principally colluvium derived sands dominated by sandy gravels, sandy duplexes, and yellow and pale deep sands. Topography is undulating with the average slope across arable areas where biosolids are to be applied is 5%.

The 'Caren Caren' Brook runs north to south through the centre of the property which is surrounded by riparian vegetation; it flows approximately 10 months of the year. There is also an intermittent creek running from the east that joins to the Brook. The Brook will have a 100m buffer from biosolids application areas, and the intermittent creek will have a 50m buffer, as per the Biosolids Guidelines. A desktop assessment of WIN Groundwater monitoring bore (Site Id no. 20032528), approximately 133m north east of the premises, identified depth to groundwater at approximately 59.74m with TDS approximately 601 mg/L (fresh).

There are multiple dams on paddocks throughout the property, and these will have 100m buffers from biosolids applications on the uphill sides. The nearest lakes are 3.0 km to the north and 4.1km to the west of the property boundary, and will therefore be unaffected by biosolids applications.



The nearest dwellings identified in the application are located approximately 440m and 900m to the east while a residence is located on the farm southern boundary.

The main environmental risks associated with the discharge (application) of biosolids to land include odour when applied under unfavourable weather conditions and potential influence on surface water bodies. There are no point source emissions proposed to air, ground or surface water.

This Licence is a new instrument based on a proposed activity that triggers category 61A of the *Environmental Protection Regulations 1987*.

The licence issued for the Premises is:

Instrument log		
Instrument	Issued	Description
L8923/2015/1	21/01/2016	New Licence

Severance

It is the intent of these Licence conditions that they shall operate so that, if a condition or a part of a condition is beyond the power of this Licence to impose, or is otherwise *ultra vires* or invalid, that condition or part of a condition shall be severed and the remainder of these conditions shall nevertheless be valid to the extent that they are within the power of this Licence to impose and are not otherwise *ultra vires* or invalid.

END OF INTRODUCTION



Licence conditions

1 General

1.1 Interpretation

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

1.1.2 For the purposes of this Licence, unless the contrary intention appears:

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

'annual period' means the inclusive period from 1 July until 30 June in the following year;

'biosolids' means the stabilised organic solids derived from sewage treatment processes that are in a state that they can be managed to beneficially utilise the nutrient, soil conditioning, energy or other valuable properties of those solids;

'bundled area' means a wall structure designed to retain or exclude run-off. Bunds may, in most cases, be constructed from earth from the application site;

'CEO' for the purpose of correspondence means;
Chief Executive Officer
Department Administering the *Environmental Protection Act 1986*
Locked Bag 33
CLOISTERS SQUARE WA 6850
Email: info@der.wa.gov.au;

'CLBAR' means the contaminant limited biosolids application rate, which is the rate which ensures that the concentration of any limiting contaminants does not exceed the maximum allowable soil contaminant concentration, as calculated in the Western Australian guidelines for biosolids management;

'dry tonnes' means the mass of biosolids, excluding any moisture that is present within the biosolids, as determined by moisture content analysis, for example, 100 wet tonnes at 75 per cent moisture is equivalent to 25 dry tonnes.

'Fugitive emissions' means all emissions not arising from point sources identified in Section 2;

'Inclement weather' means weather which is stormy, rainy, or snowy;

'Licence' means this Licence numbered L8923/2015/1 and issued under the *Environmental Protection Act 1986*;

'Licensee' means the person or organisation named as Licensee on page 1 of the Licence;

'Limiting Factor' means the lower rate of the nitrogen limited biosolids application rate (NLBAR), the contaminant limited biosolids application rate (CLBAR) and the phosphorus limited biosolids application rate (PLBAR) if required, as defined in the Western Australian guidelines for biosolids management. The Limiting Factor in relation to conditions of this Licence are stated in the respective Review of Environmental Factors report.

'NATA' means the National Association of Testing Authorities, Australia;

'NATA accredited' means in relation to the analysis of a sample that the laboratory is NATA accredited for the specified analysis at the time of the analysis;



'NLBAR' means the nitrogen limited biosolids application rate, which is based on the nitrogen demand of the crop, as calculated in the Western Australian guidelines for biosolids management;

'PLBAR' means the phosphorus limited biosolids application rate, which is the rate at which phosphorus can be applied to soils without excess leaching into the environment, which is only calculated for soils with limited ability to immobilise phosphorus, as calculated in the Western Australian guidelines for biosolids management;

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

'Review of Environmental Factors' means a third party independent auditor's review and certification of a proposed biosolids application;

'Schedule 1' means Schedule 1 of this Licence unless otherwise stated;

'Schedule 2' means Schedule 2 of this Licence unless otherwise stated;

'Western Australian guidelines for biosolids management' means the most recent version of this guidance document as published by the Department of Environment Regulation; and

'usual working day' means 0800 – 1700 hours, Monday to Friday excluding public holidays in Western Australia.

1.1.3 Any reference to an Australian or other standard in the Licence means the relevant parts of the current version of that standard.

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

1.2 General conditions

1.2.1 The Licensee shall ensure that any earthen bunds and diversion channels are maintained to prevent stormwater run-off becoming contaminated by any waste on the Premises.¹

Note1: The *Environmental Protection (Unauthorised Discharges) Regulations 2004* make it an offence to discharge certain materials into the environment.

1.3 Premises operation

1.3.1 The Licensee shall record and investigate the exceedences of any descriptive or numerical limit in this section.

1.3.2 The Licensee shall only allow waste to be accepted on to the Premises if:

- (a) it is of a type listed in Table 1.3.1;
- (b) the quantity accepted is below any limit listed in Table 1.3.1; and
- (c) it meets any specification listed in Table 1.3.1.

Table 1.3.1: Waste acceptance

Waste	Waste Code	Quantity Limit	Specification ¹
Putrescible and Organic wastes			
Dewatered biosolids cake and Lime amended biosolids (LAB)	N/A	65,000 tonnes per annual period	- From Water Corporation facilities only; - Only for use within the Premises.

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



1.3.3 The Licensee shall ensure that biosolids wastes brought onto the Premises are only subjected to the processes set out in Table 1.3.2 and in accordance with any process limits described in that Table.

Table 1.3.2: Waste processing		
Waste type	Process	Process requirements ¹
Dewatered biosolids cake and Lime amended biosolids (LAB)	Storage	<ul style="list-style-type: none"> (i) stored within a paddock on a slope gradient of less than or equal to 3%; (ii) biosolids to be stored within a bunded paddock area on the premises, if storage period exceeds 30 days; (iii) stockpiled for not more than 30 days between June to September or not more than 7 days between October to May; and (iv) storage sites are 100m away from all drinking water supply bores or surface water bodies.
	Land application	<ul style="list-style-type: none"> (i) biosolids are not to be applied within 1km of any occupied residences offsite of the premises, unless written consent has been obtained prior to application; (ii) biosolids are not to be applied within 100m of the 'Caren Caren' Brook or 50m from any intermittent flow water course; (iii) ensure that the quantity of biosolids per hectare directly applied to land does not exceed the Limiting Factor for a particular paddock, crop type and biosolids composition (iv) ensure application is carried out as per the biosolids application assessment details within the 'Review of Environmental Factors report'; (v) only biosolids cake or LAB will be applied to each parcel of land; (vi) biosolids graded as "P3 C2" or higher quality to be received and applied to the property; (vii) biosolids to be incorporated into the soil profile within 10 days of application to the land area unless soil conditions are considered unfavourable; and (viii) biosolids not to be applied pending or during inclement weather.

Note 1: In accordance with the *Western Australian guidelines for biosolids management, December 2012*.

1.3.4 The Licensee shall maintain a logbook that records the quality and quantity of biosolids supplied, the application rate, the date of supply, the location of properties supplied, depth of incorporation and the area where biosolids have been applied (i.e. paddock name). Logbooks are to be made available to an inspector upon request.

1.3.5 The Licensee shall ensure that:

- (a) a Review of Environmental Factors is undertaken for any application of biosolids on the Premises outside of the scope of the document titled '*Review of Environmental Factors West Nodes Farm, Water Corporation/ Arona Alliance, PM-#13441300-v1*', to verify that limiting factors and acceptable application rates have been identified and managed for the proposed application; and
- (b) A report for the Review of Environmental Factors undertaken in accordance with 1.3.5(a) is to be submitted to Department of Health and Department of Environment Regulation prior to the application of biosolids that is the subject of the report.



2 Emissions

2.1 General

2.1.1 The Licensee shall record and investigate the exceedences of any descriptive or numerical limit in this section.

2.2 Emissions to land

2.2.1 The Licensee shall ensure that where waste is emitted to land from the emission points in Table 2.2.1 and identified on the map of emission points in Schedule 1 it is done so in accordance with the conditions of this licence.

Table 2.2.1: Emissions to land		
Emission point reference and location on Map of emission points	Description	Source including abatement
Refer to Schedule 1: Map of emission and monitoring points – paddock boundaries.	Dewatered biosolids cake and 'Lime amended biosolids'.	Water Corporation wastewater treatment plant by-product applied in accordance with the <i>West Australian guidelines for biosolids management, December 2012</i> and 'Review of Environmental Factors Report'.



3 Monitoring

3.1 General monitoring

- 3.1.1 The licensee shall ensure that all laboratory samples are submitted to and tested by a laboratory with current NATA accreditation for the parameters being measured unless indicated otherwise in the relevant table.
- 3.1.2 The Licensee shall ensure that:
- (a) quarterly monitoring is undertaken at least 45 days apart; and
 - (b) annual monitoring is undertaken at least 9 months apart.

3.2 Monitoring of inputs and outputs

- 3.2.1 The Licensee(s) shall undertake the monitoring in Table 3.2.1 according to the specifications in that table.

Table 3.2.1: Monitoring of inputs and outputs				
Input/output	Parameter	Units	Averaging period	Frequency
Waste Inputs	Dewatered biosolids cake and Lime amended biosolids (LAB)	Tonnes	Recorded at the time of delivery	Each load arriving at Premises.
		Contaminant/ Pathogen grade classification	Monthly or 12 times per year	Monthly or 12 times per year.
Outputs		Tonnes	Recorded at the time of exit	Each load leaving or rejected from the Premises.

3.3 Process monitoring

- 3.3.1 The Licensee(s) shall undertake monitoring of biosolids according to the specifications in Table 3.3.1.

Table 3.3.1: Process monitoring					
Monitoring point reference	Parameter/ output	Parameter	Units	Frequency	Method
Refer to Schedule 1: Map of emission and monitoring points – paddocks	Inspection of Biosolids stockpiles/ storage areas within paddocks	Dewatered biosolids cake and Lime amended biosolids	Visual	Weekly or daily during heavy rainfall events.	As per <i>Western Australian Guidelines for biosolids management, December 2012</i> , and
Paddock applications: WN1-WN23	Dry tonnes	Biosolids cake	-	Annually	As per the document 'Review of Environmental Factors West Nodes Farm, Water Corporation/ Aroona Alliance, PM-#13441300-v1' or other relevant Review of Environmental Factors report as required by condition 1.3.5.
	Wet tonnes				
	Dry tonnes	Lime amended biosolids (LAB)			
	Wet tonnes				



4 Information

4.1 Records

- 4.1.1 All information and records required by the Licence shall:
- (a) be legible;
 - (b) if amended, be amended in such a way that the original and subsequent amendments remain legible or are capable of retrieval;
 - (c) except for records listed in 4.1.1(d) be retained for at least 6 years from the date the records were made or until the expiry of the Licence or any subsequent licence; and
 - (d) for those following records, be retained until the expiry of the Licence and any subsequent licence:
 - (i) off-site environmental effects; or
 - (ii) matters which affect the condition of the land or waters.
- 4.1.2 The Licensee shall ensure that:
- (a) any person left in charge of the Premises is aware of the conditions of the Licence and has access at all times to the Licence or copies thereof; and
 - (b) any person who performs tasks on the Premises is informed of all of the conditions of the Licence that relate to the tasks which that person is performing.
- 4.1.3 The Licensee shall complete an Annual Audit Compliance Report indicating the extent to which the Licensee has complied with the conditions of the Licence, and any previous licence issued under Part V of the Act for the Premises for the previous annual period.
- 4.1.4 The Licensee 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 activities undertaken 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 Licensee to address the complaint, including the outcome of any investigation(s) and action(s) to verify any impacts.
 - (b) complete an annual analysis and review of complaints recorded under 4.1.4(a) to identify any common factors and root cause of complaints and proposals to address these.



4.2 Reporting

4.2.1 The Licensee shall submit to the CEO an Annual Environmental Report within 31 calendar days after the end of the annual period. The report shall contain the information listed in Table 4.2.1 in the format or form specified in that table.

Table 4.2.1: Annual Environmental Report		
Condition or table (if relevant)	Parameter	Format or form¹
-	Summary of any failure or malfunction of any pollution control equipment or any incidents that have occurred during the annual period and any action taken	None specified
-	Monitoring data or other collected data or records required by any condition of this licence.	None specified
Table 1.3.2	Waste processing	None specified
Table 3.2.1	Summary of inputs and outputs	None specified
Table 3.3.1	Summary of process monitoring	None specified
4.1.3	Compliance	Annual Audit Compliance Report (AACR)
4.1.4	Complaints summary	None specified

Note 1: Forms are in Schedule 2

4.3 Notification

4.3.1 The Licensee shall ensure that the parameters listed in Table 4.3.1 are notified to the CEO in accordance with the notification requirements of the table.

Table 4.3.1: Notification requirements			
Condition or table (if relevant)	Parameter	Notification requirement¹	Format or form²
-	Breach of any limit specified in the Licence	Part A: As soon as practicable, but no later than 5pm of the next usual working day. Part B: As soon as practicable	N1
-	Any failure or malfunction of any pollution control equipment or any incident which has caused, is causing or may cause pollution		

Note 1: Notification requirements in the licence shall not negate the requirement to comply with s72 of the Act

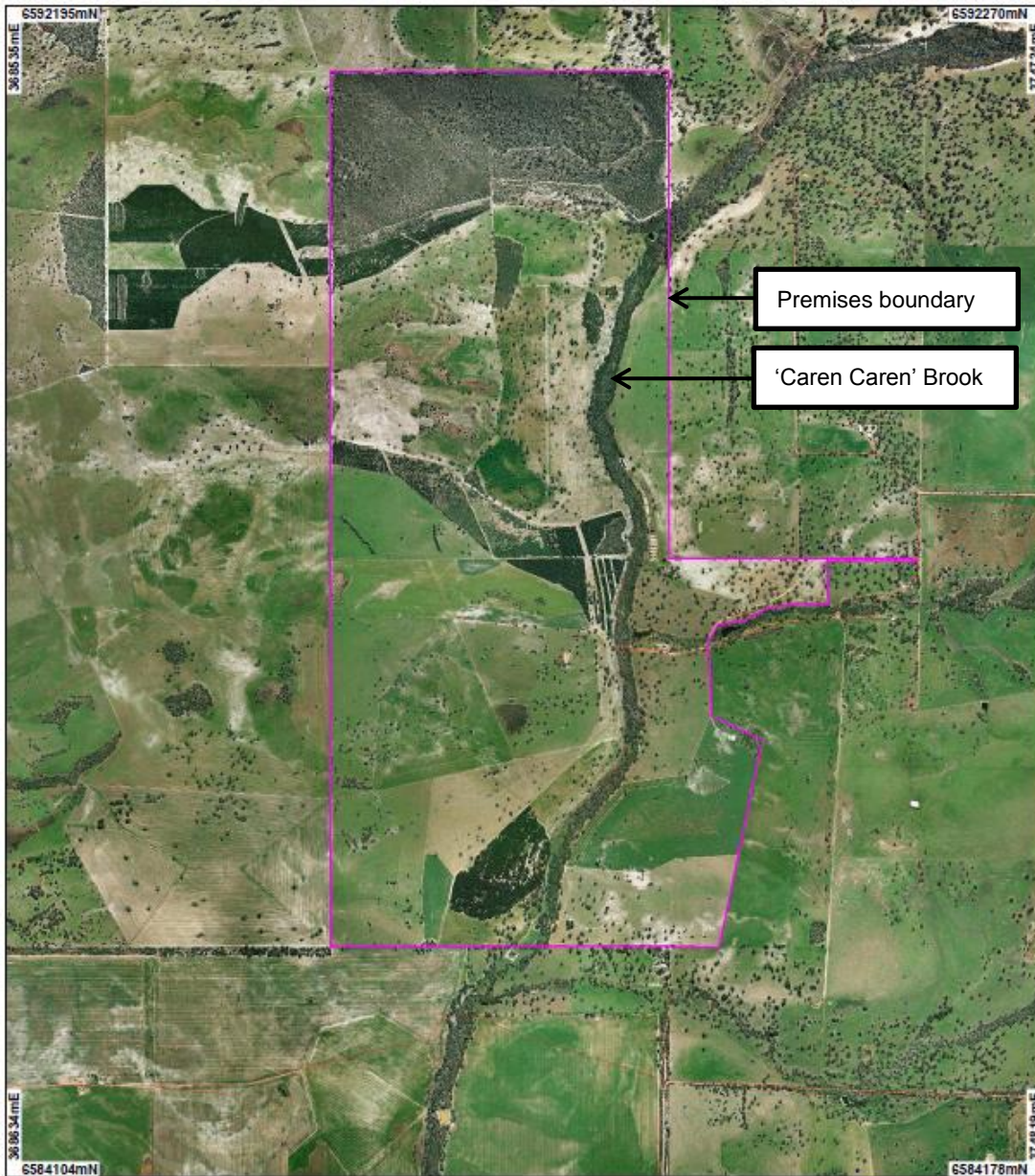
Note 2: Forms are in Schedule 2



Schedule 1: Maps

Premises map

The Premises is shown in the map below. The purple line depicts the Premises boundary.



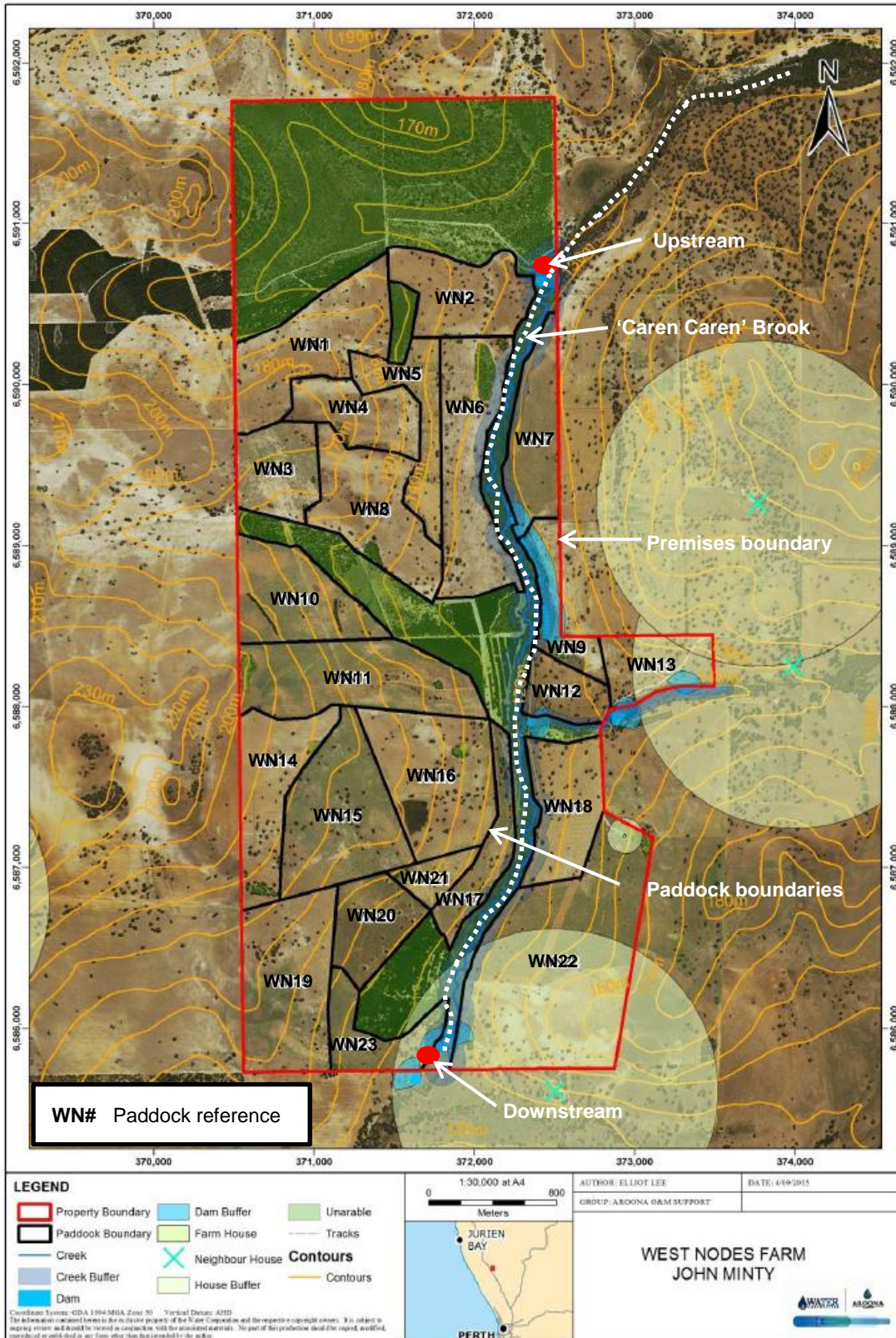
LEGEND

<ul style="list-style-type: none"> Local Government Authorities Swan River Trust Development Control Area Road Centrelines Contaminated - Reported Sites Contaminated - remediation required Contaminated - restricted use Possibly contaminated - investigation required Not contaminated - unrestricted use (Green) 	<ul style="list-style-type: none"> Decommissioned Report not substantiated Awaiting Classification Public Drinking Water Source Areas (PDWSAs) Priority Not Assigned Priority Area-P1 Priority Area-P2 Priority Area-P3 Acid Sulfate Soil Risk Map, Geraldton High to moderate risk of ASS Moderate to low risk of ASS 	<ul style="list-style-type: none"> Acid Sulfate Soils Risk Map, 100K High to moderate risk of ASS Moderate to low risk of ASS Water Corporation Production Bores Water Bore Water Observation Bore WIN Groundwater Sites Hydrography, Linear (Hierarchy) Physical Watersheds 	<p>LANDRAGAN 9908 Orthomosaic - Landgate 2008</p> <p>Scale 1:36900 (Appropriate when reproduced at A4)</p> <p>Geocentric Datum Australia 1994</p> <p>Note: the data in this map have not been projected. This may result in geometric distortion or measurement inaccuracies.</p> <p>Prepared by: carolinec Prepared for: Date: 1/12/2015 1:05:03 PM</p> <p>Information derived from this map should be confirmed with the data custodian acknowledged by the agency acronym in the legend.</p> <p> Government of Western Australia Department of Environment Regulation WA Crown Copyright 2002</p>
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* Project Data. This data has not been quality assured. Please contact map author for details.



Map of emission points (paddocks and brook)





Schedule 2: Reporting & notification forms

These forms are provided for the proponent to report monitoring and other data required by the Licence. They can be requested in an electronic format.

ANNUAL AUDIT COMPLIANCE REPORT PROFORMA

SECTION A LICENCE DETAILS

Licence Number:	Licence File Number:
Company Name: Trading as:	ABN:
Reporting period: _____ to _____	

STATEMENT OF COMPLIANCE WITH LICENCE CONDITIONS

1. Were all conditions of the Licence complied with within the reporting period? (please tick the appropriate box)

Yes Please proceed to Section C

No Please proceed to Section B

Each page must be initialled by the person(s) who signs Section C of this Annual Audit Compliance Report (AACR).

Initial:



Section C: Signature and certification

This Annual Audit Compliance Report (AACR) may only be signed by a person(s) with legal authority to sign it. The ways in which the AACR must be signed and certified, and the people who may sign the statement, are set out below.

Please tick the box next to the category that describes how this AACR is being signed. If you are uncertain about who is entitled to sign or which category to tick, please contact the licensing officer for your premises.

If the licence holder is		The Annual Audit Compliance Report must be signed and certified:
An individual	<input type="checkbox"/> <input type="checkbox"/>	by the individual licence holder, or by a person approved in writing by the Chief Executive Officer of the Department of Environment Regulation to sign on the licensee's behalf.
A firm or other unincorporated company	<input type="checkbox"/> <input type="checkbox"/>	by the principal executive officer of the licensee; or by a person with authority to sign on the licensee's behalf who is approved in writing by the Chief Executive Officer of the Department of Environment Regulation.
A corporation	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	by affixing the common seal of the licensee in accordance with the <i>Corporations Act 2001</i> ; or by two directors of the licensee; or by a director and a company secretary of the licensee, or if the licensee is a proprietary company that has a sole director who is also the sole company secretary – by that director, or by the principal executive officer of the licensee; or by a person with authority to sign on the licensee's behalf who is approved in writing by the Chief Executive Officer of the Department of Environment Regulation.
A public authority (other than a local government)	<input type="checkbox"/> <input type="checkbox"/>	by the principal executive officer of the licensee; or by a person with authority to sign on the licensee's behalf who is approved in writing by the Chief Executive Officer of the Department of Environment Regulation.
a local government	<input type="checkbox"/> <input type="checkbox"/>	by the chief executive officer of the licensee; or by affixing the seal of the local government.

It is an offence under section 112 of the *Environmental Protection Act 1986* for a person to give information on this form that to their knowledge is false or misleading in a material particular. There is a maximum penalty of \$50,000 for an individual or body corporate.

I/We declare that the information in this annual audit compliance report is correct and not false or misleading in a material particular.

Signature: _____
 Name: (printed) _____
 Position: _____
 Date: _____/_____/_____

Signature: _____
 Name: (printed) _____
 Position: _____
 Date: _____/_____/_____

Seal (if signing under seal)



Licence: L8923/2015/1
 Form: N1

Licensee: Jamala Enterprises Pty Ltd
 Date of breach:

Notification of detection of the breach of a limit.

These pages outline the information that the operator must provide.
 Units of measurement used in information supplied under Part A and B requirements shall be appropriate to the circumstances of the emission. Where appropriate, a comparison should be made of actual emissions and authorised emission limits.

Part A

Licence Number	
Name of operator	
Location of Premises	
Time and date of the detection	

Notification requirements for the breach of a limit	
Emission point reference/ source	
Parameter(s)	
Limit	
Measured value	
Date and time of monitoring	
Measures taken, or intended to be taken, to stop the emission	



Part B

Any more accurate information on the matters for notification under Part A.	
Measures taken, or intended to be taken, to prevent a recurrence of the incident.	
Measures taken, or intended to be taken, to rectify, limit or prevent any pollution of the environment which has been or may be caused by the emission.	
The dates of any previous N1 notifications for the Premises in the preceding 24 months.	

Name	
Post	
Signature on behalf of Jamala Enterprises Pty Ltd	
Date	



Decision Document

Environmental Protection Act 1986, Part V

Proponent: **Jamala Enterprises Pty Ltd**

Licence: **L8923/2015/1**

Registered office: 2/ 100 Havelock Street
WEST PERTH WA 6005

ACN: 078 002 730

Premises address: West Nodes Farm
Being Lot 3 on Plan 60272
YATHROO WA 6510

Issue date: Thursday, 21 January 2016

Commencement date: Monday, 25 January 2016

Expiry date: Sunday, 20 January 2036

Decision

Based on the assessment detailed in this document the Department of Environment Regulation (DER), has decided to issue a licence. DER considers that in reaching this decision, it has taken into account all relevant considerations.

Decision Document prepared by:

Caroline Conway-Physick
Licensing Officer

Decision Document authorised by:

Steve Checker
Delegated Officer



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1 Purpose of this Document

This decision document explains how DER 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 checked="" type="checkbox"/>	
	Licence amendment <input type="checkbox"/>	
	Works Approval amendment <input type="checkbox"/>	
Activities that cause the premises to become prescribed premises	Category number(s)	Assessed design capacity
	61A – Solid waste facility	65,000 tonnes per annual period
Application verified	Date: 30/09/2015	
Application fee paid	Date: 28/10/2015	
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"/>
Is the proposal subject to Ministerial Conditions?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
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"/>
Is the Premises within an Environmental Protection Policy (EPP) Area	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
If Yes include details of which EPP(s) here.		
Is the Premises subject to any EPP requirements?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
If Yes, include details here, eg Site is subject to SO ₂ requirements of Kwinana EPP.		



3 Executive summary of proposal and assessment

West Nodes Farm is owned by Jamala Enterprises Pty Ltd, which is a company for I & J Minty & Sons. It is located off Stockyard Road, approximately 160 km north of Perth within a rurally zoned area in the Shire of Dandaragan. The property consists of 23 paddocks covering 1335 ha, with approximately 925 ha of arable land.

West Nodes Farm accepts Lime Amended Biosolids (LAB) and Biosolids Cake sourced from Water Corporation metropolitan wastewater treatment plants (Beenyup, Woodman Point and Subiaco). This material is stored, spread and incorporated into the soils onsite in accordance with the *Western Australian Guidelines for Biosolids Management*. The biosolids are applied to improve structure of soils and provide nutrients for crop growth.

The operation has a nominated rate of throughput for the premises of up to 65,000 tonnes (wet weight) of biosolids per year. This has been determined using average application rates (50 t/ha) and the arable area (1,300 ha) on the property. Application rates are dependent on the Review of Environmental Factors and approval by the Department of Health prior to application.

Soils on the farm are principally colluvium derived sands dominated by sandy gravels, sandy duplexes, and yellow and pale deep sands. Topography is undulating with the average slope across arable areas where biosolids are to be applied is 5%.

The 'Caren Caren' Brook runs north to south through the centre of the property which is surrounded by riparian vegetation; it flows approximately 10 months of the year. There is also an intermittent creek running from the east that joins to the Brook. The Brook will have a 100 m buffer from biosolids application areas, and the intermittent creek will have a 50 m buffer, as per the Biosolids Guidelines. A desktop assessment of WIN Groundwater monitoring bore (Site Id no. 20032528), approximately 133 m north east of the premises, identified depth to groundwater at approximately 59.74 m with TDS approximately 601 mg/L (fresh).

There are multiple dams on paddocks throughout the property, and these will have 100 m buffers from biosolids applications on the uphill sides. The nearest lakes are 3.0 km to the north and 4.1 km to the west of the property boundary, and will therefore be unaffected by biosolids applications.

The nearest dwellings identified in the application are located approximately 440 m and 900 m to the east while a residence is located on the farm southern boundary.

Environmental risks are associated with the discharge (application) of biosolids to land and odour when applied under unfavourable weather conditions. There are no point source emissions proposed to air, ground or surface water.

This decision document is for a new instrument based on a proposed activity that triggers category 61A of the *Environmental Protection Regulations 1987* and conditions reflect the *Western Australian Guidelines for Biosolids Management (December 2012)*.



4 Decision table

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

DECISION TABLE			
Works Approval / Licence section	Condition number W = Works Approval L = Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
General conditions	L1.2.1	Condition 1.2.1 has been included within the general conditions section of the Licence that are applicable to the operation of the premises, in the management of stormwater flow and potential discharges as a result of stormwater flow.	
Premises operation	L1.3.1-L1.3.6	<p><u>Emission Description</u> <i>Emission:</i> Stormwater contaminated with leachate from the storage of biosolids prior to application to land. <i>Impact:</i> Contamination of surrounding land and surface water drainage systems. Potential impacts on ecology of surface water from the addition of nutrients and heavy metals. <i>Controls:</i> The proponent proposes to only store the biosolids for a maximum of 30 days. Storage will be on a low gradient surface and will maintain buffer distances from waterways, wetlands and environmentally sensitive areas. The application areas will be bunded to prevent runoff. Application and management of the biosolids is proposed to be carried out in compliance with the <i>Western Australian guidelines for biosolids management, December 2012</i>.</p> <p><u>Risk Assessment</u> <i>Consequence:</i> Minor <i>Likelihood:</i> Possible <i>Risk Rating:</i> Moderate</p> <p><u>Regulatory Controls</u> Operational conditions have been included to manage the risk to public health and the</p>	<p>Application supporting documentation</p> <p>General provisions of the <i>Environmental Protection Act, 1986</i>.</p> <p>Western Australian guidelines for biosolids management, 2012.</p>



DECISION TABLE			
Works Approval / Licence section	Condition number W = Works Approval L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
		<p>environment. Inappropriate storage and processing may lead to unauthorised discharges and creation of fugitive odour.</p> <p>Condition 1.2.1 has been added to the licence to require the operator to prevent the contamination of stormwater.</p> <p>Condition 1.3.3 has been added to the licence to limit the duration of storage, specify topography requirements and ensure the Licensee maintains minimum buffers from surface water bodies and residential areas.</p> <p>Condition 1.3.4 has been added to the Licence to ensure appropriate record-keeping to verify the quality and quantity of biosolids received, location application rates conforms to the Review of Environmental Factors.</p> <p>Condition 1.3.5 has been included to require assessment of limiting factors and acceptable application rates prior to any biosolids application. assessment report is to be submitted to DoH and DER prior to any application occurring.</p> <p>The application of biosolids will be undertaken in accordance with the <i>Western Australian guidelines biosolids management, 2012</i>.</p> <p>Condition 1.3.6 requires the proponent to demarcate the separation distance from the start of the riparian zone within the premises boundary to ensure application of biosolids does not encroach within the 100m separation distance required.</p> <p><u>Residual Risk</u> <i>Consequence:</i> Insignificant <i>Likelihood:</i> Unlikely <i>Risk Rating:</i> Low</p>	



DECISION TABLE			
Works Approval / Licence section	Condition number W = Works Approval L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
Emissions general	L2.1.1	<p>Descriptive limits will be set through condition 1.3.3 of the licence and therefore condition L2.1.1 regarding recording and investigation of exceedances of limits has been included.</p> <p>Condition L2.2.2 identifies the areas authorised for application of biosolids to land.</p>	N/A
Emissions to land including monitoring	L2.2 and L3.2	<p><u>Emission Description</u> <i>Emission:</i> Application of Pathogen Grade 3 (P3) and Contaminant Grade 2 (C2) of either biosolids cake or lime-amended biosolids (LAB) onto the identified paddocks. Application loading exceeding the determined limiting factors, including the vegetation's capacity to utilise the nutrients will result in leachate runoff to surface water and infiltration to groundwater. Application of biosolids will be away from wetlands and waterways. <i>Impact:</i> Eutrophication of waterways with nitrogen, phosphorus and heavy metals, and impacts to the groundwater quality which is extracted for livestock watering. Depth to groundwater has been presented as being approximately 59.74m below ground level. The nearest perennial waterway intersects the property; the 'Caren Caren' Brook drains into the Namming Lake to the south west. <i>Controls:</i> The proponent will undertake an assessment of the Review of Environmental Factors prior to application (which will require Department of Health approval) to verify limiting factors and acceptable application rates are being appropriately incorporated into the premises operation.</p> <p><u>Risk Assessment</u> <i>Consequence:</i> Moderate <i>Likelihood:</i> Unlikely <i>Risk Rating:</i> Moderate</p>	Application supporting documentation



DECISION TABLE			
Works Approval / Licence section	Condition number W = Works Approval L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
		<p><u>Regulatory Controls</u> Condition 1.3.6 requires the proponent to conduct a review of environmental factors with the consideration of limiting factors (condition 1.3.3). This means that application rates will vary each time based on the environment's ability to cope with the loading (without causing unacceptable impacts).</p> <p><u>Residual Risk</u> <i>Consequence:</i> Minor <i>Likelihood:</i> Unlikely <i>Residual Risk Rating:</i> Moderate</p>	
Fugitive emissions	N/A	<p>Fugitive dust emissions are not considered significant as the premises is based within an agricultural landscape. Incorporation of biosolids in a moist state will reduce any dust emissions.</p> <p>Biosolids are to be applied in a relatively wet state, therefore dust is not expected to be generated during spreading operations. Dust can be generated during incorporation operations during the dry summer months, and this also causes losses of valuable topsoil. Incorporation will therefore be delayed during dry periods, as per the Biosolids Guidelines.</p> <p>Fugitive dust emissions are sufficiently regulated under section 49 of the <i>Environmental Protection Act 1986</i>. The Licensee has a statutory responsibility to comply with the Act during the operation of the premises.</p>	<p>'Review of Environmental Factors' Report.</p> <p>Ambient Air Assessment Criteria, National Environmental Protection Measure (Ambient Air Quality)</p>
Odour	N/A	<p>Operation <u>Emission Description</u> <i>Emission:</i> Application of biosolids during inclement weather, or if the biosolids are not incorporated into the soils in a timely manner can result in the generation of odour. Application of biosolids is usually undertaken on a paddock once every few years. Three paddocks have currently been identified as suitable, so the duration of exposure</p>	<p>Application supporting documentation</p> <p>General provisions of the</p>



DECISION TABLE			
Works Approval / Licence section	Condition number W = Works Approval L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
		<p>will be limited. <i>Impact:</i> The nearest residence is adjacent to the southern premises boundary and impacts may be experienced under certain weather conditions <i>Controls:</i> The proponent has experience in the application of biosolids. The proponent has also committed to maintaining a 1km buffer between any residence and the area of application.</p> <p>LAB will be transported in sealed metal silos and biosolids cake will be transported with trailers using hydraulic lids and rubber seals to minimise any odour emissions during transfers. Transport routes are also to be chosen in consultation with local Shires to minimise the impact of any residual odour on local residents.</p> <p><u>Risk Assessment</u> <i>Consequence:</i> Minor <i>Likelihood:</i> Unlikely <i>Risk Rating:</i> Moderate</p> <p><u>Regulatory Controls</u> Fugitive odour emissions are sufficiently regulated under section 49 of the <i>Environmental Protection Act 1986</i>. The Licensee has a statutory responsibility to comply with the Act during the operation of the premises.</p>	<i>Environmental Protection Act, 1986.</i>
Noise	N/A	<p>This activity is not expected to generate any noise beyond that likely to be experienced in an agricultural landscape.</p> <p>Provisions under <i>the Environmental Protection (Noise) Regulations 1997</i> will apply, and the provisions under section 49 of the <i>Environmental Protection Act, 1986</i>.</p>	Application supporting documentation.
General monitoring	L3.1.1 L3.1.2	Operation Administrative conditions have been included to define appropriate standards to be	



DECISION TABLE			
Works Approval / Licence section	Condition number W = Works Approval L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
		used in the sampling and monitoring required defined within 'Section 3 – Monitoring'.	
Monitoring of inputs and outputs	L3.2.1	Operation Condition 3.2.1, Table 3.2.1 defines the monitoring requirements of all inputs and outputs in relation to biosolids application or biosolids rejected/ removed from the premises.	General provisions of the <i>Environmental Protection Act, 1986</i> .
Process monitoring	L3.3.1	Operation Condition 3.3.1, Table 3.3.1 defines the process monitoring requirements in relation to biosolids application and stockpile inspection at the premises. Application rates and stockpile management are to be carried out in accordance with the 'Western Australian guidelines for biosolids management' and the submitted 'Review of Environmental Factors' report. Condition 1.3.6 requires verification of the application rates prior to application of biosolids.	Application supporting documentation <i>Western Australian Guidelines for biosolids management, December 2012.</i>
Information	L1.3.4 Section 4	The Licensee will be required to maintain records associated with the acceptance and management of biosolids. A complaints register and annual reporting requirements have been included in the Licence.	N/A
Licence Duration	N/A	Application rates of biosolids were determined prior to application as part of the 'Review of Environmental Factors', which relates to existing soil type/ conditions and agricultural requirements. Biosolids are usually only applied once annually to a property and paddocks receiving the biosolids are usually on a rotation basis (a paddock could only receive biosolids every three years). This is considered to be a low risk activity and it is recommended that the Licence be issued for a 20 year period in accordance with DER's guidance statement on licence	Application supporting documentation. General provisions of the <i>Environmental Protection Act,</i>



DECISION TABLE			
Works Approval / Licence section	Condition number W = Works Approval L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
		duration.	1986.



5 Advertisement and consultation table

Date	Event	Comments received/Notes	How comments were taken into consideration
02/11/2015	Application advertised in West Australian (or other relevant newspaper)	Nil	N/A
26/10/2015	Application referred to interested parties listed: Shire of Dandaragan	Email sent through to Dennis Gillam (Shire of Dandaragan, A/ Manager Environmental Health). Response received 27/10/2015.	Shire of Dandaragan had no objection to the application as 'John Minty' is considered an experienced operator in terms of the application of biosolids in broadacre situations. The approval was subject to the delivery of the biosolids not passing through any townsite within the Shire of Dandaragan.
30/10/2015	Department of Water	Email sent through to Briony Lyons (Department of Water). Response received from Kerry Wray on 30/11/2015. "The Department of Water has no objection to the biosolids application, subject to the following recommendations for monitoring and buffers. The largest risk is considered to be surface transport of nutrients and metals in a storm event on any eroded soil or with poorly incorporated biosolids. As per the WA Guidelines, the risk of environmental harm is considered sufficiently large to warrant additional monitoring as a condition of approval (Section 8.4, p55). 1. Monitoring of creek-bed sediments and water quality (standard full suite of	Buffer distances have been defined within the Licence within section 1.3 of the proposed Licence, and in accordance with the 'Western Australian guidelines for biosolids management, 2012'. Management of surface run-off, pooling and ponding within the land application areas and limiting of application during inclement weather has also been considered within the Licence, section 1.3, table 1.3.1. The biosolids are required to be compliant to the 'Western Australian guidelines for biosolids management' and relevant pathogen/contaminant classification for disposal to land. Testing on nutrients and heavy metal loading is included within Licence for surface water quality monitoring. An upstream monitoring



Date	Event	Comments received/Notes	How comments were taken into consideration
		<p>metals and nutrients) to establish a baseline, and quarterly thereafter, for 3 sites. Sites recommended are the first pool upstream of paddock WN2, a pool upstream of the confluence with Nambung River and a site in between. If no impacts are recorded above guidelines, frequency can be reduced. If budget is an issue, DoW recommends only sampling for Cd, Pb and Cr (total metals) in sediments.</p> <p>In addition, monitoring of aquatic biota is also recommended, to enable risk assessment from any chemical changes that may occur, and as indicators of change. It is suggested that bi-annual sampling of fish and macroinvertebrates should occur in spring and summer, or at least once a year in summer. DoW can assist with more detailed instructions if required.</p> <p>Provision should also be made for contingency monitoring further downstream if contaminants are detected.</p> <p>2. For WN2, the riparian zone doesn't appear to be fenced off in 2012 aerial imagery and the understorey looks sparse alongside paddock WN2. Application in this paddock should be set back at least 100 m from the edge of the trees in the riparian zone, or the waterway, or whichever distance is greater. This is less of an issue with paddock WN8 and paddock WN15 is set back far enough to almost remove all risk of surface transport. The buffer</p>	<p>location has been placed just above paddock WN2 within the premises and a downstream location identified.</p> <p>With consideration to the consistent application of conditions at similar sites and the overall risk of the activity, the DER will not require the monitoring of aquatic biota, however the DoW comments will be passed on to Aroona Alliance and the proponent.</p>



Date	Event	Comments received/Notes	How comments were taken into consideration
4/11/2015	Department of Health	<p>distances specified in the Guidelines are stated to be 'Minimum', therefore it is expected that larger setbacks will be acceptable, particularly in this case when it is risk-based."</p> <p>Email sent through to Clemencia Rodrigues (Department of Health, Senior Project Officer). Response received 5/11/2015.</p> <p>Copy of additional letter (sent to Mr J. Minty) received via internal email on 30/11/2015 regarding a 'Review of the Environmental Factors', from Richard Theobald, Manager – Water Unit, Public Health Division, dated 18/11/2015.</p> <p>Fifteen requirements were stated within the advice for consideration.</p>	<p>DoH confirmed that they are satisfied with the health aspects of the proposal.</p> <p>Consideration of advice received has been worked into the Licence within section 1.3, 'Premises operation' where applicable to DER in the assessment of emissions and discharges from the premises. Some of the requirements are for direct action by the Licensee with DoH.</p>



5 Advertisement and consultation table

Date	Event	Comments received/Notes	How comments were taken into consideration
15/12/2015	Proponent sent a copy of draft instrument	Comments received from Craig Byers (Environment and Resource Manager, Aroona Alliance) on 04/01/2016, with seven minor changes made to the Licence.	Changes included: Change to the annual period to 1 July-30 June annually; Amendment to application details within condition 1.3.3 and update to table numbering; Removal of condition 1.3.6 which was considered a duplicate as outlined within Table 1.3.2; Condition 3.2.1 – Contaminant/ Pathogen frequency and averaging period changed from each load to monthly or 12 times per year; and Condition 3.3.1 parameters amended to reflect 'not greater than' symbol. An email confirming changes was sent back to Craig Byers and John Minty (Owner) on 5/01/2016.



6 Risk Assessment

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

Table 1: Emissions Risk Matrix

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