Protection of the Environment Operations Act 1997

General Terms of Approval - Issued

Notice No: 1538137

Mr Paul Henry

General Manager

Inverell Shire Council

PO Box 138

INVERELL NSW 2360

Attention: Mr Chris Faley

Notice Number	1538137
File Number	EF15/16945
Date	05-Jul-2016

Re: DA 15/2016 - NULLAMANNA FEEDLOT EXPANSION - NULLAMANNA STATION, 1633 NULLAMANNA ROAD, NULLAMANNA

Issued pursuant to Section 91A(2) Environmental Planning and Assessment Act 1979

I refer to the development application and accompanying information provided for a proposed feedlot expansion on Nullamanna Station received by the Environment Protection Authority (EPA) on 12 February 2016.

The EPA has reviewed the information provided and has determined that it can issue an environment protection licence (EPL) for the proposal, subject to a number of conditions. The applicant will need to submit a separate application to EPA to obtain the licence.

The general terms of approval for this proposal are provided as attached. If Inverell Shire Council grants development consent for this proposal these conditions should be incorporated into the consent.

These general terms relate to the development as proposed in the documents and information currently provided to EPA. In the event that the development is modified either by the applicant prior to the granting of consent or as a result of the conditions proposed to be attached to the consent, it will be necessary to consult with EPA about the changes before the consent is issued. This will enable EPA to determine whether its general terms need to be modified in light of the changes.

General Terms of Approval - Issued

Notice No: 1538137

Please contact the EPA's Armidale office on 02 6773 7000 or email armidale@epa.nsw.gov.au is you have any question concerning this matter.

Yours sincerely

Michael Lewis

Acting Head Regional Operations Unit

North - Armidale

(by Delegation)

General Terms of Approval - Issued

Notice No: 1538137

Administrative conditions

- The relevant scheduled activity requiring authorisation by an EPL is *Livestock Intensive Activities - Animal accommodation.* Ancillary activities may also be added to the licence.
- The scale of the activity is to be confirmed in a future licence application by the proponent.

A1. Information supplied to the EPA

A1.1 Except as expressly provided by these general terms of approval, works and activities must be carried out in accordance with the proposal contained in:

- the development application DA 15/2016 submitted to Inverell Shire Council on 5 February 2016;
- a statement of environmental effects *Statement of Environmental Effects - Nullamanna Feedlot Expansion* and its appendices (report 23876.81916) relating to the development; and
- additional documents supplied to the EPA in relation to the development including information contained in *Briefing Note 23876.83876 Nullamanna Feedlot Information Request* dated 3 June 2016 and its attachments:
  - Attachment 4: Environmental Monitoring Plan
  - Attachment 5: Updated Soil and Land capability Assessment
  - Attachment 6: Updated Hydrology Assessment

A2. Fit and Proper Person

A2.1 The applicant must, in the opinion of the EPA, be a fit and proper person to hold a licence under the Protection of the Environment Operations Act 1997, having regard to the matters in s.83 of that Act.

Limit conditions

L1. Pollution of waters

L1.1 Except as may be expressly provided by a licence under the Protection of the Environment Operations Act 1997 in relation of the development, section 120 of the Protection of the Environment Operations Act 1997 must be complied with in and in connection with undertaking the development.

General Terms of Approval - Issued

Notice No: 1538137

Discharges to air and water and application to land

Location of monitoring/discharge points and areas

- The following points referred to in the table below are identified for the purposes of monitoring and/or setting of limits for the emission of pollutants to water from the point

EPA Identification no.	Type of Monitoring Point	Type of Discharge Point	Description of Location
TBA	Groundwater quality monitoring		Groundwater monitoring bore north and downhill of the effluent irrigation area identified as 'GW1' in Figure 4 'Map of Groundwater Monitoring Points' within *Attachment 4: Environmental Monitoring Plan* included in *Briefing Note 23876.83876 Nullamanna Feedlot Information Request Response* supplied to the EPA on 6 June 2016
TBA	Groundwater quality monitoring		Groundwater monitoring bore west and downhill of the feedlot, adjacent to the effluent holding pond, identified as 'GW2' in Figure 4 'Map of Groundwater Monitoring Points' within *Attachment 4: Environmental Monitoring Plan* included in *Briefing Note 23876.83876 Nullamanna Feedlot Information Request Response* supplied to the EPA on 6 June 2016
TBA	Surface water quality monitoring		Surface waters of Tumbledown Gully directly downstream of the feedlot identified as 'SW TG' in Figure 3 'Map of Surface Water Monitoring Points' within *Attachment 4: Environmental Monitoring Plan* included in *Briefing Note 23876.83876 Nullamanna Feedlot Information Request* supplied to the EPA on 6 June 2016
TBA	Surface water quality monitoring		Surface waters downstream of the junction of Tumbledown Gully and Frazers Creek identified as 'SW FC' in Figure 3 'Map of Surface Water Monitoring Points' within *Attachment 4: Environmental Monitoring Plan* included in *Briefing Note 23876.83876 Nullamanna Feedlot Information Request* supplied to the EPA on 6 June 2016

Notice No: 1538137

TBA	Surface water quality monitoring		Surface waters of Frazers Creek upstream of the junction of Tumbledown Gully and Frazers Creek identified as 'SW FC Upstream' in Figure 3 'Map of Surface Water Monitoring Points' within *Attachment 4: Environmental Monitoring Plan* included in *Briefing Note 23876.83876 Nullamanna Feedlot Information Request* supplied to the EPA on 6 June 2016
TBA	Soil quality monitoring		Soil of effluent utilisation area identified as 'Soil 1' in Figure 5 'Map showing Soil Monitoring Points' within *Attachment 4: Environmental Monitoring Plan* included in *Briefing Note 23876.83876 Nullamanna Feedlot Information Request Response* supplied to the EPA on 6 June 2016
TBA	Soil quality monitoring		Soil of effluent utilisation area identified as 'Soil 2' in Figure 5 'Map showing Soil Monitoring Points' within *Attachment 4: Environmental Monitoring Plan* included in *Briefing Note 23876.83876 Nullamanna Feedlot Information Request Response* supplied to the EPA on 6 June 2016
TBA	Soil quality monitoring		Soil of effluent utilisation area identified as 'Soil 3' in Figure 5 'Map showing Soil Monitoring Points' within *Attachment 4: Environmental Monitoring Plan* included in *Briefing Note 23876.83876 Nullamanna Feedlot Information Request Response* supplied to the EPA on 6 June 2016
TBA	Effluent quality and volume monitoring, wet weather discharge, discharge quality monitoring of discharge utilised in irrigation area	Effluent quality and volume monitoring, wet weather discharge, discharge quality monitoring of discharge utilised in irrigation area	Effluent holding pond depicted in Figure 1 in Appendix I *Solid and Liquid Waste Management Plan* included in the Statement of Environmental Effects, report number 23876.8196 prepared by EnviroAg Australia Pty Ltd 3 February 2016
TBA	Dam water storage and volume monitoring, wet weather discharge	Runoff quality and volume monitoring, wet weather discharge	Water storage gully dam depicted in Figure 1 in Appendix I *Solid and Liquid Waste Management Plan* included in the Statement of Environmental Effects, report number 23876.8196 prepared by EnviroAg Australia Pty Ltd 3 February 2016
TBA	Manure quality monitoring		
TBA		Weather analysis	Meteorological station on 'Nullamanna Station' at location to be confirmed

Volume and mass limits

L1.2 For each discharge point or utilisation area specified below (by a point number), the volume/mass of:

liquids discharged to water;

or solids or liquids applied to the area, must not exceed the volume/mass limit specified for that discharge point or area.

Point	Specified Volume of runoff
Spillway from the effluent holding pond shown in Figure 1 in Appendix I *Solid and Liquid Waste Management Plan* included in the Statement of Environmental Effects, report number 23876.8196 prepared by EnviroAg Australia Pty Ltd dated 3 February 2016	Either: the runoff volume from the *controlled drainage area* draining to the effluent holding pond from a 1 in 20 year, 24 hour storm event, using volumetric runoff coefficients of 0.8 for the feedlot pens, roadways and other hard stand areas and 0.4 for grassed areas within the *controlled drainage area*; OR the runoff volume from the *controlled drainage area* in a 90th percentile wet year determined from a water balance, calculated using no longer than average monthly evaporation losses from the ponds, monthly withdrawals for irrigation, daily (or weekly) input data and using a volumetric runoff coefficient of 0.4; whichever is greater.

For the purposes of this condition:

(a) Australian Rainfall and Runoff Data and rainfall data from the Australian Bureau of Meteorology for the premises is to be used to calculate the volume of runoff from a 1 in 20 year, 24 hour storm event and 90% percentile wet year;

(b) the *controlled drainage area* consists of the Pen, Hard, Soft and Pond catchment areas defined on plan titled "Fig 1 in Appendix I *Solid and Liquid Waste Management Plan* included in the Statement of Environmental Effects, report number 23876.8196 prepared by EnviroAg Australia Pty Ltd dated 3 February 2016 and placed on file no. DOC16/676752-04; and

(c) the *effluent utilisation area* consists of the Soil of effluent utilisation area identified as 'Soil 3' in Figure 5 'Map showing Soil Monitoring Points' within *Attachment 4: Environmental Monitoring Plan* included in *Briefing Note 23876.83876 Nullamanna Feedlot Effluent Reuse and placed on file DOC16/286907*.

L3. Waste

L3.1 The licensee must not cause, permit or allow any waste generated outside the premises to be received at the premises for storage, treatment, processing, re-processing or disposal or any waste generated at the premises to be disposed of at the premises, except as expressly permitted by a licence under the Protection of the Environment Operations Act 1997.

L3.2 This condition only applies to the storage, treatment, processing, re-processing or disposal of waste at the premises if it requires an environment protection licence under the Protection of the Environment Operations Act 1997.

L4. Noise limits

L4.1 Noise generated at the premises (other than during construction) must not exceed the noise limits in the table below at the localities specified. The location referred to in Figure 3 "*Nearest sensitive receptors in relation to the*

current feedlot and the expansion plan" - listed on page 5 – Nullamanna Expansion SEE_Rev 0 – Filename 23876.81916 (Project Document Number 23876.81916) dated 3 February 2016.

		NOISE LIMITS dB(A)			
Locality	Location	Day	Evening	Night	
		LAeq (15 minute)	LAeq (15 minute)	LAeq (15 minute)	LAmax
Shalom Grove	*Nullamanna*	35	35	35	45
Whispering Willows	*Nullamanna*	35	35	35	45
Belmore	*Nullamanna*	35	35	35	45
Pineleigh	*Nullamanna*	35	35	35	45
Five Corners	*Nullamanna*	35	35	35	45
Hillview	*Nullamanna*	35	35	35	45

L4.2 For the purpose of condition 1:

- Day is defined as the period from 7am to 6pm Monday to Saturday and 8am to 6pm Sunday and Public Holidays.
- Evening is defined as the period 6pm to 10pm.
- Night is defined as the period from 10pm to 7am Monday to Saturday and 10pm to 8am Sunday and Public Holidays.

L4.3 Construction activity is permitted between the hours of 7:00 am to 6:00 pm Monday to Friday and Saturday 8:00 am to 1:00 pm, with no construction activity on Sundays and Public Holidays. Construction activity is permitted outside these hours that does not generate more than 35dBLAeq(15minute) at any of the locations listed in condition 1.

Activities that may also be undertaken outside the hours specified in condition 2 are:
a) the delivery of oversized plant or structures that police or other authorised authorities determine require special arrangements to transport along public roads;
b) emergency activities to avoid the loss of life or property, or to prevent environmental harm.

L4.4 The noise limits set out in condition 1 apply under all meteorological conditions except for the following:

a) Wind speeds greater than 3 metres/second at 10 metres above ground level; or
b) Stability category F temperature inversion conditions and wind speeds greater than 2 metres/second at 10 metres above ground level; or

Stability category G temperature inversion conditions.

L4.5 For the purposes of condition 4.4:

c) Data recorded by the meteorological station identified as EPA Identification Point (TBA) must be used to determine meteorological conditions; and
d) Temperature inversion conditions (stability category) are to be determined by the sigma-theta method referred to in Part E4 of Appendix E to the NSW Industrial Noise Policy.

L4.6 To determine compliance:

a) with the Leq(15 minute) noise limits in the noise limits in condition 1, the noise measurement equipment must be located:

- approximately on the property boundary, where any dwelling is situated 30 metres or less from the property boundary closest to the premises; or
- within 30 metres of a dwelling façade, but not closer than 3m, where any dwelling on the property is situated more than 30 metres from the property boundary closest to the premises; or, where applicable
- within approximately 50 metres of the boundary of a National Park or a Nature Reserve.

b) with any LAmax noise limits in condition 1, the noise measurement equipment must be located within 1 metre of a dwelling facade.

c) with the noise limits in condition 1, the noise measurement equipment must be located:

- at the most affected point at a location where there is no dwelling at the location; or
- at the most affected point within an area at a location prescribed by conditions 6(a) or 6(b).

L 4.7 A non-compliance of condition 1 will still occur where noise generated from the premises in excess of the appropriate limit is measured:

- at a location other than an area prescribed by conditions 6(a) and 6(b); and/or
- at a point other than the most affected point at a location.

L4.8 For the purposes of determining the noise generated at the premises the modification factors in Section 4 of the NSW *Industrial Noise Policy* must be applied, as appropriate, to the noise levels measured by the noise monitoring equipment.

L5. *Other limit conditions*

L5.1 The total number of cattle accommodated within the feedlot pens on the premises at any one time must not exceed 3,000 head.

L6. Odour

L6.1 No condition of this licence identifies a potentially offensive odour for the purposes of section 129 of the Protection of the Environment Operations Act 1997.

Note: Section 129 of the Protection of the Environment Operations Act 1997, provides that the licensee must not cause or permit the emission of any offensive odour from the premises but provides a defence if the emission is identified in the relevant environment protection licence as a potentially offensive odour and the odour was emitted in accordance with the conditions of a licence directed at minimising odour.

L6.2 The facility must be run in a proper and efficient manner consistent with the processes and practices described within the Statement of Environmental Effects. This includes but is not limited to:

- stocking density in pens to allow at least 15 square metres per Standard Cattle Unit (SCU)
- pens to be cleaned at least once every 13 weeks
- manure depth in pens maintained at no more than 50 millimetres (mm)

L6.3 The facility must maintain a register of odour complaints and keep a record of the actions taken to investigate each complaint and any actions taken to reduce odour emissions.

Notice No: 1538137

Operating conditions

O1. Dust

O1.1 The premises must be maintained in a condition which minimises or prevents the emission of dust from the premises.

O1.2 The premises must be maintained in a condition which minimises or prevents the emission of dust from the premises.

O1.3 Trucks entering and leaving the premises that are carrying loads other than livestock must be covered at all times, except during loading and unloading.

O2. Stormwater/sediment control - Construction and Operational Phases

O2.1 An Erosion and Sediment Control Plan (ESCP) for the feedlot expansion construction stage must be prepared and implemented and a copy supplied to the EPA prior to the commencement of any construction. The plan must describe the measures that will be employed to minimise soil erosion and the discharge of sediment and other pollutants to lands and/or waters during construction activities. The ESCP should be prepared in accordance with relevant guidelines including *Managing Urban Stormwater: Soils and Construction, Volume 1, 4th Edition March 2004.*

O2.2 An ESCP for the operational stage must be prepared and implemented and a copy supplied to the EPA prior to the commencement of expanded feedlot operations. The plan must describe the measures that will be employed to minimise soil erosion and the discharge of sediment and other pollutants to lands and/or waters during operational activities for the life of the feedlot operation. The ESCP should be prepared in accordance with relevant guidelines including *Managing Urban Stormwater: Soils and Construction, Volume 1, 4th Edition March 2004.*

O3. Maintenance of Effluent Holding Pond

O3.1 The effluent holding pond must be maintained to ensure that sedimentation does not reduce its capacity to a point whereby it is no longer capable of capturing the specified volume of runoff defined at condition L1.2.

O4. Effluent Utilisation Areas

O4.1 Effluent and manure compost must only be applied to the areas described in Appendix I *Solid and Liquid Waste Management Plan* (the plan) included with the Statement of Environmental Effects.

O4.2 Effluent from the holding pond associated with the feedlot must be managed in accordance with the measures and practices detailed in the plan and Appendix J (Groundwater Management Plan) included with the Statement of Environmental effects.

O4.3 Waste water irrigation must only occur when there is no rainfall forecast by the Bureau of Meteorology for the site within a period of at least the next 48 hours.

O4.4 Effluent application must not occur in a manner which causes surface runoff.

O4.5 Livestock access to any effluent application area must be denied during irrigation and until the applied effluent has dried.

O4.6 Spray from effluent application must not drift beyond the boundary of the waste water utilisation area to which it is applied.

O4.7 Contaminated Agricultural Runoff (CAR) or tailwater dams must be constructed in the following areas to contain runoff:

- silage pits

- south of the feedlot access road
- west of the proposed effluent utilisation area
- near Tumbledown Gully below the existing gully dam to ensure the gully is not subject to runoff from irrigation areas

O4.8 The proponent must construct tailwater dams in the nominated areas to contain the first 12 mm of runoff where there is normally no tailwater generated by feedlot by-product application, and at least 25 mm of runoff where tailwater is generated (e.g. flood irrigation or inefficient spray irrigation). The proponent should construct and manage tail water systems in accordance with Appendix E *Effluent and nutrition utilisation* within the *National Guidelines for Beef Cattle Feedlots in Australia, 3rd Edition (2012).*

O4.9 The design and location of the tailwater dams will be in accordance with relevant EIS appendices and subject to final survey and development approval conditions.

O5. Maintaining Waste Utilisation Areas

O5.1 The effluent utilisation areas must effectively utilise the waste water applied to those areas. This includes the use for pasture or crop production, as well as ensuring the soil is able to absorb the nutrients, salts, hydraulic load and organic materials in the solids or liquids. Monitoring of land and receiving waters to determine the impact of waste water application will be required by the EPA.

O6. Solid Waste Storage

O6.1 Solid wastes generated by the feedlot must be stored on an impermeable pad within the controlled drainage area.

O7. Maintenance of Feedlot Pens

O7.1 The feedlot pen surface must be maintained to prevent infiltration.

O8. Groundwater management

O8.1 A groundwater monitoring plan (GWMP) must be prepared and implemented for the operational life of the feedlot.

O8.2 The GWPM must implement the measures and practices contained in Appendix J *Groundwater Management Plan* included with the Statement of Environmental Effects.

O8.3 Groundwater monitoring must be initially undertaken every six months at the two bores identified in the plan for the following analytes:

- standing water levels
- pH
- electrical conductivity
- total Nitrogen
- Nitrate
- Nitrite
- Ammonia
- total Phosphorous

O8.4 Upon review of the results of monitoring, the EPA in consultation with the proponent may amend the monitoring interval.

O9. Environmental Monitoring

O9.1 The proponent must develop an environmental monitoring plan (EMP) that meets the satisfaction of the EPA

O9.2 The EMP must include details of and justification for the monitoring program for:

- soil characteristics
- composted manure quality and quntity
- effluent quality and quantity
- surface water quality

O9.3 The EMP must be prepared and implemented in accordance with relevant guidelines including

- *Development of Indicators of Sustainability for Effluent Reuse in the Intensive Livestock Industries: Piggeries and Cattle Feedlots* (McGahan and Tucker, 2003)
- *Environmental Guidelines: Use of Effluent by Irrigation* (DEC, 2004)

O9.4 The monitoring requirements of the EMP may be varied in consultation with the EPA after review and assessment of monitoring results and assessment of the environmental sustainability of the feedlot.

O10. Water Management

O10.1 The Proponent must develop a Water Management Plan (WMP) in consultation with the EPA prior to commencement of feedlot construction or operation. The WMP must include but is not limited to:

- nutrient, salt, and water balance assessments, accounting for all effluent, manure, and carcasses generated on the premises;
- specifications and design details of the effluent management system components, including the design storm sizing for the effluent holding pond (i.e. 'X year ARI X hr rainfall event equal to X mm') and justification for sizing of the irrigation tailwater ponds as per the recognised standard in *The National Guidelines for Beef Cattle Feedlots* recommending that terminal ponds be constructed to capture the first 12 mm of rainfall run-off plus the irrigation tail-water run-off;
- an operational monitoring program.

O10.2 With regard to nutrient, salt, and water balance assessments, they must be consistent with the relevant guidelines, including the *Development of Indicators of Sustainability for Effluent Reuse in the Intensive Livestock Industries: Piggeries and Cattle Feedlots (*McGahan and Tucker, 2003), and prepared by a suitably qualified and experienced person. The nutrient, salt, and water balance assessments must include but are not limited to:

estimations of the total quantities of nitrogen, phosphorus, and salt excreted by stock and released from carcasses on the premises annually, and identification of the fate of these materials;

- calculations to demonstrate the sustainability of any soil phosphorus storage;
- water balance modelling to support sizing of the effluent reuse area that includes, but need not be limited to:

- volumes of rainfall to and evaporation, percolation, and run-off from the controlled drainage area;

- expected annual frequency and volume of any managed overflows from the controlled drainage area;

- expected annual volume of effluent reused.

O10.3 The operational monitoring program must align with the practices and principles contained in the *Development of Indicators of Sustainability for Effluent Reuse in the Intensive Livestock Industries: Piggeries and Cattle Feedlots* (McGahan and Tucker, 2003) and should include but is not limited to:

- collection of multiple composite soil samples from the reuse areas to represent the variability in conditions;
- monitoring of quantities of manure sold off-site and effluent and manure reused;
- monitoring of quantities of crops harvested from each reuse area;
- a review of the monitoring program after the initial three years subject to the monitoring results.

Monitoring and recording conditions

M1. Monitoring records

M1.1 The results of any monitoring required to be conducted by the EPA's general terms of approval, or a licence under the Protection of the Environment Operations Act 1997, in relation to the development or in order to comply with the load calculation protocol must be recorded and retained as set out in conditions.

M1.2 All records required to be kept by the licence must be:

a) in a legible form, or in a form that can readily be reduced to a legible form;

b) kept for at least 4 years after the monitoring or event to which they relate took place; and

c) produced in a legible form to any authorised officer of the EPA who asks to see them.

M1.3 The following records must be kept in respect of any samples required to be collected: the date(s) on which the sample was taken;

a) the time(s) at which the sample was collected;

b) the point at which the sample was taken; and

c) the name of the person who collected the sample.

M2. Requirement to monitor concentration of pollutants discharged

M2.1 For each monitoring/ discharge point or utilisation area specified below (by a point number), the applicant must monitor (by sampling and obtaining results by analysis) the concentration of each pollutant specified in Column 1. The applicant must use the sampling method, units of measure, and sample at the frequency, specified opposite in the other columns:

General Terms of Approval - Issued

Notice No: 1538137

Groundwater monitoring bores **Water and Land**

Pollutant	Units of measure	Frequency	Sampling Method
Conductivity	micro siemens per centimetre	Every 6 months	In situ
Nitrate	milligrams per litre	Every 6 months	Representative sample
Nitrite	milligrams per litre	Every 6 months	Representative sample
Nitrogen (ammonia)	milligrams per litre	Every 6 months	Representative sample
Nitrogen (total)	milligrams per litre	Every 6 months	Representative sample
pH	pH	Every 6 months	In situ
Phosphorous (total)	milligrams per litre	Every 6 months	Representative sample
Potassium	milligrams per litre	Every 6 months	Representative sample
Reactive Phosphprus	milligrams per litre	Every 6 months	Representative sample
Standing Water Level	milligrams per litres	Every 6 months	Representative sample

Surface water monitoring

Pollutant	Units of measure	Frequency	Sampling Method
Chloride	milligrams per litre	Special Frequency 1	Representative sample
Conductivity	micro siemens per litre	Special Frequency 1	In situ
Flow	cubic metres per second	Special Frequency 1	Representative sample
Nitrate	milligrams per litre	Special Frequency 1	Representative sample
Nitrogen (ammonia)	milligrams per litre	Special Frequency 1	Representative sample
Nitrogen (total)	milligrams per litre	Special Frequency 1	Representative sample
Phosphorous (total)	milligrams per litre	Special Frequency 1	Representative sample
Potassium	milligrams per litre	Special Frequency 1	Representative sample

Reactive Phosphorous	milligrams per litre	Special Frequency 1	Representative sample
Total Kjeldahl Nitrogen	milligrams per litre	Special Frequency 1	Representative sample
Total suspended solids	milligrams per litre	Special Frequency 1	Representative sample

Soil monitoring

Pollutant	Units of measure	Frequency	Sampling Method
Aggregate stability	As appropriate	Every 3 years	Special method 1
Available phosphorous	milligrams per kilogram	Yearly	Special method 1
Bulk density	kilograms per cubic metre	Every 3 years	Special method 1
Cation exchange capacity	centimoles of positive charge per kilogram of soil	Yearly	Special method 1
Chloride	milligrams per kilogram	Yearly	Special method 1
Conductivity	micro siemens per centimetre	Yearly	Special method 1
Exchangeable calcium	centimoles of positive charge per kilogram of soil	Yearly	Special method 1
Exchangeable magnesium	centimoles of positive charge per kilogram of soil	Yearly	Special method 1
Exhcnageable potassium	centimoles of positive charge per kilogram of soil	Yearly	Special method 1
Exchangeable sodium	centimoles of positive charge per kilogram of soil	Yearly	Special method 1
Exchangeable sodium percentage	percentage	Yearly	Special method 1
Nitrate	milligrams per kilogram	Yearly	Special method 1
Nitrogen (total)	milligrams per kilogram	Yearly	Special method 1
Organic carbon	percentage	Yearly	Special method 1
pH	pH	Yearly	Special method 1

Phosphorous sorption capacity	kilograms per hectare	Every 3 years	Special method 1
Sodium adsorption ratio	Sodium adsorption ratio	Yearly	Special method 1

M2.2 Special frequency 1 means the collection of samples must occur within 24 hours of each overflow even from the holding pond and at lease once every 6 months.

M2.3 Special method 1 means that for each paddock/management unit within the utilisation areas, representative composite samples must be taken of topsoils and sub-soils.

M3. Weather monitoring

M3.1 At the point identified below the license must (by sampling and obtaining results by analysis) the parameters specified in Column 1 of the table below. using the corresponding sampling method, units of measure, averaging period and sampling frequency specified opposite in Columns 2, 3, 4 and 5 respectively.

Point TBA (Meteorological station)

Parameter	Sampling method	Unit of Measure	Averaging period	Frequency
Rainfall	AM-4	Millimetres per hour	1 hour	Continuous
Wind speed at 10 metres	AM-2 and AM-4	Metres per second	15 minutes	Continuous
Wind direction at 10 metres	AM-2 and AM-4	Degrees in a clockwise direction from True North	15 minutes	Continuous
Temperature at 2 metres	AM-4	Degrees celsius	15 minutes	Continuous
Temperature at 10 metres	AM-4	Degrees celsius	15 minutes	Continuous
Sigma theta	AM-4	Degrees in a clockwise direction from True North	15 minutes	Continuous
Total solar radiation	AM-4	Watts per square metre	15 minutes	Continuous
Siting	Special method 5	-	-	-

M3.2 For the purposes of the table above, Special method 5 means that both AM-1 and AM-5 must be used and that the proponent must install a permanent meteorological station (the station) and data logger.

M3.3 The location of the site for the station and the details of equipment, measurement and maintenance/service procedures and schedules to be installed and implemented mist be submitted in writing to the EPA, and be approved in writing by the EPA, before any sampling or analysis is carried out.

M3.4 The station must be calibrated at least once every 12 months.

M3.5 The proponent must provide meteorological data from the station to the EPA upon request in a format compatible with software used by the EPA, including but not limited to Microsoft Office 2013.

M4. Requirement to monitor volume or mass

M4.1 For each discharge point or utilisation area specified below, the applicant must monitor:

a) the volume of liquids discharged to water or applied to the area;

b) the mass of solids applied to the area;

c) the mass of pollutants emitted to the air,

over the interval, at the frequency and using the method and units of measure, specified below.

Point	Frequency	Units of Measure	Sampling Method
Manure compost area	Continuous	Tonnes	Special method 5
Effluent irrigation area	Daily during any discharge	Kilolitres per day	Special Method 3
Manure utilisation area	Yearly	Kilograms per hectare	Special Method 4
Effluent holding pond	Daily during any discharge	Kilolitres per day	By calculation (volume flow or pump capacity multiplied by operating time)

M4.2 For the purposes of the table above Special Method 3 means that the mass of:

a) nutrients (Total Phosphorus, Total Nitrogen and Potassium) applied to each paddock/management unit within the Wastewater Utilisation Area; and

b) crop yield (dry matter) and nutrients removed (Total Phosphorus, Total Nitrogen and Potassium) from each paddock/management unit within the Wastewater Utilisation Area;

must be monitored.

M4.3 For the purposes of the table above Special Method 4 means that the mass of:

a) manure (dry matter) and nutrients (Total Phosphorus, Total Nitrogen and Potassium) applied to each paddock/management unit within the Solid Waste Utilisation Areas; and

b) crop yield (dry matter) and nutrients removed (Total Phosphorus, Total Nitrogen and Potassium) from each paddock/management unit within the Solid Waste Utilisation Areas;

must be monitored.

M4.4 For the purposes of the tables above Special Method 5 means by weighing each load of solids taken from the stockpiles.

M5. Testing methods - concentration limits

M5.1 Monitoring for the concentration of a pollutant discharged to waters or applied to a utilisation area required by the relevant condition must be done in accordance with:

a) the Approved Methods publication; or

b) if there is no methodology required by the Approved Methods publication or by the general terms of approval or in the licence under the Protection of the Environment Operations Act 1997 in relation to the development or the relevant load calculation protocol, a method approved by the EPA in writing before any tests are conducted, unless otherwise expressly provided in the licence.

Reporting conditions

R1. Annual return documents

R1.1 The licensee must complete and supply to the EPA an Annual Return in the approved form comprising:
a) a Statement of Compliance; and
b) a Monitoring and Complaints Summary.
At the end of each reporting period, the EPA will provide to the licensee a copy of the form that must be completed and returned to the EPA.

R1.2 An Annual Return must be prepared in respect of each reporting period, except as provided below.

Note: The term "reporting period" is defined in the dictionary at the end of this licence. Do not complete the Annual Return until after the end of the reporting period.

R1.3 Where this licence is transferred from the licensee to a new licensee:
a) the transferring licensee must prepare an Annual Return for the period commencing on the first day of the reporting period and ending on the date the application for the transfer of the licence to the new licensee is granted; and
b) the new licensee must prepare an Annual Return for the period commencing on the date the application for the transfer of the licence is granted and ending on the last day of the reporting period.

Note: An application to transfer a licence must be made in the approved form for this purpose.

R1.4 Where this licence is surrendered by the licensee or revoked by the EPA or Minister, the licensee must prepare an Annual Return in respect of the period commencing on the first day of the reporting period and ending on:
a) in relation to the surrender of a licence - the date when notice in writing of approval of the surrender is given; or
b) in relation to the revocation of the licence - the date from which notice revoking the licence operates.

R1.5 The Annual Return for the reporting period must be supplied to the EPA by registered post not later than 60 days after the end of each reporting period or in the case of a transferring licence not later than 60 days after the date the transfer was granted (the 'due date').

R1.6 The licensee must retain a copy of the Annual Return supplied to the EPA for a period of at least 4 years after the Annual Return was due to be supplied to the EPA.

R1.7 Within the Annual Return, the Statement of Compliance must be certified and the Monitoring and Complaints Summary must be signed by:
a) the licence holder; or

b) by a person approved in writing by the EPA to sign on behalf of the licence holder.

R1.8 A person who has been given written approval to certify a certificate of compliance under a licence issued under the Pollution Control Act 1970 is taken to be approved for the purpose of this condition until the date of first review of this licence.

Notice No: 1538137

Attachment – Mandatory Conditions for all environment protection licences

Administrative conditions

Operating conditions

Activities must be carried out in a competent manner

Licensed activities must be carried out in a competent manner.

This includes:

a. the processing, handling, movement and storage of materials and substances used to carry out the activity; and

b. the treatment, storage, processing, reprocessing, transport and disposal of waste generated by the activity.

Maintenance of plant and equipment

All plant and equipment installed at the premises or used in connection with the licensed activity:

a. must be maintained in a proper and efficient condition; and

b. must be operated in a proper and efficient manner.

Monitoring and recording conditions

Recording of pollution complaints

The licensee must keep a legible record of all complaints made to the licensee or any employee or agent of the licensee in relation to pollution arising from any activity to which this licence applies.

The record must include details of the following:

- the date and time of the complaint;
- the method by which the complaint was made;
- any personal details of the complainant which were provided by the complainant or, if no such details were provided, a note to that effect;
- the nature of the complaint;
- the action taken by the licensee in relation to the complaint, including any follow-up contact with the complainant; and
- if no action was taken by the licensee, the reasons why no action was taken.

The record of a complaint must be kept for at least 4 years after the complaint was made.

The record must be produced to any authorised officer of the EPA who asks to see them.

Telephone complaints line

The licensee must operate during its operating hours a telephone complaints line for the purpose of receiving any complaints from members of the public in relation to activities conducted at the premises or by the vehicle or mobile plant, unless otherwise specified in the licence.

The licensee must notify the public of the complaints line telephone number and the fact that it is a complaints line so that the impacted community knows how to make a complaint.

This condition does not apply until 3 months after this condition takes effect.

Reporting conditions

Annual Return documents

What documents must an Annual Return contain?

The licensee must complete and supply to the EPA an Annual Return in the approved form comprising:

a. Statement of Compliance; and

b. Monitoring and Complaints Summary.

A copy of the form in which the Annual Return must be supplied to the EPA accompanies this licence. Before the end of each reporting period, the EPA will provide to the licensee a copy of the form that must be completed and returned to the EPA.

Period covered by Annual Return

An Annual Return must be prepared in respect of each reporting, except as provided below

Note: The term "reporting period" is defined in the dictionary at the end of this licence. Do not complete the Annual Return until after the end of the reporting period.

Where this licence is transferred from the licensee to a new licensee,

a. the transferring licensee must prepare an annual return for the period commencing on the first day of the reporting period and ending on the date the application for the transfer of the licence to the new licensee is granted; and

b. the new licensee must prepare an annual return for the period commencing on the date the application for the transfer of the licence is granted and ending on the last day of the reporting period.

Note: An application to transfer a licence must be made in the approved form for this purpose.

Where this licence is surrendered by the licensee or revoked by the EPA or Minister, the licensee must prepare an annual return in respect of the period commencing on the first day of the reporting period and ending on

in relation to the surrender of a licence - the date when notice in writing of approval of the surrender is given; or

c. in relation to the revocation of the licence – the date from which notice revoking the licence operates.

General Terms of Approval - Issued

Notice No: 1538137

and the event has caused, is causing or is likely to cause material harm to the environment (whether the harm occurs on or off premises to which the licence applies), the authorised officer may request a written report of the event.

The licensee must make all reasonable inquiries in relation to the event and supply the report to the EPA within such time as may be specified in the request.

The request may require a report which includes any or all of the following information:

a. the cause, time and duration of the event;

b. the type, volume and concentration of every pollutant discharged as a result of the event;

c. the name, address and business hours telephone number of employees or agents of the licensee, or a specified class of them, who witnessed the event; and

d. the name, address and business hours telephone number of every other person (of whom the licensee is aware) who witnessed the event, unless the licensee has been unable to obtain that information after making reasonable effort;

e. action taken by the licensee in relation to the event, including any follow-up contact with any complainants;

f. details of any measure taken or proposed to be taken to prevent or mitigate against a recurrence of such an event;

g. any other relevant matters.

The EPA may make a written request for further details in relation to any of the above matters if it is not satisfied with the report provided by the licensee. The licensee must provide such further details to the EPA within the time specified in the request.

General conditions

Copy of licence kept at the premises or on the vehicle or mobile plant

A copy of this licence must be kept at the premises or on the vehicle or mobile plant to which the licence applies.

The licence must be produced to any authorised officer of the EPA who asks to see it.

The licence must be available for inspection by any employee or agent of the licensee working at the premises or operating the vehicle or mobile plant.