



Licence

Environmental Protection Act 1986, Part V

Licensee: Macrofertil Australia Pty Ltd

Licence: L8638/2012/2

Registered office: Level 14
644 Chapel St
SOUTH YARRA VIC 3141

ACN: 166 370 976

Premises address: Albany Shed
66 Down Road
DROME WA 6330
Being Lot 16 on Diagram 100636 as depicted in Schedule 1

Issue date: 25 July 2013

Commencement date: 30 July 2013

Expiry date: 29 July 2031

Prescribed Premises Category

Schedule 1 of the Environmental Protection Regulations 1987

Category number	Category description	Category production or design capacity	Premises production or design capacity
33	Chemical blending or mixing: premises on which chemical or chemical products are mixed, blended or packaged in a manner that causes or is likely to cause a discharge of waste into the environment.	500 tonnes or more per year	75,000 tonnes per year

Conditions of Licence

Subject to the conditions of the licence set out in the attached pages.

Date signed: 10 November 2016

Jonathan Bailes
Manager Licensing (Process 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 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. These 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.



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 the Environment. You are required to comply with any conditions imposed by the Minister.

Premises description and Licence summary

Macrofertil Australia Pty Ltd (a 100% wholly owned subsidiary of Louis Dreyfus Commodities Asia Pty Ltd) became the owner occupier of the Albany Shed fertiliser premises at 66 Down Road on 13 December 2013, taking over ownership from Ravensdown Fertiliser Co-Operative Limited (RFC) who had been operating the premises since 2008. Prior to this, the shed had been built in 2000 with the fertiliser distribution premises operated by United Farmers.

Having initially been established and operated without works approval, the premises was identified as prescribed premises and first licensed on 26 July 2012. The premises are located 15km north-west of Albany and 19km north-west of the Albany Port, from where imported bulk fertiliser products are received. Some fertiliser products are transported by truck to the premises. The fertilisers are received, stored, blended and subsequently dispatched in trucks from the Albany Shed. All fertilisers handled on the site are in the form of granulated solids, crystalline solids, or crystalline powder and are water soluble. Other chemicals stored and used on site include a fungicide and dust suppressant polymer both stored in 1,000L IBCs.

The surrounding area is zoned as special use, special industrial, or rural. The nearest rural residence is approximately 400 metres north-east of the premises.

The main emissions from the facility are the result of spilt fertiliser and fertiliser dust being generated and potentially being discharged to land and/or surface water, and noise generated from the operation of blending equipment, front-end loaders and truck movements. In April 2013, the Licensee installed a new blending plant at the site which has achieved significant operational improvements including reduced noise and dust emissions. The licence amendment issued in November 2015 included changes to the controls for fugitive dust and an update to the current licence template.

The Licensee has subsequently applied for a further licence amendment to include a swale treatment system that will receive stormwater from part of the shed roof as well as the hardstand area at the front of the premises.

The licences and works approvals issued for the Premises are:

Instrument log		
Instrument	Issued	Description
L8638/2012/1	26/07/2012	New licence
L8638/2012/2	25/07/2013	Licence reissue
L8638/2012/2	06/02/2014	Licence amendment and transfer
L8638/2012/2	05/11/2015	Licence amendment and update to current template
L8638/2012/2	29/04/2016	Licence amendment to extend expiry date to 2031
L8638/2012/2	10/11/2016	Licence amendment to include stormwater treatment system

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 January until 31 December in the same year;

'Annual Audit Compliance Report' means a report in a format approved by the CEO as presented by the Licensee or as specified by the CEO from time to time and published on the Department's website.

'AS/NZS 5667.1' means the Australian Standard AS/NZS 5667.1 *Water Quality – Sampling – Guidance of the Design of sampling programs, sampling techniques and the preservation and handling of samples*;

'AS/NZS 5667.10' means the Australian Standard AS/NZS 5667.10 *Water Quality – Sampling – Guidance on sampling of waste waters*;

'AS/NZS 5667.11' means the Australian Standard AS/NZS 5667.11 *Water Quality – Sampling – Guidance on sampling of groundwaters*;

'averaging period' means the time over which a limit is measured or a monitoring result is obtained;

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

'CEO' for the purpose of notification means:

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

'Department' means the department established under s.35 of the Public Sector Management Act and designated as responsible for the administration of Division 3 Part V of the Environmental Protection Act 1986;

'fertiliser product' means all fertiliser components incoming and outgoing;

'Licence' means this Licence numbered L8638/2012/2 and issued under the *Environmental Protection Act 1986*;

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

'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;



‘night time operation’ means operation during 10 pm to 7 am Monday through Saturday and 10 pm to 9 am Sundays and public holidays;

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

‘quarterly’ means the four inclusive periods from 1 January to 31 March, 1 April to 30 June, 1 July to 30 September, and 1 October to 31 December;

‘Schedule 1’ means Schedule 1 of this Licence unless otherwise stated;

‘six monthly’ means the two inclusive periods from 1 January to 30 June and 1 July to 31 December;

‘spot sample’ means a discrete sample representative at the time and place at which the sample is taken;

‘Stormwater system’ means the series of tanks, pipes and swales on the premises used to discharge stormwater from the premises; 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 immediately recover, or remove and dispose of spills of fertiliser product that occur outside of an engineered containment system.

2 Emissions

2.1 Surface water emissions

2.1.1 The Licensee shall ensure that where waste is emitted from the emission points in Table 2.1.1 and identified on the premises map in Schedule 1 it is done so in accordance with the conditions of this Licence.

Table 2.1.1: Surface water emissions		
Emission point reference and location on premises map	Description	Source including abatement
SW3	Discharge to stormwater system as shown on the stormwater system plan in Schedule 1	Stormwater from shed roof and hardstand at the front of the premises discharge via bubble-up pit and grate
SW2	Discharge from the stormwater system to offsite drainage ditch	Stormwater from the stormwater system discharged via stone pitch outfall

2.2 Noise

2.2.1 The licensee shall ensure that the northern and eastern shed doors, as shown in the premises map in Schedule 1, are closed during night time operation.



3 Monitoring

3.1 General monitoring

3.1.1 The Licensee shall ensure that:

- (a) all water samples are collected and preserved in accordance with AS/NZS 5667.1;
- (b) all wastewater samples are collected in accordance with AS/NZS 5667.10;
- (c) all groundwater sampling is conducted in accordance with AS/NZS 5667.11; and
- (d) all samples are submitted to a laboratory with current NATA accreditation for the parameters to be measured.

3.1.2 The Licensee shall ensure that:

- (a) weekly monitoring is undertaken at least 3 days apart; and
- (b) quarterly monitoring is undertaken at least 45 days apart.

3.2 Monitoring of surface water emissions

3.2.1 The Licensee shall undertake the monitoring in Table 3.2.1 according to the specifications in that table.

Table 3.2.1: Monitoring of surface water emissions				
Monitoring point reference and location on premises map	Parameter	Units	Averaging period	Frequency
SW2 – Discharge from the stormwater system to offsite drainage ditch (stone pitch outfall)	pH	NA	Spot sample	Weekly if flowing
	Chemical Oxygen Demand Total Phosphorus Total Nitrogen Total Suspended Solids Copper Cobalt	mg/L		
SW3 – Discharge to stormwater system (bubble-up pit)	Manganese Zinc Total Dissolved Solids			

3.3 Ambient environmental quality monitoring

3.3.1 The Licensee shall undertake the monitoring specified in Table 3.3.1.

Table 3.3.1: Monitoring of ambient groundwater quality				
Monitoring point reference and location on premises map	Parameter	Units	Averaging period	Frequency
Bore 1 Bore 2 Bore 3 Bore 4	Standing water level (SWL)	mBGL	Spot sample	Quarterly
	pH	-		
	Electrical conductivity	dS/m		
	Total Dissolved Solids Dissolved Oxygen Copper Manganese Zinc Total Nitrogen Nitrate-Nitrogen Ammonia Nitrogen Total Phosphorus Total Petroleum Hydrocarbons	mg/L		



3.4 Monitoring of inputs and outputs

3.4.1 The Licensee shall undertake the monitoring in Table 3.4.1 according to the specifications in that table.

Table 3.4.1: Monitoring of inputs and outputs		
Input / Output	Units	Averaging period
Fertiliser product	Tonnes	Annual

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 groundwater.

4.1.2 The Licensee must submit to the CEO within 60 calendar days after the end of the annual period, an Annual Audit Compliance Report indicating the extent to which the Licensee has complied with the conditions of the Licence for the annual period.

4.1.3 The Licensee shall implement a complaints management system that as a minimum records the number and details of complaints received concerning the environmental impact of the activities undertaken at the Premises and any action taken in response to the complaint.

4.2 Reporting

4.2.1 The Licensee shall submit to the CEO an Annual Environmental Report within 60 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 form
-	Summary of any failure or malfunction of any pollution control equipment or any incidents that have occurred during the year and any action taken	None specified
Table 3.4.1	Monitoring of fertiliser product inputs and outputs	None specified
Table 3.3.1	Monitoring of ambient groundwater quality for all parameters listed in Table 3.3.1	Tabular and graphical format
Table 3.2.1	Monitoring of stormwater emissions for all parameters listed in Table 3.4.1	Tabular and graphical format
4.1.3	Complaints summary	None specified

4.2.2 The Licensee shall ensure that the annual environmental report also contains an assessment of the information contained within the report against previous monitoring results.



4.2.3 The Licensee shall submit the information in Table 4.2.2 to the CEO according to the specifications in that table.

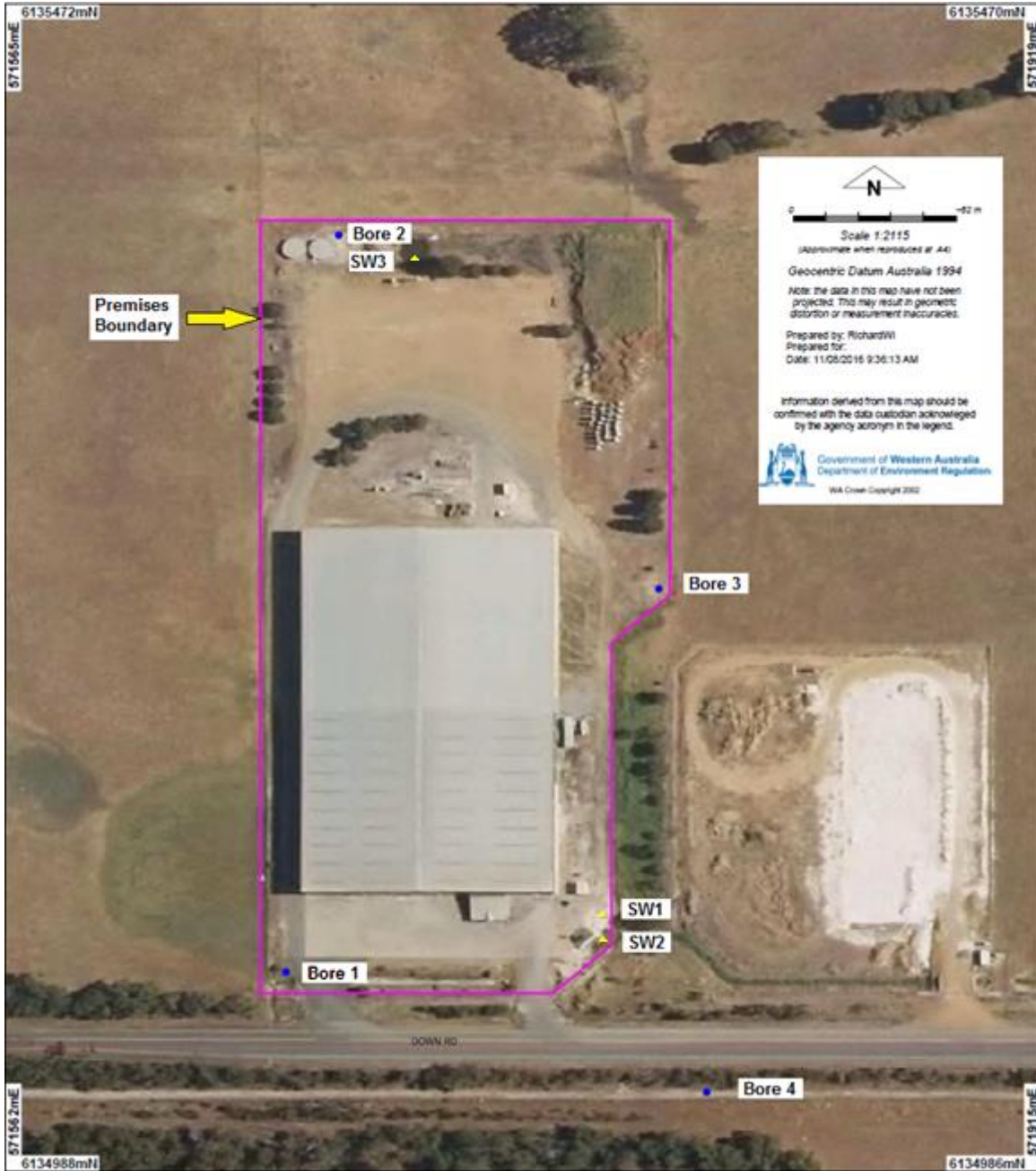
Table 4.2.2: Non-annual reporting requirements				
Condition or table (if relevant)	Parameter	Reporting period	Reporting date	Format or form
-	Copies of original monitoring reports submitted to the Licensee by third parties	Not Applicable	Within 14 days of the CEO's request	As received by the Licensee from third parties
Table 3.3.1	Groundwater monitoring results from Bores 1- 4	Six monthly	Within 21 days after end of the reporting period	Tabular and graphical format including a comparison to all previous monitoring results and relevant guideline values.
Table 3.2.1	Surface water monitoring results from SW1 and SW3	Quarterly		



Schedule 1: Maps

Premises map

The Premises are shown on the map below. The pink line depicts the Premises boundary.





Stormwater system plan

The figure below shows an indicative design of the stormwater system





Decision Document

Environmental Protection Act 1986, Part V

Licensee: **Macrofertil Australia Pty Ltd**

Licence: **L8638/2012/2**

Registered office: Level 14
 644 Chapel St
 SOUTH YARRA VIC 3141

ACN: 166 370 976

Premises address: Albany Shed
 66 Down Road
 DROME WA 6330

Issue date: 25 July 2013

Commencement date: 30 July 2013

Expiry date: 29 July 2031

Decision

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

Decision Document authorised by:

Jonathan Bailes
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 type="checkbox"/>	
	Licence amendment <input checked="" type="checkbox"/>	
	Works Approval amendment <input type="checkbox"/>	
Activities that cause the premises to become prescribed premises	Category number(s)	Assessed design capacity
	33	75 000 tonnes per year
Application verified	Date: N/A	
Application fee paid	Date: N/A	
Works Approval has been complied with	Yes <input type="checkbox"/>	No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>
Compliance Certificate received	Yes <input type="checkbox"/>	No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>
Commercial-in-confidence claim	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Commercial-in-confidence claim outcome	N/A	
Is the proposal a Major Resource Project?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Was the proposal referred to the Environmental Protection Authority (EPA) under Part IV of the <i>Environmental Protection Act 1986</i> ?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
		Referral decision No: Managed under Part V <input type="checkbox"/> Assessed under Part IV <input type="checkbox"/>
Is the proposal subject to Ministerial Conditions?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
		Ministerial statement No: EPA Report No:
Does the proposal involve a discharge of waste into a designated area (as defined in section 57 of the <i>Environmental Protection Act 1986</i>)?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
	Department of Water consulted Yes <input type="checkbox"/> No <input type="checkbox"/>	
Is the Premises within an Environmental Protection Policy (EPP) Area	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Is the Premises subject to any EPP requirements?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>



3 Executive summary of proposal and assessment

The premises is located 15km north-west of Albany and 19km north-west of the Albany Port, from where imported bulk fertiliser products are received. Some fertiliser products are transported by truck to the premises. The fertilisers are received, stored, blended and subsequently dispatched in trucks from the Albany Shed. All fertilisers handled on the site are in the form of granulated solids, crystalline solids, or crystalline powder and are water soluble. Other chemicals stored and used on the premises include a fungicide and dust suppressant polymer both stored in 1,000L IBCs.

The surrounding area is zoned for special use, special industrial, or rural. The nearest rural residence is approximately 400 metres north-east of the premises.

The main emissions from the facility are the result of spilt fertiliser and fertiliser dust being generated and potentially being discharged to land and/or surface water, and noise generated from the operation of blending equipment, front-end loaders and truck movements. In April 2013, the Licensee installed a new blending plant at the site which has achieved significant operational improvements including reduced noise and dust emissions. The licence amendment issued in November 2015 included changes to the controls for fugitive dust and an update to the current licence template.

In November 2015 the licence was amended to remove improvement conditions as alternative dust control measures have been implemented to limit potential contamination from the fertiliser unloading, blending and subsequent loading operations. As part of the amendment, the licence was also updated to the current template and obsolete conditions removed.

This licence amendment is in response to the licensee's application to amend the licence to allow the discharge of potentially contaminated stormwater from the hard stand at the front of the premises to a new stormwater system.



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	Conditions removed from the Licence: L1.1.5 L1.2.1 L1.2.2 L1.2.3	<p>Conditions removed from the licence:</p> <p>1.1.5 <i>Nothing in the Licence shall be taken to authorise any emission that is not mentioned in the Licence, where the emission amounts to:</i></p> <p>(a) <i>pollution;</i> (b) <i>unreasonable emission;</i> (c) <i>discharge of waste in circumstances likely to cause pollution;</i> or (d) <i>being contrary to any written law.</i></p> <p>1.2.1 <i>The Licensee shall maintain all pollution control and monitoring equipment to the manufacturer's specification or any internal management system.</i></p> <p>1.2.3 <i>The Licensee shall:</i></p> <p>(a) <i>implement all practical measures to prevent stormwater run-off becoming contaminated by the activities on the Premises; and</i> (b) <i>treat contaminated or potentially contaminated stormwater as necessary prior to being discharged from the Premises.</i></p> <p>Condition 1.1.5 has been removed as it contained explanatory text only. Condition 1.2.1 has been removed as no specific pollution control or monitoring equipment is referenced in the licence. The</p>	<p><i>Environmental Protection Act 1986</i></p> <p><i>Environmental Protection (Unauthorised Discharges) Regulations 2004</i></p>



DECISION TABLE			
Works Approval / Licence section	Condition number W = Works Approval L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
		Delegated Officer has determined that the previous risk assessment is still appropriate and no specific equipment is required to be listed in the licence. Condition 1.2.2 (now 1.2.1) has been updated to reference fertiliser products rather than environmentally hazardous materials specifically. Condition 1.2.3 has been removed as specific controls relating to stormwater have been included in the licence in accordance with this amendment.	
Surface water emissions to including monitoring	L3.1.3 L3.4.1	<p>Condition 3.1.3 has been removed from the licence as monitoring of throughput data is specified in condition 3.4.1.</p> <p><i>3.1.3 The Licensee shall record production or throughput data and any other process parameters relevant to any monitoring undertaken.</i></p> <p>The assessment of the stormwater system is contained in Appendix A.</p>	<p><i>Environmental Protection Act 1986</i></p> <p><i>Environmental Protection (Unauthorised Discharges) Regulations 2004</i></p>
Information	L4.1.2 L4.2.1	<p>Condition 4.1.2 has been removed from the licence:</p> <p><i>4.1.2 The Licensee shall ensure that:</i></p> <p><i>(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</i></p> <p><i>(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.</i></p> <p>This condition is not enforceable as the requirements for compliance are not clear. It is not a defence to offences under the EP Act for the Licensee to claim they were unaware of licence conditions. The obligation to comply with conditions of the Licence remains with the</p>	www.der.wa.gov.au



DECISION TABLE			
Works Approval / Licence section	Condition number W = Works Approval L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
		Licensee. Annual Audit Compliance Reporting requirements (conditions 4.1.2 and 4.2.1) have been updated in accordance with DER Guidance Statement: Publication of Annual Audit Compliance Reports.	



5 Advertisement and consultation table

Date	Event	Comments received	Delegated Officer's consideration
07/10/2016	Proponent sent a copy of draft instrument	Stormwater monitoring – The Licensee requested that the increased weekly monitoring should be decreased after 12 months to monthly based on the assessed risk.	The Delegated Officer has decided to keep surface water monitoring to weekly. The data will be reviewed after 12 months, and if appropriate the frequency reduced. DER will initiate a licence amendment to reduce the monitoring if the data supports the reduction.
		Groundwater monitoring - The Licensee requested that the increased monthly monitoring should be decreased after 6 months to quarterly based on the assessed risk.	The Delegated Officer has reinstated quarterly groundwater monitoring as this is considered sufficient to capture seasonal trends in groundwater level and quality in accordance with the assessed risk.
		Reporting requirements – the Licensee requested that non-annual reporting requirements should be decreased after 12 months to annual reporting.	The Delegated Officer agrees to review reporting requirements after 12 months and if appropriate reduce reporting to annually. DER will initiate a licence amendment to reduce the reporting frequency if the monitoring data supports the reduction.



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



APPENDIX A – ASSESSMENT OF STORMWATER EMISSIONS

The Licensee has constructed a new surface water drainage system to manage stormwater run-off from the concrete apron at the front of the premises and from the roof of the warehouse. The system is designed to capture the two sources of water separately and then discharge them to a combined system of swales where the relatively clean roof water will dilute the potentially contaminated stormwater from the front of the premises. The surface water treatment system comprises of the following infrastructure and is shown in Figure 1 below:

- Collection gully pit and sump (stormwater);
- Two storage tanks (roof water);
- Bubble-up pit and grate;
- Grassed swale;
- Attenuation swale;
- Outfall swale; and
- Discharge to offsite drainage ditch via stone pitch outfall.

Emission Description

Emission: Stormwater contaminated with fertiliser products including nitrogen, phosphorus and metals discharging off-site to the neighbouring land, groundwater, and drainage systems. The area at the front of the warehouse is deemed a high-risk area as it is the area most prone to fertiliser product being tracked outside of the shed by vehicles. The potentially contaminated stormwater is pumped to the rear of the premises into a bubble-up pit where it will be mixed with clean roof water from the shed. The water will flow through the swales where nutrients can be taken up by planted vegetation and water can infiltrate to ground or discharge offsite into the drainage channel. The stormwater system can discharge offsite into a drainage channel managed by the City of Albany.

Impact: Stormwater high in nutrients and metals has the potential to cause localised contamination and eutrophication of waterways and groundwater. This may be via direct discharge from the premises into the offsite drainage channel or via infiltration to groundwater whilst residing in the swales, especially if the planned vegetation planting is not effective at taking up nutrients.

Controls: The main risk of contamination comes from fertiliser products being tracked outside of the warehouse and washed into stormwater on the concrete apron outside the warehouse. The proponent has developed a dust management plan for the premises that has measures to help reduce the amount of fertiliser product exiting the shed. These measures include:

- One way truck movements through the shed;
- Loading carried out 30m from the exit of the shed;
- Exit area is swept approximately every three days;
- Trucks pass over a rumble strip prior to exiting the shed;
- Shed floor is regularly swept; and
- Staff trained in spill response.

The stormwater system is intended to collect and dilute potentially contaminated stormwater with clean roof water and attenuate it in the swales allowing nutrient uptake by vegetation and infiltration to ground.

Risk Assessment

Consequence: Minor

Likelihood: Possible

Risk Rating: Moderate

Regulatory Controls

Additional regulatory controls have been placed on the licence based on additional monitoring that can be used to provide data to verify the performance and impact of the new swale system that has been constructed.



Condition 2.1.1 has been updated to reflect the new configuration of the surface water drainage system. Discharge points have been specified at the point of discharge of stormwater and roof water into the stormwater system (bubble-up pit), and at the point of discharge from the stormwater system to the offsite drainage ditch.

Condition 3.2.1 has been updated to specify the monitoring requirements for water inputs into the surface water drainage system and at the discharge point to the offsite drainage ditch. Existing monitoring parameters have been used, and the monitoring frequency has been increased to weekly (when flowing) to allow a baseline set of data to be established. The previous monthly and quarterly surface water monitoring frequencies only provided results on three occasions in 2015 due to rainfall occurrences and frequencies. Therefore, the Delegated Officer has increased the frequency to weekly (when flowing) to capture more data.

Table 4.2.2 has been updated accordingly to specify the reporting of the surface water and groundwater monitoring.

Residual Risk

Consequence: Minor

Likelihood: Possible

Risk rating: Moderate

After 12 months of the stormwater treatment system operating DER will review the monitoring data and determine if the increased surface water monitoring and reporting requirements are still warranted.

