

Licence

Environmental Protection Act 1986, Part V

Licensee: Ausvision Rural Services Pty Ltd

Licence: L6859/1987/12

Registered office: Ausvision Rural Services Pty Ltd

28 Charles Street SOUTH PERTH WA 6151

ACN: 106 075 763

Premises address: Narrogin Farm Lot 566 on Deposited Plan 409391 394 Narrakine Road DUMBERNING, WA 6312 as depicted in Schedule 1 map.

Issue date: 8 September 2011

Commencement date: 2 October 2011

Expiry date: 1 October 2036

Prescribed premises category

Schedule 1 of the Environmental Protection Regulations 1987

Category number	Category description		Premises production or design capacity
2	Intensive Piggery: premises on which pigs are fed, watered and housed in pens.	More than 5 000 animals	Not more than 9,500 animals

Conditions

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

Date signed: 7 August 2018

Caron Goodbourn A/Manager, Process Industries Officer delegated under section 20 of the *Environmental Protection Act 1986*



Contents

Licence	1
Contents	2
Introduction	2
Licence conditions	5
1 General	5
2 Emissions	8
3 Monitoring	9
5 Information	9
Schedule 1: Maps	11
Schedule 2: Form	13

Introduction

This Introduction is not part of the Licence conditions.

DWER's industry licensing role

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

DWER has responsibilities under Part V of the *Environmental Protection Act 1986* (the Act) for the licensing of prescribed premises. Through this process DWER works with the business owners, community, consultants, industry and other representatives to prevent, control and abate pollution and environmental harm to conserve and protect the environment. DWER also monitor and audit compliance with works approvals and licence conditions, take enforcement action as appropriate and develop and implement licensing and industry regulation policy.

Licence requirements

This licence is issued under Part V of the Act. Conditions contained with 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.

Other guidelines and relevant industry standards which you should be aware of include:

- National Environmental Guidelines for Piggeries, 2nd edition, published by Australia Pork Limited, 2010; and
- 'Water Quality Protection Notes (WQPN)' published by Department of Water.

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

The Narrogin Farm is a 'prescribed Premises' under Category 2, Schedule 1 of the *Environmental Protection Regulations 1987* - Premises on which pigs are fed, watered and housed in pens.

Shire of Narrogin advised that piggeries are listed as 'SA' under the Shire of Narrogin Town Planning Scheme No. 2. This means that piggeries are not allowed to operate unless they have relevant approvals from the Shire. A Restrictive Covenant was provided for the adjoining Lot 566, previously listed as the Piggery Manager's residence, due to the proximity to the piggery. Any proposal to increase pig numbers on Lot 566, will not only require an amendment application, but will also require planning approval from the Shire of Narrogin.

The piggery operates with a combination of eco-shelters and conventional sheds, where the design capacity of the conventional sheds is 9,500 pigs. The nearest surface water body is Bottle Creek, located 2.3 km in a north west direction and the Williams River is 4 km south of the Premises. The average rainfall of the area is recorded at 494 mm per year. The Premises is located adjacent to the Narrogin Beef Feedlot about 5 km south of the Narrogin town site.

An analysis of the soil profile shows that the piggery is located on clayey sand soils with a trace of gravel. Nutrient levels as indicated by bore monitoring are high in the vicinity of the ponds, which may indicate potential seepage.

All wastewater from the conventional sheds is channelled below ground to the wastewater treatment system via a concrete lined sump. The wastewater is pumped through a vertical screen where solids fall into a concrete hardstand and the effluent is diverted to a large, clay lined anaerobic pond (Pond 1). The wastewater is then gravity fed into a series of two clay lined aerobic ponds (Ponds 2 and 3). From Pond 3, it is pumped back to a concrete lined settling tank and then into a recycling tank where it can be used on site for cleaning and flushing operations. Both scheme and recycled wastewater are used to hand spray the pens and flush the drains beneath the conventional sheds, where the flushing



occurs every 7 - 10 days on a rotation system for each pen. Recycled water is not irrigated on the premises. Pond 4 is a large evaporation pond but, due to the recycling of wastewater, this pond is rarely used. All wastewater storage ponds were desludged in 2009. There are two stormwater dams located in the south and east of the Premises used to capture stormwater runoff.

Odour generation is a potentially significant emission from the premises because of the solid and liquid waste created during operations. Odour emissions can be generated from both the conventional sheds and the wastewater treatment process if not properly managed.

Solid waste from the screening process and from the eco-shelters are stored onsite on concrete or clay hardstand areas and removed from the Premises fortnightly for distribution on local agricultural land. Deceased animals are buried on the Premises in designated clay lined burial pits and covered with suitable covering to limit odour, vermin and feral animals.

Instrument log			
Instrument	Issued	Description	
Instrument number	Date of issue or	Reason for issue of instrument	
and version	amendment	e.g. ministers decision must be recorded	
L6859/1987/5	27/09/2000	Licence Reissue	
L6859/1987/6	26/09/2001	Licence Reissue	
L6859/1987/7	16/09/2002	Licence Reissue	
L6859/1987/8	8/09/2003	Licence Reissue	
L6859/1987/9	14/09/2004	Licence Reissue	
L6859/1987/10	11/07/2005	Licence Reissue	
L6859/1987/11	25/09/2008	Licence Reissue	
L6859/1987/11	18/8/2011	Licence Amended to reflect change in pig numbers	
L6859/1987/12	8/09/2011	Licence Reissue	
L6859/1987/12	25/11/2011	Licence Amended to reflect change in pig numbers	
L6859/1987/12	20/09/2013	Licence Amendment to reflect new REFIRE licensing	
		format	
L6859/1987/12	21/05/2015	Licence transfer from Craig Mostyn Pty Ltd to Pearl Pty Ltd	
L6859/1987/12	29/04/2016	the licence expiry date was extended by an administrative	
		notice	
L6859/1987/12	14/06/2017	Amendment Notice 1- Boundary re-alignment including a	
		change in lot description from Lot 2581 and Lot 2582 to Lot	
		566 Narrakine Road, Dumberning.	
L6859/1987/12	8/08/2018	Licence transfer from Pearl Pty Ltd to Ausvision Rural	
		Services Pty Ltd	

The licences and works approvals issued for the Premises since 1987 include:

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:

'Act' means the Environmental Protection Act 1986;

annual period" means the inclusive period from 1 June to 31 May in the following year;

'carcass' means the dead body of animal (pig);

'CEO' means Chief Executive Officer of the Department of Water and Environmental Regulation;

'CEO' for the purpose of correspondence means;

Chief Executive Officer Department of Water and Environmental Regulation Locked Bag 33 CLOISTERS SQUARE WA 6850 Email: <u>info@dwer.wa.gov.au</u>

'Code of Practice for the Storage and handling of dangerous goods' means the "Storage and handling of dangerous goods, Code of Practice" published by the Department of Mines and Petroleum, as amended from time to time;

'dangerous goods' has the meaning defined in the Dangerous Goods Safety (Storage and Handling of Non-explosives) Regulations 2007;

'environmentally hazardous material' means material (either solid or liquid raw materials, materials in the process of manufacture, manufactured products, products used in the manufacturing process, by-products and waste) which if discharged into the environment from or within the premises may cause pollution or environmental harm. Note: Environmentally hazardous materials include dangerous goods where they are stored in quantities below placard quantities. The storage of dangerous goods above placard quantities is regulated by the Department of Mines and Petroleum;

'freeboard' means the distance between the maximum water surface elevations and the top of retaining banks or structures at their lowest point.;

'fugitive emissions' means all emissions not arising from point sources;

'hardstand' means a surface with a permeability of 10⁻⁹ metres/second or less;

'leachate' means liquid released by or water that has percolated through waste and which contains some of its constituents.

'Licence' means this Licence numbered L6859/1987/12, including Amendment Notice 1 and issued under the Act;



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

'NEGP' means the current version of the National Environmental Guidelines for Piggeries, as amended from time to time;

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

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

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

'sludge' means any mud-like deposit or mixtures of faecal matter and spilt feed derived from the pens;

'solids' means any solid or spadeable faecal matter and spilt feed derived from the pens; and

'wastewater treatment system' means a wastewater and effluent management system consisting of catch drain, anaerobic and aerobic ponds, evaporative pond, settling tank(s) and storage tank(s);

- 1.1.3 Any reference to an Australian or other standard in the Licence means the relevant parts of the standard in force from time to time during the term of this Licence.
- 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 Nothing in the Licence shall be taken to authorise any emission that is not mentioned in the Licence, where the emission amounts to:
 - (a) pollution;
 - (b) unreasonable emission;
 - (c) discharge of waste in circumstances likely to cause pollution; or
 - (d) being contrary to any written law.
- 1.2.2 The Licensee shall operate and maintain all pollution control and monitoring equipment to the manufacturer's specification or any internal management system.
- 1.2.3 The Licensee, except where storage is prescribed in section 1.3, shall ensure that environmentally hazardous materials are stored in accordance with the Code of Practice for the Storage and handling of dangerous goods.
- 1.2.4 The Licensee shall immediately recover, or remove and dispose of spills of environmentally hazardous materials outside an engineered containment system.
- 1.2.5 The Licensee shall:
 - (a) implement all practical measures to prevent stormwater run-off becoming contaminated by the activities on the Premises; and
 - (b) treat contaminated or potentially contaminated stormwater as necessary prior to being discharged from 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 ensure that all wastewaters from piggery operations including wash down water, by-products wastewater and contaminated run-off are directed to the wastewater treatment system.
- 1.3.2 The Licensee shall maintain an effective wastewater treatment system that shall include:
 - (a) a solids separation system; and
 - (b) an impervious pond system for treatment of wastewater to reduce nitrogen, phosphorous and biochemical oxygen demand levels.
- 1.3.3 The Licensee shall ensure that waste material is only stored and/or treated within vessels or compounds provided with the infrastructure detailed in Table 1.3.3.

Table 1.3.3: Containment infrastructure			
Structure	Material	Infrastructure requirements	
Pond 1	Wastewater	Compacted clay with a Permeability of the liner of at least	
(anaerobic pond)	Wastewater	1 x10 ⁻⁹ m /second or equivalent	
Pond 2 and 3	Wastewater	Compacted clay with a Permeability of the liner of at least	
(aerobic ponds)	Wastewater	1 x10 ⁻⁹ m /second or equivalent	
Evaporation pond	Wastewater	Compacted clay with a Permeability of the liner of at least	
	Wastewater	1 x10 ⁻⁹ m /second or equivalent	
Solids separator	Wastewater	Concrete lined	
Screened solids	Screened	A bunded hardstand area capable of preventing surface run-	
storage area	solids	off of leachate and sludge and which returns sludge leachate	
		to the wastewater treatment system.	
Solid waste	Piggery solids	A bunded hardstand area capable of preventing surface run-	
interim storage	and pond	off of leachate, sludge and contaminated stormwater and	
area	sludge	which returns sludge leachate to the wastewater treatment	
	-	system.	
Catch drains	Contaminated	Compacted clay with a Permeability of the liner of at least	
	stormwater;	1 x10 ^{.9} m /second or equivalent	
	Wastewater		
Burial pits	Carcasses	Compacted clay with a Permeability of the liner of at least	
	and afterbirth	1 x10 ⁻⁹ m /second or equivalent	

1.3.4 The Licensee shall manage all wastewater treatment and evaporation ponds such that:

- (a) overtopping of the ponds does not occur;
- (b) a minimum top of embankment freeboard of 500mm is maintained;
- (c) the integrity of the containment infrastructure is maintained;
- (d) trapped overflows are maintained on the outlet of ponds to prevent carry-over of surface floating matter; and
- (e) vegetation and floating debris (emergent or otherwise) is prevented from encroaching onto pond surfaces or inner pond embankments.
- 1.3.5 The Licensee shall ensure that where wastes produced on the Premises are not taken off-site for lawful use or disposal, they are managed in accordance with the process requirements in Table 1.3.5.



Table 1.3.5 Processing of materials			
Waste type	Process	Process requirements	
Treated	Evaporation	None specified	
wastewater	Reuse for wash down / flushing	The animal pens shall only be flushed between 0700 and 1500 hours and where possible, not undertaken when winds are from the south east quadrant.	
Carcasses and spadeable animal materials	On-site burial	 (i) Carcasses and waste material are covered with at least 500 mm of soil immediately upon deposit; (ii) Burial sites are 100 m away from watercourses and 50 m away from the premises boundary; (iii) Burial of carcasses and spadeable animal materials occur within 2 hours; and (iv) The number of animal carcasses buried is recorded for the duration of the licence. 	
Piggery solids, piggery sludge and pond sludge	Interim storage	Interim storage not to exceed two weeks	

- 1.3.6 The Licensee shall ensure that treated wastewaters are only disposed of via evaporation or used for wash down.
- 1.3.7 The Licensee shall implement control measures to prevent infestations of pests, flies and vermin on the premises.
- 1.3.8 The Licensee shall flush the underfloor channels in conventional holding sheds at least once every 10 days for each pen.
- 1.3.9 The Licensee shall notify the CEO not less than 60 days prior to recommencement of piggery operations and provide information on proposed stocking numbers and herd details for both the intensive sheds and the deep litter sheds.

2 Emissions

2.1 General

2.1.1 The Licensee shall record and investigate the exceedance of any descriptive or numerical limit or target specified in any part of section 2 of this Licence.

2.2-2.4 Point source emissions to air, surface water and groundwater

There are no specified conditions relating to point source emissions to air, surface water or groundwater in this section.

2.5 Emissions to land

There are no specified conditions relating to emissions to land in this section.

2.6 Fugitive emissions

There are no specified conditions relating to fugitive emissions in this section.



2.7 Odour

2.7.1 The Licensee shall ensure that odour emitted from the Premises does not unreasonably interfere with the health, welfare, convenience, comfort or amenity of any person who is not on the Premises.

2.8 Noise

There are no specified conditions relating to emissions to land in this section.

3 Monitoring

3.1 General monitoring

There are no specified conditions relating to general monitoring in this section.

5 Information

5.1 Records

- 5.1.1 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 5.1.1(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.
- 5.1.2 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.
- 5.1.3 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 annual period.
- 5.1.4 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);
 - (i) fiame and time of complaint:
 - (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

Page 9 of 14



- (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 5.1.4(a) to identify any common factors and root cause of complaints and proposals to address these.

5.2 Reporting

5.2.1 The Licensee shall submit to the CEO at the Contact Address an annual environmental report within 30 calendar days after of the end of the annual period. The report shall contain the information listed in Table 5.2.1 in the format or form specified in that table.

Table 5.2.1: 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	
5.1.3	Compliance	Annual Audit Compliance Report (AACR). Template available at www.dwer.wa.gov.au	
5.1.4	Complaints summary	None specified	
-	Total number of animals per year	Tabular format: monthly maximum including annual total	

5.3 Notification

5.3.1 The Licensee shall ensure that the parameters listed in Table 5.3.1 are notified to the CEO in accordance with the notification requirements of the table.

Condition or table (if relevant)	Parameter	Notification requirement ¹	Format or form ²
-	Any failure or malfunction of any pollution control equipment or any incident which has caused, is causing	Part A: As soon as practicable but no later than 5pm of the next usual working day.	N1
	or may cause pollution	Part B: As soon as practicable	

Note 1: Notification requirement 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 pink line depicts the Premises boundary.





Schedule 1: Infrastructure





Schedule 2: Form

Licence:	L6859/1987/12	Licensee:	Ausvision Rural Services Pty Ltd
Form:	N1	Date of breach	1:

Notification of detection of the breach of a limit or any failure or malfunction of any pollution control equipment or any incident which has caused, is causing or may cause pollution.

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		

Notification requirements for any failure or malfunction of any pollution control equipment or		
any incident which has caused, is causing or may cause pollution		
Date and time of event		
Reference or description of the		
location of the event		
Description of where any release		
into the environment took place		
Substances potentially released		
Best estimate of the quantity or		
rate of release of substances		
Measures taken , or intended to		
be taken, to stop any emission		
Description of the failure or		
accident		



Part B - to be submitted as soon as practicable

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	
Ausvision Rural Services Pty Ltd	
Date	



Decision Document

Environmental Protection Act 1986, Part V

Proponent:	Pearls Pty. Limited
Licence:	L6859/1987/12
Registered office:	Level 3 69 Smith Street DARWIN NT 0800
ACN:	008 396 825
Premises address:	Narrogin Farm 394 Narrakine Road South and 202 Wanerie Road, DUMBERNING WA 6312 Being Lot 2581 on Plan 109130 and Lot 2582 on Plan 109129 as depicted in Schedule 1.
Issue date:	Thursday, 8 September 2011
Commencement dates	Sunday, 2 October 2011
Expiry date:	Saturday, 1 October 2016

Decision

Based on the assessment detailed in this document, the Department of Environment Regulation (DER), has decided to amend the current license to reflect the new change of owner. DER considers that in reaching this decision, it has taken into account all relevant considerations and legal requirements and that the licence and its conditions will ensure that an appropriate level of environmental protection is provided.

Decision Document amended by:

Nanette Schapel, Licensing Officer

Decision Document authorised by:

Ed Schuller, Manager, Process Industries (Metro)



Contents

ents
Purpose of this Document
Administrative summary
Executive summary of proposal
Decision table

8

9

10

Risk Assessment Appendix A

5

6

Purpose of this Document 1

Advertisement and consultation table

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.

Works approval and licence conditions

DER has three types of conditions that may be imposed on works approvals and licences. They are as follows;

Standard conditions (SC)

DER has standard conditions that are imposed on all works approvals and licences regardless of the activities undertaken on the Premises and the information provided in the application. These are included as the following conditions on works approvals and licences:

Works approval conditions: 1.1.1-1.1.4, 1.2.1, 1.2.2, 5.1.1 and 5.1.2.

Licence conditions: 1.1.1-1.1.4, 1.2.1-1.2.4, 5.1.1-5.1.4 and 5.2.1.

For such conditions, justification within the Decision Document is not provided.

Optional standard conditions (OSC)

In the interests of regulatory consistency DER has a set of optional standard conditions that can be imposed on works approvals and licences. DER will include optional standard conditions as necessary, and are likely to constitute the majority of conditions in any licence. The inclusion of any optional standard conditions are justified in Section 4 of this document.

Non standard conditions (NSC)

Where the proposed activities require conditions outside the standard conditions suite DER will impose one or more non-standard conditions. These include both premises and sector specific conditions, and are likely to occur within few licences. Where used, justification for the application of these conditions will be included in Section 4.



2 Administrative summary

Administrative details					
Application Type	Works Approval Image: Constraint of the second				
Activities that cause the Premises to become prescribed premises	Category number(s)	Assessed design capacity			
	2	9,500 animals			
Application verified	Date: 24/6/2011				
Application fee paid	Date: 07/07/2011				
Works Approval has been complied with	Yes 🗌 No 🗌 N/A 🖂				
Compliance Certificate received	Yes 🗌 No 🗌 N/A	\sim			
Commercial-in-confidence claim					
Commercial-in-confidence claim outcome					
Is the proposal a Major Resource Project?	Yes 🗌 No 🖂				
Was the proposal referred to the Environmental Protection Authority (EPA) under Part IV of the <i>Environmental Protection Act 1986</i> ?	Yes 🗌 No 🖾	Referral decision No: Managed under Part V 🛛 Assessed under Part IV 🗌			
Is the proposal subject to Ministerial Conditions?	Yes 🗌 No 🖂	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>)?					
Is the Premises within an Environmental Protection Policy (EPP) Area Yes No					
Is the Premises subject to any EPP requirements? Yes 🔲 No 🖂					
If Yes, include details here, eg Site is subject to SO ₂ requirements of Kwinana EPP.					



3 Executive summary of proposal

Overview:

Pearls Pty. Limited (Pearls) is the Licensee for Narrogin Farm, which is a 'prescribed Premises' under Category 2, Schedule 1 of the *Environmental Protection Regulations 1987* - Premises on which pigs are fed, watered and housed in pens.

The Licensee operates a combination of eco-shelters and conventional sheds. Due to RSPCA specifications based on aging infrastructure, the design capacity of the conventional sheds is 9,500 pigs at any one time. Odour generation is a potentially significant emission from the premises. Due to the solid and liquid wastes created by piggery operations, odour emissions can be generated from both the grower sheds and the wastewater treatment process if not properly managed.

Licence amendment:

This licence amendment is for a transfer of owners from Craig Mostyn Farms Pty Ltd to Pearls Pty. Limited. Based on correspondence received from the previous Licensee (Craig Mostyn Farms Pty Ltd) no pigs have been on site since the end of November 2014.

As part of this amendment, DER has not re-assessed the acceptability or impacts of emissions and discharges from the Premises or re-visited any existing emission control levels. Minor changes to the licence have been made to ensure that all conditions are in keeping with DER's current licence recommendations for Category 2 - Intensive Piggeries. Condition 4.1 has been updated to require the new Occupier to provide background information on the groundwater in the vicinity of the wastewater ponds. Similarly, because piggery production ceased in November 2014, there has not been any wastewater through the clay-lined wastewater treatment system. It is therefore necessary for the next Occupier of the Premises to demonstrate that the wastewater ponds and any hardstands where solid wastes are stored meet the required permeability of 1 x 10^{-9} metres/second.

Location:

The Premises is approximately 96.7 Hectares (239 acres) in area. It is located adjacent to the Narrogin Beef Feedlot and about 5 km south of the Narrogin town site. The nearest residential dwelling is approximately 1,500 metres north of the Premises boundary where the dwelling is located adjacent to an open farm piggery not associated with this Premises. The proximity of this residence is less than the Environmental Protection Authority's Guidance Statement No. 3 *Separation Distances between Industrial and Sensitive Land Uses* which recommends a buffer of 5,000 metres or more for intensive piggeries with more than 5,000 pigs.

There are no groundwater bores on site and no known groundwater users within 2 km of the Premises. The previous Licensee was not required to monitor groundwater. However, it is integral that information on the depth, quality and direction of the groundwater in the vicinity of the wastewater treatment system be provided to ensure that operations on site do not impact on the underlying groundwater.

An analysis of a composite sample of soil shows that the Premises is located on clayey sand soils with a trace of gravel. The nearest surface water body is Bottle Creek, located approximately 2.3 km from the Premises boundary in a north west direction. The Williams River is located 4 km south of the Premises and the area surrounding the Premises is part of the Arthur River catchment system.

Narrogin experiences prevailing moderate south-easterly winds in summer and moderate northwesterly winds in winter. The average rainfall of the area is recorded at 494 mm per year. However, over recent years the rainfall has been significantly lower than the average predictions.



Operations:

The piggery consists of straw-based eco-shelters and conventional indoor sheds that house grower and finisher pigs prior to dispatch. This licence does not apply to the pigs raised in the eco-shelters. When operational, pigs are received at approximately 11 - 12 weeks old from breeders in the Albany area. The pigs are conditioned for approximately 10 weeks prior removal off site at 21 weeks of age.

Conventional sheds:

The facility was initially constructed in the 1980s as an indoor 'grow-out' unit to house grower/finisher pigs using conventional sheds with pull-plug underfloor flushing. Six of the nine sheds were being utilised for the 'grow-out' process with one other shed used to temporarily store pigs either arriving or being transported off the premises.

Eco-shelters:

The piggery also includes 23 eco-shelters with deep litter straw lining on the Premises. The holding capacity is approximately 180 pigs in each shelter and the pigs are fed on grazing pellets and water is sourced from a combination of scheme and bore water. The shelter floors are concrete with a deep litter straw lining where the depth of straw varies according to the age of the pigs. Straw becomes contaminated with pig wastes and excess feed and it is replaced in each eco-shelter when the pigs are moved to another shed or transported off site.

Wastewater treatment system:

The wastewater treatment system has been established to screen solid waste and recycle wastewater for use on the Premises. All wastewater from the conventional sheds is channelled below ground to the wastewater treatment system via a concrete lined sump. The wastewater is pumped through a vertical screen where solids fall into a concrete hardstand and the effluent is diverted to a large, clay lined anaerobic pond (Pond 1), which is sectioned on the surface with floating tubing to promote the formation of an anaerobic crust in individual sections of the pond. Capacity is 5.6ML and depth is 2.4m at the outlet.

The wastewater is then gravity fed into a series of two clay lined aerobic ponds (Ponds 2 and 3). Capacity of Pond 2 is 5 ML and Pond 3 is 26 ML. When it reaches a certain height in Pond 3, the wastewater is pumped back to a concrete lined settling tank and then into a recycling tank where it can be used on site for cleaning and flushing operations. Both scheme and recycled wastewater are used to hand spray the pens and flush the drains beneath the conventional sheds, where the flushing occurs every 7 - 10 days on a rotation system for each pen (based on pig numbers and weather conditions). The flushing frequency is in keeping with the recommendations in the *National Environmental Guidelines for Piggeries* (Australian Pork Limited, revised 2010). Recycled water is not irrigated on the premises.

The wastewater treatment system includes a large evaporation pond (Pond 4) with a capacity of 75 ML. There are also two stormwater dams located in the south and east of the Premises which are used to capture stormwater runoff and retain the water within the Premises boundary.

The pond system and pond sizes were originally constructed for larger volumes than the throughput when the piggery was operating prior to November 2014. As a result, the second aerobic pond (Pond 3) rarely receives any wastewater over flow from the first aerobic pond (Pond 2) and, similarly, very little wastewater is discharged to the evaporation pond.

During a previous transfer of ownership of the piggery Licence (from the Great Southern Pig Company to Craig Mostyn Farms Ltd Pty), the wastewater ponds had dried during a period of nonoperation. As a result, the ponds were desludged in 2009.



Solid waste:

Solid waste consists of the solids from the screening process and solid waste mixed with straw from the eco-shelters. These wastes are stored onsite on concrete or clay hardstand areas and removed from the Premises fortnightly for distribution on local agricultural land.

Deceased animals are buried on the Premises in designated clay lined burial pits and covered with suitable covering to limit odour, vermin and feral animals.

Other activities:

The Premises previously included a feed manufacturing plant and silos (Category 23). However, because these activities have ceased, Category 23 was removed from the licence when it was amended in 2011.

The instrument was issued for a five-year period, commencing 2 October 2011 and expiring 1 October 2016.



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	DECISION TABLE					
Works Approval / Licence section	Condition number W = Works Approval L= Licence	OSC or NSC	Justification (including risk description & decision methodology where relevant)	Reference documents		
Premises operation	L1.3.3, L1.3.4, L1.3.5 and L4.1	OSC	Operation: <u>Emission Description</u> : <i>Emission</i> : Overflows from the wastewater treatment ponds and infiltration of wastewater from the ponds and areas where solid and liquid wastes are stored or buried.	General provisions of the Environment al Protection		
			<i>Impact</i> : Stormwater contaminated with nutrient high wastewater can overflow from the ponds and impact on the surrounding land. The closest surface water body is 2.3 km distance. Leachate from areas where solid and liquid wastes are stored or buried can infiltrate and impact on the underlying groundwater.	Act 1986.		
			<i>Controls</i> : There are 4 wastewater ponds in series, with sufficient capacity to contain all wastewater associated with piggery operations. Ponds, burial pits and hardstanding areas are clay lined but further information is required regarding the permeability of the liners and hardstands and the depth, quality and direction of the groundwater are not known.			
			Risk Assessment Consequence: Moderate Likelihood: Possible Risk Rating: Moderate			
			Regulatory controls;			
			L1.3.3 (Table 1.3.3) requires that the clay liner on the wastewater ponds, catch drains, burial pits and catch drains meet a permeability of $<1x10^{-9}$ m/s.			
			Condition 1.3.4 has been updated to a standard REFIRE and requires that overtopping of the ponds does not occur and a minimum freeboard of 500 mm is maintained.			
			Condition 1.3.5 (Table 1.3.5) requires carcass burial pits to be located 100 m away from			

Date of Amendment: 21 May 2015

Page 7 of 10



			watercourses.	
			Condition 4.1 (IR2, IR3 and IR4) requires the Occupier to provide information which demonstrates that the clay liner on the wastewater ponds and all areas where solid waste is stored or buried and liquid waste is channeled meets the required permeability of $<1 \times 10^{-9}$ m/s.	
			Residual Risk Consequence Moderate Likelihood: Possible Risk Rating: Moderate	
	L4.1.1 and L4.1.2	NSC	As noted above, piggery operations have the potential to impact on the underlying groundwater. As the depth, quality and direction of the groundwater in the vicinity of the wastewater ponds, solid waste storage and carcass burial areas require further understanding, the following Improvement Conditions are required:	General provisions of the Environment al Protection
Improve- ments			IR1: Provide information on the depth, quality and direction of the groundwater beneath the wastewater treatment system on the premises	Act 1986.
			IR2: Provide information on the permeability of the clay liners on all wastewater treatment ponds which demonstrates the clay liners meet the required permeability of $<1x10^{-9}$ m/second:	
			IR3: Carry out testing to ensure that all areas where solid waste is stored and the liner on the carcass burial pits meet the required permeability of $<1x10^{-9}$ m/second.	
Licence Duration	N/A	N/A	The current licence is issued for a period of 5 years, expiring on Sunday 1 October 2016.	

5 Advertisement and consultation table

Date	Event	Comments received/Notes	How comments were taken into consideration
28/04/15	Proponent sent a copy of draft instrument	Licensee has requested a compliance date of 1 November 2015 to allow permeability testing and groundwater monitoring as required by Condition 4.1.1	Licence 4.1.1 compliance date changed to 1 November 2015



6 Risk Assessment

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

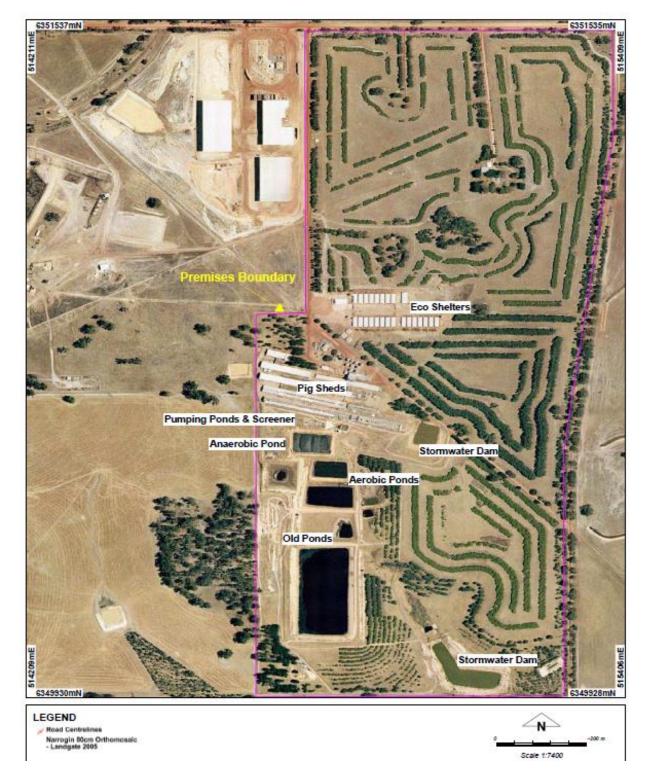
Table 1: Emissions Risk Matrix

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

Premises Boundary and operations Plan of Pearls Pty. Limited



Environmental Protection Act 1986 Decision Document: L6859/1987/12 File Number: DER2015/000044

Date of Amendment: 21 May 2015