



Government of **Western Australia**  
Department of **Environment and Conservation**

Your ref: L7279/1994/9  
Our ref: SWB1972  
Enquiries: Margaret Redfern  
Phone: 9621 3401  
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Mr Richard Evison  
Westpork Pty Ltd  
Unit 1, 7 Foundry Street  
MAYLANDS WA 6051

Dear Mr Evison

**ENVIRONMENTAL PROTECTION ACT 1986 – LICENCE 7279/1994/9**

**Westpork-Martup Hills Piggery**  
**Lot 4661 on Plan 227772 Gorn Road Bokal WA 6392**  
**L7279/1994/9**

Your application for a licence under Part V of the *Environmental Protection Act 1986* for the above premises has been issued subject to the attached conditions. Enclosed is your licence number **L7279/1994/9**.

If you are concerned about, or object to any of the conditions you may lodge an appeal with the Minister for the Environment within 21 days from the date on which this licence is received. The Office of the Appeals Convenor can be contacted on 6467 5190 to find out the procedure and fee.

Members of the public may also appeal the licence. The Appeals Registrar at the Office of the Appeals Convenor can be contacted after the closing date of appeals to check whether any appeals were received.

Under Section 58 of the *Environmental Protection Act 1986*, it is an offence to contravene a licence condition. This offence carries a penalty of up to \$125,000, with a daily penalty of up to \$25,000.

If you have any questions relating to the licence or licence conditions, please contact Margaret Redfern on 9621 3401.

Yours sincerely

Carissa Aitken  
Officer delegated under Section 20  
of the *Environmental Protection Act 1986*

Monday 8 October 2012

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wa.gov.au



# Licence

## *Environmental Protection Act 1986, Part V*

**Licensee:** Westpork Pty Ltd

**Licence:** L7279/1994/9

**Registered office:** Westpork Pty Ltd  
Unit 1, 7 Foundry Street  
Maylands WA 6051

**ACN:** 009 148 879

**Premises address:** Westpork – Martup Hills Piggery  
Lot 4661 on Plan 227772 Gorn Road  
Bokal WA 6392

**Licence period:** 5 years

**Commencement date:** Monday, 8 October 2012

**Expiry date:** Tuesday, 9 October 2017

**Issue date:** Monday, 8 October 2012

**Prescribed Premises Category**

Schedule 1 of the Environmental Protection Regulations 1987

Categories		
Category number	Description of category	Premises assessment capacity
2	Intensive piggery: premises on which pigs are fed, watered and housed in pens	4350 animals

**Conditions of Licence**

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

Carissa Aitken

Officer delegated under Section 20  
of the *Environmental Protection Act 1986*



## Contents

Licence	i
Contents	ii
Introduction	ii
Licence conditions	1
1 General	1
2 Emissions	5
3 Monitoring	5
4 Improvements	7
5 Information	8
Schedule 1: Maps	10
Schedule 2: Reporting & notification forms	13

## Introduction

This Introduction is not part of the Licence conditions.

### Who we are

The Department of Environment and Conservation (DEC) is a Government Department in the portfolio of the Minister for the Environment. Our purpose is to protect and conserve the State's environment on behalf of the people of Western Australia.

### Our industry licensing role

DEC has responsibilities under Part V of the *Environmental Protection Act 1986* for the licensing of prescribed premises. We 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 *Environmental Protection Act 1986*. Conditions contained with 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 *Environmental Protection Act 1986* 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 should comply with your licence. Non-compliance with your licence is an offence and strict penalties exist for those who do not comply. Additional guidance on pollution prevention can be found in the Department of Water's Water Quality Protection Notices accessed through:  
<http://www.water.wa.gov.au/Managing+water/Water+quality/Water+quality+protection+guidelines/default.aspx>

### **Ministerial conditions**

If your Premises has been assessed under Part IV of the *Environmental Protection Act 1986* 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**

Westpork Pty Ltd holds licence L7279/1994/8 for 600 sows and 3 750 growing pigs. The piggery supplies other farms with the weaner pigs to be grown out.

The premises are at Kojonup locations 4850 and 4661 on Gorn Road in the Shire of West Arthur. The site is cleared land and is 267 hectares. The soil is sand over an old paleochannel. To the west of the piggery over a slight ridge (approximately 10 M) there is an old dry swamp. From the ridge the land slopes down to the piggery and shed and evaporation ponds. The controlled drainage area is all on the down side of the ridge away from the dry swamp.

There are seven monitoring bores. Previous groundwater monitoring indicated a spike in 2008 coinciding with a rainfall event that overtopped the ponds. Since the spike nitrogen, phosphorus and TDS have declined to long term averages

The nearest residence is 3.5 km west of the piggery. The entire farm is fenced with Agriculture fencing (ring lock and wire) and the actual piggery section has a 6 foot mesh security fence.

Effluent is sent to a 8.2 ML anaerobic pond. Partially treated effluent then flows to the facultative pond which has a capacity of 8 ML and then to storage evaporation pond (12.5 ML capacity). Flow between all ponds is by gravity. Westpork do not currently irrigate effluent, but some 7.7ML/year recycled effluent is used for flushing the piggery sheds. The owner has requested that the irrigation conditions remain on the licence in case of an extreme rainfall event. A Nutrient Irrigation Plan will be required by this re-issue for irrigation to land. A Waste Treatment Systems Procedures manual has been developed.

Pig carcasses are collected from the piggery sheds and send to a burial pit on the site. The lining of this pit has not been determined for suitability and the licensee is constructing a new burial pit under the works approval issued in March 2012. Other works include proposed include the construction of an additional piggery shed (farrowing shed), a covered anaerobic pond and associated infrastructure to cater for a change in the piggery operation where there will be more pigs under 4 weeks old. The operation will breed a greater number of piglets to be removed offsite and grown elsewhere by contract growers. The current operation has piglets up to 24 weeks before being sold. The change will have weaners less than 31 days.

This Licence is the successor to licence L7279/1994/8. As part of the licence re-issue, DEC has also converted the existing licence to a new format REFIRE licence.



The licences and works approvals issued for the Premises since 09/10/2000 are for the 5 licences prior to issue of this Licence are:

Instrument log		
Instrument	Issued	Description
WA 5158/2012/1	29/03/2012 Amendment	Works Approval to build new piggery farrowing shed and covered anaerobic pond
L7279/1994/3	09/10/2000	Licence reissue
L7279/1994/4	09/10/2001	Licence reissue
L7279/1994/5	09/10/2002	Licence reissue
L7279/1994/6	09/10/2003	Licence reissue
L7279/1994/7	09/10/2004	Licence reissue
L7279/1994/8	09/10/2007	Licence reissue
L7279/1994/9	8/10/2012	Licence re-issue

#### 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 Act apply unless the contrary intention appears.

1.1.2 In the Licence, unless the contrary intention appears:

“**the Act**” means the *Environmental Protection Act 1986*;

“**AHD**” means the Australian height datum;

“**annual**” means the inclusive period from 1 July until 30 June in the following year;

“**APHA-AWWA-WEF**” means American Public Health Association – American Water Works Association – Water Environment Federation;

“**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 5667.4**” means the Australian Standard AS/NZS 5667.4 *Water Quality – Sampling – Guidance on sampling from lakes, natural and man-made*;

“**AS/NZS 5667.6**” means the Australian Standard AS/NZS 5667.6 *Water Quality – Sampling – Guidance on sampling of rivers and streams*;

“**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*;

“**Code of Practice for the Storage and handling of dangerous goods**” means the Storage and handling of dangerous goods, Code of Practice, Dept of Mines and Petroleum, Government of Western Australia;

“**Contact Address**” for the purpose of correspondence and advice means:

Regional Leader, Wheatbelt Region  
Department of Environment and Conservation  
PO Box 100 Telephone: 9621 3400  
Narrogin WA 6231 Facsimile: 9621 3410  
Email: [WheatbeltLR@dec.wa.gov.au](mailto:WheatbeltLR@dec.wa.gov.au)

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

“**Director**” means Director, Environmental Regulation Division of the Department of Environment and Conservation for and on behalf of the Chief Executive Officer as delegated under Section 20 of the *Environmental Protection Act 1986*;

“**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;



“**Licence**” means this Licence numbered L7279/1994/9 and issued under the *Environmental Protection Act 1986*;

“**Licensee**” means the person or organisation named as Licensee on page i 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;

“**NEGP**” means the current version of the National Environmental Guidelines for Piggeries;

“**placard quantity**” has the meaning defined in the Dangerous Goods Safety (Storage and Handling of Non-explosives) Regulations 2007;

“**Premises**” is as defined by Condition 1.2.3 of the Licence;

“**quarterly**” means the 4 inclusive periods from 1 April to 30 June, 1 July to 30 September, 1 October to 31 December and in the following year, 1 January to 31 March;

“**six monthly**” means the 2 inclusive periods from 1 April to 30 September and 1 October to 31 March in the following year;

“**spot sample**” means a discrete sample representative at the time and place at which the sample is taken;

“**USEPA**” means United States (of America) Environmental Protection Agency;

“**usual working day**” means 0800 – 1700 hours, Monday to Friday excluding public holidays in Western Australia; and

“**waste**” has the meaning defined in the *Environmental Protection Act 1986*.

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.

## 1.2 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 provide to the Director prior written notice of any works it intends to undertake on the Premises that may:

- (a) cause any emission;
- (b) alter the volume, nature, location or source of any emission;
- (c) alter the method of detecting, monitoring or measuring any emission; or
- (d) involve the installation, alteration or replacement of any emission causing process equipment or industrial plant.

1.2.3 The Premises is the area defined in Table 1.2.1 and depicted visually in the Premises Map in Schedule 1.

**Table 1.2.1: Premises location & description**

Location	Premises definition	All or part	Record of cadastral definition
Lot 4661 Gorn Road BOKAL WA 6392	Premises is defined: Using cadastral definitions	All	Plan 22772



- 1.2.4 The Licensee shall maintain all pollution control and monitoring equipment to the manufacturer's specification and any internal management system.
- 1.2.5 The Licensee, except where storage is prescribed in section 1.3, shall only store more than 250 kg or 250 litres of any substance that is classed as dangerous goods below placard quantities or environmentally hazardous materials not classified as dangerous goods if:
- (a) they are stored in accordance with the Code of Practice for the Storage and handling of dangerous goods; and
  - (b) if secondary containment is required by 1.2.5(a), it is constructed and maintained to:
    - (i) contain not less than 110% of the volume of the largest storage vessel or inter-connected system; and
    - (ii) contain at least 25% of the total volume of vessels stored in the compound; and
    - (iii) have a low permeability ( $10^{-9}$  m/s or less).
- 1.2.6 The Licensee shall immediately recover, or remove and dispose of spills or leaks of environmentally hazardous materials outside its storage vessel.

#### Stormwater control

- 1.2.7 The Licensee shall ensure that uncontaminated stormwater is kept separate from contaminated or potentially contaminated stormwater. Where stormwater has come into contact with a possible source of contamination, it should be treated as contaminated.

#### 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 a wastewater treatment system.
- 1.3.2 The Licensee shall maintain an effective wastewater treatment system that shall include:
- (a) a solids separation system;
  - (b) a physicochemical treatment system, to lower the concentration of phosphorus in the wastewater stream; and
  - (c) an impervious pond system for treatment of wastewater to reduce nitrogen and biological oxygen demand levels.
- 1.3.3 The Licensee shall ensure that wastewater 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		
Storage vessel or compound	Material	Infrastructure requirements
Solids separator	Wastewater	Concrete lined
Anaerobic Pond	Wastewater	Lined to achieve a permeability of at least $<10^{-9}$ m/s or equivalent
Facultative pond	Wastewater	Lined to achieve a permeability of at least $<10^{-9}$ m/s or equivalent.
Evaporation pond	Wastewater	Lined to achieve a permeability of at least $<10^{-9}$ m/s or equivalent.
Sewage sludge area	Sewage sludge	The previous anaerobic pond was lined to achieve a permeability of at least $<10^{-9}$ m/s. Sludge will be removed and used as soil conditioner.





- 1.3.4 The Licensee shall manage the wastewater treatment ponds such that:
- (a) a minimum top of embankment freeboard of 500mm is maintained;
  - (b) storm water runoff is prevented from causing the erosion of outer pond embankments;
  - (c) overtopping of the wastewater treatment ponds does not occur except as a result of an extreme rainfall event (greater than 1 in 10 year event of 72 hours duration);
  - (d) vegetation and floating debris (emergent or otherwise) is prevented from encroaching onto pond surfaces or inner pond embankments;
  - (e) trapped overflows shall be maintained between treatment ponds to prevent carry-over of surface floating matter to subsequent ponds; and
  - (f) no overflow leaves the Premises.
- 1.3.5 The Licensee shall ensure only treated wastewaters are disposed of via irrigation or evaporation or used for wash down.
- 1.3.6 The Licensee shall ensure irrigation meets the following requirements:
- (a) irrigation does not occur in areas where the water table rises to within 1m of the surface during the irrigation period;
  - (b) bunding/cut-off drains are maintained adjacent to treated wastewater irrigation areas such that run-off only discharges to a designated location;
  - (c) no irrigation generated run-off, spray drift or discharge occurs beyond the boundary of the Premises;
  - (d) wastewater is evenly distributed over the irrigation area;
  - (e) no soil erosion occurs; and
  - (f) a healthy vegetation cover is maintained over the wastewater irrigation areas.
- 1.3.7 The Licensee shall ensure that animal carcasses, spadeable animal material and other piggery solids are disposed of to a licensed rendering plant or to on-site burial pits.
- 1.3.8 The Licensee shall ensure that where carcasses and spadeable animal materials are disposed of on-site the licensee shall ensure;
- (a) carcasses and waste material are covered with at least 500mm of soil immediately upon deposit;
  - (b) burial sites are 300m away from watercourses and 50m away from nearest properties; and
  - (c) the number of animal carcasses buried is recorded for the duration of the licence.
- 1.3.9 The Licensee shall ensure that where application of piggery solids to land occurs on the Premises:
- (a) solids and sludge derived from the piggery shall be disposed of evenly by means of a mechanical spreader;
  - (b) piggery solids shall only be applied to land that is a minimum of 1 metre above the winter groundwater table;
  - (c) application of piggery solids shall be managed such that there is no runoff beyond the boundaries of the premises;
  - (d) application of piggery solids shall not occur within 50 metres of any defined watercourse, wetland or external property boundary.
- 1.3.10 The Licensee shall not apply any artificial fertilizer containing nitrogen or phosphorus within areas subject to treated wastewater irrigation or land application of piggery solids and sludges.
- 1.3.11 The Licensee shall monitor and record, on a monthly basis, the number of sows and total number of pigs held intensively on site (monthly maximum).



## 2 Emissions

### 2.1 General

2.1.1 The Licensee shall record and investigate the exceedance of any limit, and/or target in this section.

#### 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 and groundwater in this section.

### 2.5 Emissions to land

2.5.1 The Licensee is permitted, subject to conditions in the Licence, to emit waste to land through the emissions points listed in Table 2.5.1 and identified in the Map of emission points in Schedule 1.

Emission point reference	Emission point reference on Map of emission points	Description	Source
EN 1 to EN 3	EN1 to EN3	Pipe leading to irrigation on paddocks has 3 connection points	Final evaporation pond

2.5.2 The Licensee shall target emissions to land at or below the levels specified in Table 2.5.2.

Emission point reference	Parameter	Target (including units)	Averaging period
EN 1 to EN 3	Phosphorous	20kg/ha	Annual
EN 1 to EN 3	Nitrogen	250kg/ha	Annual

### 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.

## 3 Monitoring

### 3.1 General monitoring

3.1.1 The licensee shall ensure that:

- (a) all water samples are collected in accordance with AS/NZS 5667.1;
- (b) all wastewater samples are collected in accordance with AS/NZS 5667.10;
- (c) all water samples are analysed in accordance with "Standard Methods for Examination of Water and Wastewater APHA-AWWA-WEF" [ unless indicated otherwise in relevant table]; and
- (d) all samples are submitted to a laboratory with current NATA accreditation for the parameters to be measured [unless indicated otherwise in relevant table].



3.1.2 The Licensee shall have all monitoring equipment referred to in any condition of the Licence calibrated in accordance with the manufacturer's specifications.

3.1.3 The Licensee shall, where the requirements for calibration cannot be practicably met, or a discrepancy exists in the interpretation of the requirements, bring these issues to the attention of the Director accompanied with a report comprising details of any modifications to the methods.

### 3.2 Monitoring of point source emissions to air, surface water and groundwater

There are no specified conditions relating to monitoring of point source emissions to air in this section.

### 3.3 Monitoring of emissions to land

3.3.1 The Licensee shall undertake the monitoring in Table 3.3.1 according to the specifications in that table.

Emission point reference	Parameter	Units	Frequency <sup>1</sup>
EN 1 to EN 3	Volumetric flow rate	m <sup>3</sup> /s	Monthly whilst irrigation is taking place
EN 1 to EN 3	BOD	mg/l	
EN 1 to EN 3	Total Phosphorous	mg/l	
EN 1 to EN 3	Total Nitrogen	mg/l	

Note 1: Monthly monitoring shall be undertaken at least 15 days apart.

### 3.4 Monitoring of inputs and process monitoring

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

### 3.5 Environmental quality monitoring

3.5.1 The Licensee shall undertake the monitoring specified in Table 3.5.1.

Monitoring point reference	Parameter	Units	Averaging period	Frequency <sup>1</sup>
GB1A – GB2B	Standing water level	m(AH D)	Spot sample	Six monthly
GB1A – GB2B	pH		Spot sample	Six monthly
GB1A – GB2B	Electrical conductivity	µS/cm	Spot sample	Six monthly
GB1A – GB2B	Total Dissolved Solids	mg/L	Spot sample	Six monthly
GB1A – GB2B	Total Nitrogen	mg/L	Spot sample	Six monthly
GB1A – GB2B	Total Phosphorus	mg/L	Spot sample	Six monthly

Note 1: Six monthly monitoring shall be undertaken at least 5 months apart.

3.5.2 The Licensee shall ensure that all groundwater sampling in Table 3.5.1 shall be conducted in accordance with AS/NZS 5667.11.

### 3.6 Meteorological monitoring

There are no specified conditions relating to meteorological monitoring.



## Improvements

### 4.1 Improvement programme

4.1.1 The Licensee shall complete the improvements in Table 4.1.1 by the date specified.

Table 4.1.1: Improvement programme		
Improvement reference	Improvement	Date of completion
IR1.	The Licensee shall submit to the Director a Nutrient and Irrigation Management Plan (NIMP) for the treated wastewater irrigated on the Premises that meets the requirements of the Department of Water, Water Quality Protection Notice 33 – Nutrient and Irrigation Management Plans.	01/03/2013



## 5 Information

### 5.1 Records

- 5.1.1 All information and records required by the Licence shall:
- be legible;
  - if amended, be amended in such a way that the original and subsequent amendments remain legible or are capable of retrieval;
  - 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
  - for those following records, be retained until the expiry of the Licence and any subsequent licence:
    - off-site environmental effects; or
    - matters which affect the condition of the land or groundwater.
- 5.1.2 The Licensee shall ensure that:
- 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
  - 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 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.

### 5.2 Reporting

- 5.2.1 The Licensee shall submit to the Director at the Contact Address an annual environmental report within 28 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.

Condition or table (if relevant)	Parameter	Format or form <sup>1</sup>
5.1.3	Compliance	AACR
5.1.5	Complaints	None specified
Table 3.3.1	Volumetric flow rate, BOD, Total Phosphorus, Total Nitrogen	WR1
Table 3.5.1	Water level, pH, electrical conductivity Total Dissolved Solids, Total Nitrogen, Total Phosphorous	GR1

Note 1: Forms are in Schedule 2

- 5.2.2 The annual environmental report shall also contain:
- an assessment of the information contained within the report against previous monitoring results and Licence limits and/or targets; and
  - any original monitoring reports submitted to the Licensee from third parties.



### 5.3 Notification

5.3.1 Parameters listed in Table 5.3.1 shall be notified to the Director at the Contact Address and in accordance with the notification requirements of the table.

<b>Condition or table (if relevant)</b>	<b>Parameter</b>	<b>Notification requirement<sup>1</sup></b>	<b>Format or form<sup>2</sup></b>
3.1.3	Calibration report	As soon as practicable.	None specified
2.1.1	Breach of any limit specified in the Licence	Part A: As soon as practicable but no later than 5PM of the next usual working day.	N1
	Any failure or malfunction of any pollution control equipment or any incident which has caused, is causing or may cause pollution	Part B: As soon as practicable	

Note 1: No notification requirement in the Licence shall negate the requirement to comply with s72 of the Act.

Note 2: Forms are in Schedule 2

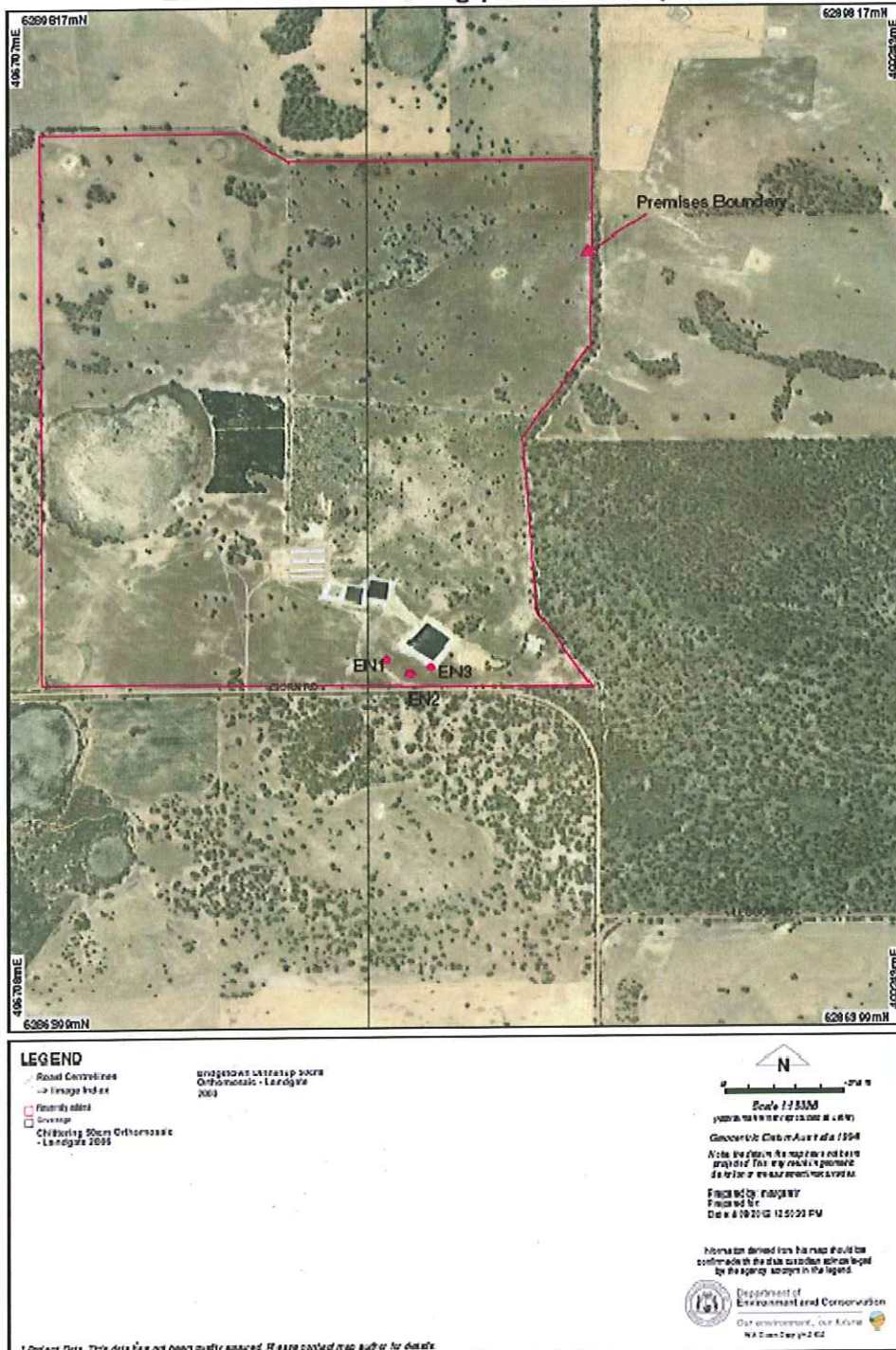




### Map of emission points

The locations of the emission points defined in Tables 2.5.1 are shown below.

### Emissions monitoring points Matrup Hills



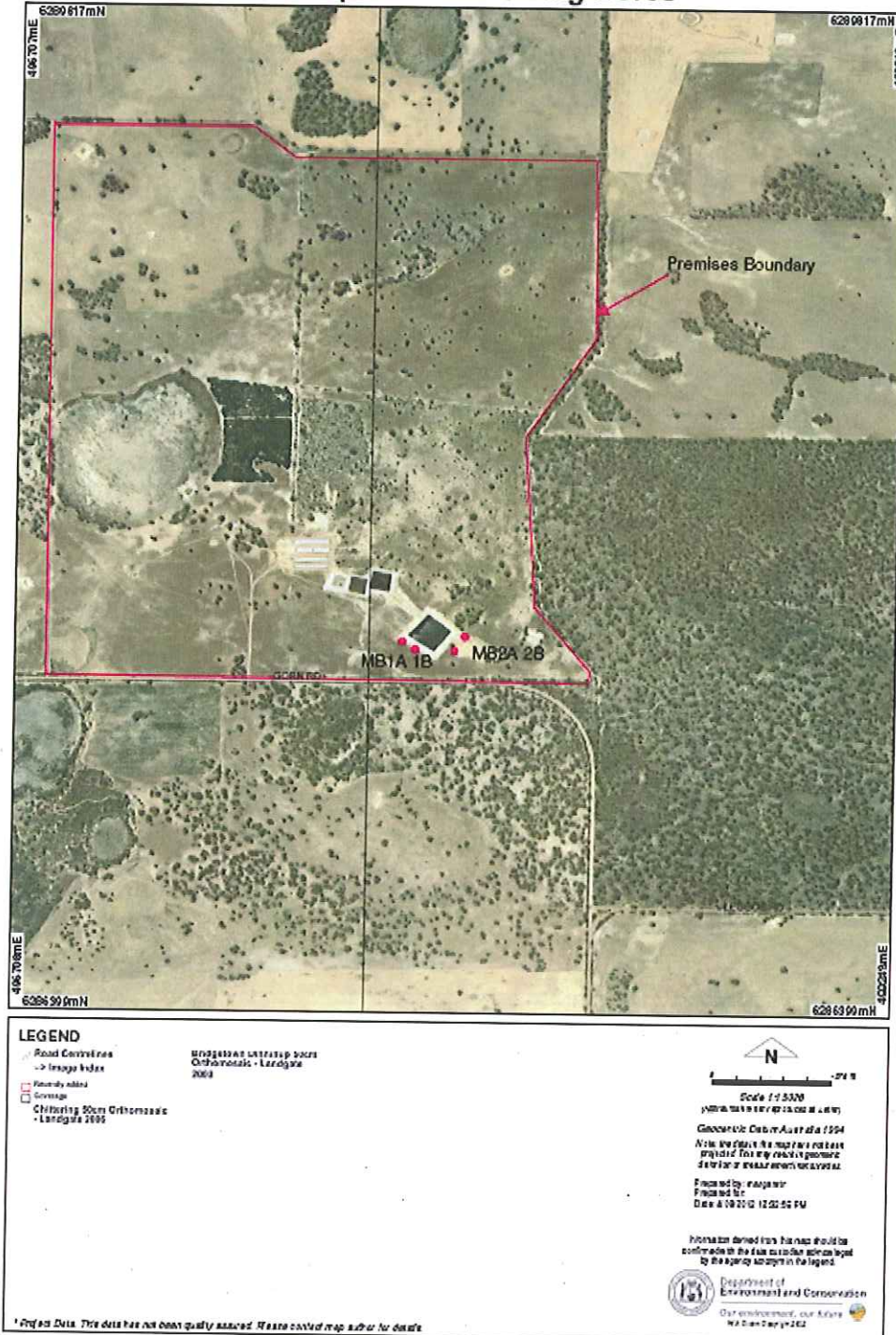




### Map of monitoring locations

The locations of the monitoring points defined in Table 3.8.1 is shown below.

### Martup Hills Monitoring Bores





## Schedule 2: Reporting & notification forms

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

Copies of the original monitoring reports must also be submitted.

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Licence: L7279/1994/9 Licensee: Westpork Pty Ltd  
Form: AACR Period :  
Name: Annual audit compliance report

### Annual audit compliance report

#### Section A: Statement of compliance with Licence conditions

Were all conditions of licence complied with within the reporting period?	
Yes	<input type="checkbox"/> Initial Sections A & B, then proceed to Section C
No	<input type="checkbox"/> Initial Section A, then proceed to Section B

Each page must be initialled by the person(s) who signs Section C of this annual audit compliance report (AACR).

Initial:



**Section B: Details of non-compliance with Licence condition**

<b>a) Licence condition not complied with?</b>	
<b>b) Date(s) and time(s) the non compliance occurred, if applicable?</b>	
<b>c) Was this non compliance reported to DEC?</b>	
<input type="checkbox"/> Yes, and <input type="checkbox"/> Reported to DEC verbally    Date <input type="checkbox"/> Reported to DEC in writing    Date	<input type="checkbox"/> No
<b>d) Has DEC taken, or finalised any action in relation to the non compliance?</b>	
<b>e) Summary of particulars of non compliance, and what was the environmental impact?</b>	
<b>f) If relevant, the precise location where the non compliance occurred (attach map or diagram)</b>	
<b>g) Cause of non compliance</b>	
<b>h) Action taken or that will be taken to mitigate any adverse effects of the non compliance</b>	
<b>i) Action taken or that will be taken to prevent recurrence of the non compliance</b>	

Please use a separate page for each Licence condition that was not complied with. Each page must be initialled by the person(s) who signs Section C of this AACR

Initial:



**Section C: Signature and certification**

This AACR may only be signed by a person(s) with legal authority to sign it as defined below. Please tick the box next to the category that describes how this AACR is being signed. If you are uncertain about who is entitled to sign or which category to tick, please contact the licensing officer for your premises.

If the Licence holder is	The AACR must be signed and certified:
an individual	<input type="checkbox"/> by the individual Licence holder, or <input type="checkbox"/> by a person approved in writing by the Chief Executive Officer (CEO) of DEC to sign on the Licensee's behalf.
a corporation	<input type="checkbox"/> by affixing the common seal of the Licensee in accordance with the Corporations Act 2001; or <input type="checkbox"/> by two directors of the Licensee; or <input type="checkbox"/> by a director and a company secretary of the Licensee, or <input type="checkbox"/> if the Licensee is a proprietary company that has a sole director who is also the sole company secretary – by that director, or <input type="checkbox"/> by the principal executive officer of the Licensee; or <input type="checkbox"/> by a person with authority to sign on the Licensee's behalf who is approved in writing by the CEO of DEC.
A public authority (other than a local government)	<input type="checkbox"/> by the principal executive officer of the Licensee; or <input type="checkbox"/> by a person with authority to sign on the Licensee's behalf who is approved in writing by the CEO of DEC.
a local government	<input type="checkbox"/> by the CEO of the Licensee; or <input type="checkbox"/> by affixing the seal of the local government.

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

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

Signature:

Signature:

Name: (printed)

Name: (printed)

Position:

Position:

Date:

Date:

Seal (if signing under seal)


P dry

Ltd ..... Date: .....



Licence: L7279/1994/9  
Form: GR1  
Name: Monitoring of groundwater

Licensee: Westpork Pty Ltd  
Period :

Form GR1: Monitoring of groundwater						
Emission point	Parameter	Limit	Result <sup>1</sup>	Averaging period	Method	Sample date & times
GB1A – GB2B	Standing water level		m			
GB1A – GB2B	pH					
GB1A – GB2B	Electrical conductivity		µS/cm			
GB1A – GB2B	Total Dissolved solids		mg/L			
GB1A – GB2B	Total Nitrogen		mg/L			
GB1A – GB2B	Total Phosphorus		mg/L			

Note 1: All units are referenced to STP dry

Signed on behalf of Westpork Pty Ltd: ..... Date: .....

Ltd: .....

Date: .....



Licence: L7279/1994/9  
Form: EL1  
Name:

Licensee: Westpork Pty Ltd  
Date of exceedance:

**Form EL1: Limit exceedance under exemption where relevant management action taken**

Emission point	Exemption event reference	Date & time	Parameter	Peak emission <sup>1</sup> (mg/m <sup>3</sup> )	Peak emission <sup>1</sup> (g/s)	Average emission <sup>1</sup> (mg/m <sup>3</sup> )	Average emission <sup>1</sup> (g/s)	Duration of exceedance (seconds)	Date & time process restarted (if stopped)
				mg/m <sup>3</sup>	g/s	mg/m <sup>3</sup>	g/s	s	

Please provide details of the exceedance, including but not limited to:

- (a) the root cause analysis for the exceedance and any contributory factors
- (b) a description of remedial measures taken (including relevant management actions) or planned to be taken, including those taken to prevent recurrence of the exceedance;
- (c) from 1 hour prior to the exceedance to the end of the exceedance; a description of remedial measures taken or planned to be taken, including those taken to prevent recurrence of the exceedance; meteorological details: temperature, wind speed and wind direction, humidity; and
- (d) complaints received that may have been caused by this exceedance.

Note 1: All units are referenced to STP dry

Signed on behalf of Westpork Pty Ltd ..... Date: .....





Licence: L7279/1994/9  
Form: N1

Licensee: Westpork Pty Ltd  
Date of breach:

**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	

<b>Notification requirements for the breach of a limit</b>	
<b>To be notified as soon as practicable and no later than 5PM of the next working day</b>	
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	

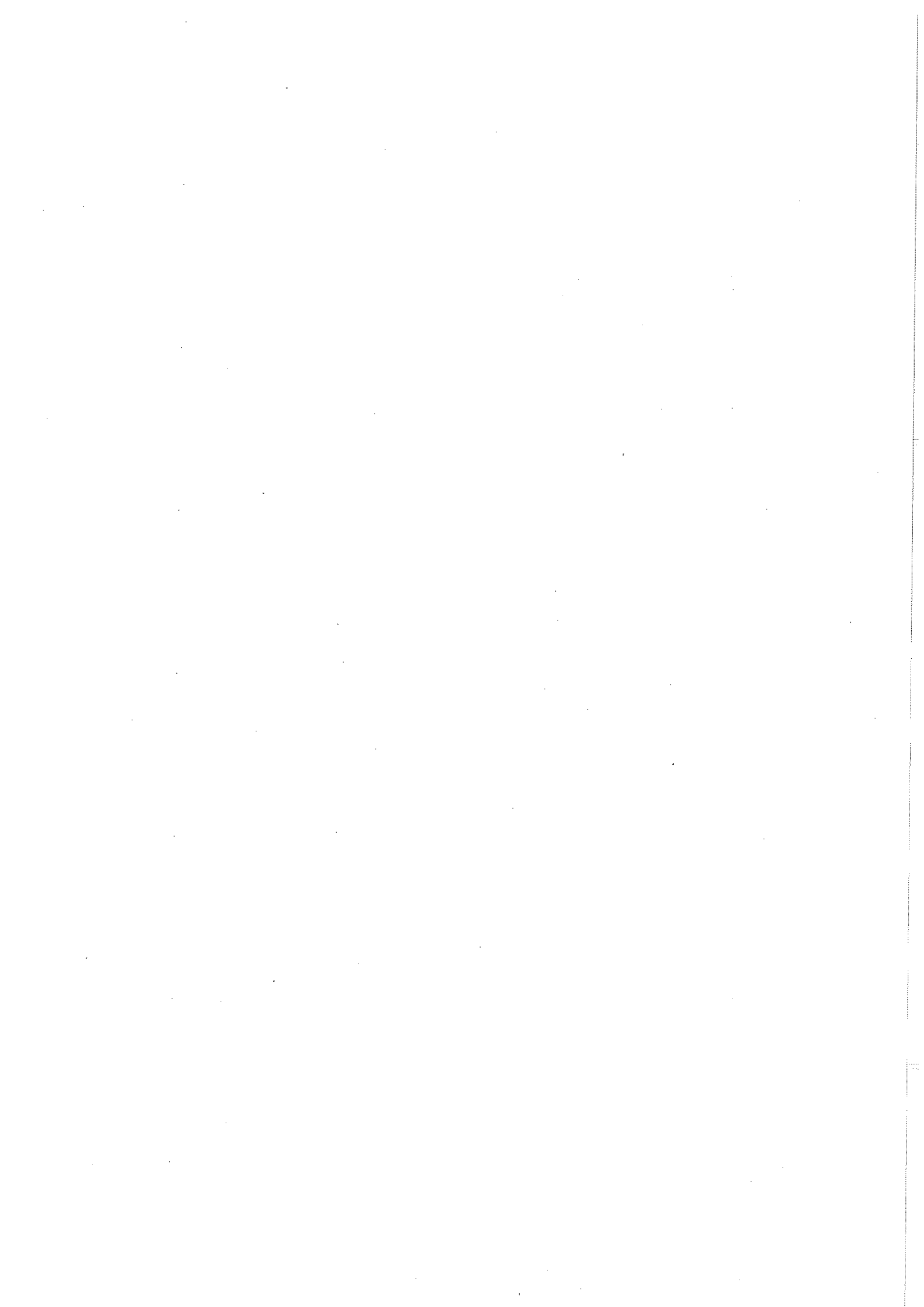
<b>Notification requirements for any failure or malfunction of any pollution control equipment or any incident which has caused, is causing or may cause pollution</b>	
<b>To be notified as soon as practicable and no later than 5PM of the next working day</b>	
Date and time of event	
Reference or description 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 unauthorised emissions from the installation in the preceding 24 months.	

Name*	
Post	
Signature on behalf of <b>Error! Reference source not found.</b> Westpork Pty Ltd	
Date	





**LICENCE NUMBER: L7279/1994/9**  
**LICENCE FILE NUMBER: 2012/2000227**  
**APPLICATION DATE: 12 Jan 2012**  
**EXPIRY DATE: 9 October 2017**

## PREMISES DETAILS

### LICENCE HOLDER AND OCCUPIER

Westpork Pty Ltd  
Unit 1/7 Foundry Road  
MAYLANDS WA 6051  
ACN: 009 148 789

### PREMISES

Westpork – Martup Hills Piggery  
Lot 4661 on Plan 227772 Gorn Road  
BOKAL WA 6392

### PRESCRIBED PREMISES CATEGORY

Table 1: Prescribed Premises Category from Schedule 1 of the Environmental Protection Regulations 1987

Category number*	Category Description*	Category Production or Design Capacity*	Premises Production or Design Capacity#	Premises Fee Component**
2	Intensive Piggery: premises on which pigs are fed, watered and housed in pens.	1,000 animals or more per year	4350 animals	More than 2 000 but not more than 5000 animals

\* From Schedule 4 of the Environmental Protection Regulations 1987

# From application

\*\* From Schedule 4 of the Environmental Protection Regulations 1987

This Environmental Assessment Report (EAR) has been drafted for the purposes of detailing information on the management and mitigation of emissions and discharges from the prescribed premises. The objective of the EAR is to provide a risk assessment of emissions and discharges, and information on the management of other activities occurring onsite which are not related to the control of emissions and discharges from the prescribed premises activity. This does not restrict the Department of Environment and Conservation (DEC) to assessing only those emissions and discharges generated from the activities that cause the premises to become prescribed premises.

### Basis of Assessment

Westpork Martup Hills Piggery has been assessed as a Category 2 "prescribed premises" under Schedule 1 of the Environmental Protection Regulations 1987, as detailed in Table 1.

Westpork breed piglets to be supplied to other farms to be grown out to market size. The current operation has 600 sows, and 3750 pigs between 24 days and 4 weeks.



## **1.0 BACKGROUND**

### **1.1 GENERAL COMPANY DESCRIPTION**

The Westpork Martup Hills Piggery has been recently purchased by Westpork Pty Ltd. The company holds licence L7279/1994/8 for 600 sows and 3 750 growing pigs. The site has been licensed as a piggery under the Environmental Protection Regulations 1987 since 1993. The piggery supplies other farms with the weaner pigs to be grown out.

Westpork Pty Ltd also operates two licensed piggeries North of Gingin (breeding facilities only):

- Wannamel Operations – L5724/10; and
- Boonanarring Operations L4409/1988/7.

### **1.2 LOCATION OF PREMISES**

The premises is located at Kojonup Locations 4850 and 4661 on Gorn Road, Bokal in the Shire of West Arthur. The site is cleared pastoral land and is 267 hectares in area.

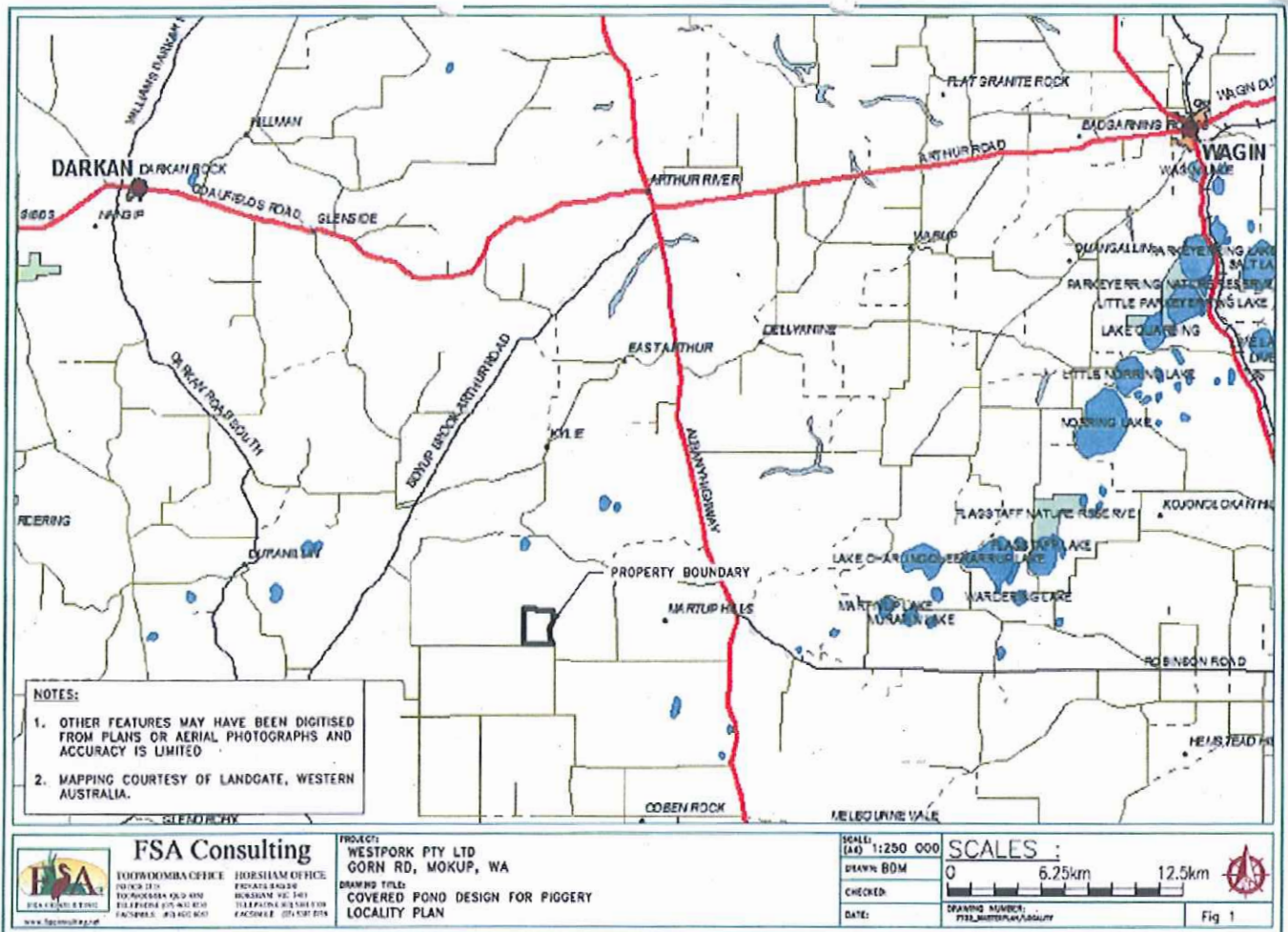
The soils of the site consist of sands based in an old paleochannel. The sands have a high clay content and the nutrient application of the piggery solids and effluent application was previously assessed for the licence to determine the target nutrient application rates, both on the premises and the adjoining paddocks. To the west of the piggery sheds, over a slight ridge (approx 10 metres) there is a dry swamp which is only about 335 metres from the piggery sheds and approximately 680 metres from the evaporation pond. The swamp is to the west and over the ridge the land slopes down from the piggery sheds to the effluent ponds.

The paleochannel is a fractured aquifer that was described as good quality water in a resource management technical report 385 (prepared by GP Raper and RJ George), published in 2010 by the Department of Agriculture and Food "Modelling the impacts of a Mixed Forestry Plantation on groundwater resources in the Beaufort River area, Western Australia. The report recommends further drilling and groundwater monitoring in the area. The Department of Water does not restrict use of this aquifer and no abstraction licence is required.

Monitoring from the piggery bores report no contamination. There was a short-term spike in elevated nitrogen, phosphorus and TDS in 2008 but these measurements declined to long term averages within 3 months. 2008 coincided with a rainfall event that caused overtopping of ponds. The monitoring conditions will continue.

The nearest residence is 3.5km west of the piggery. The Environmental Protection Authority Guidance Statement No 3: Separation Distances between Industrial and Sensitive Land Uses suggested buffer distance is 3 500 metres for piggeries with 500 to 5 000 pigs. The entire farm is fenced with Agricultural fencing (ring lock and wire) and the actual piggery section has a 6 foot mesh security fence, for biosecurity.

Water is sourced from 2 groundwater bores –one is 50 meters to the west and the second 1.5 km north. Clean water is required for drinking water and cleaning the ponds. Estimated water use is 24.2 mega-litres (ML) a year.



**Figure 1: Premises location**

**1.3 PROCESS DESCRIPTION**

The premise operates an intensive piggery where pigs are housed in pens (in large sheds) for breeding. The premise selectively breeds pigs from a breeding stock of 80 females and 20 males with nine months turnaround of breeding stock. The offspring from the breeding stocks are sold to meat processing contractors for processing and human consumption. The wastewater from the piggery goes through three wastewater treatment ponds (anaerobic, facultative and evaporation ponds respectively). Treated wastewater is reused as wash water, evaporated or disposed of by irrigation.

The farrowing shed is operated as a fully slatted flushed system, which is a shed with a slatted floor section for waste to fall through. The sheds are flushed clean with bore water and recycled water.

The premise has an internal management system in place which covers their daily operational activities. It is listed with AQIS (food quality assurance) which conducts independent audits of the premise operation. The premise is going through an expansion under a Works Approval (5128/2012/1).

Westpork Martup Hills Piggery are moving towards operating as a 1 200 sow multiplier unit (predominately breeder operation) as part of the expansion. The majority of the weaner pigs will be removed from the site every two weeks and grown out by a contract grower, with approximately 380 weaned pigs (24 days old) and approximately 380 pigs one week post weaning (31 days old), removed from the site fortnightly. This will leave approximately 100 pigs per week to be grown out to finishing stage (approximately 24 weeks).



The site comprises of five sheds which have a one metre high concrete perimeter wall around them.

### **Effluent production and treatment**

Effluent is mainly composed of wastewater from shed cleaning and cooling of the sheds, but also includes drinking water spills and leaks, manure and waste feed which is directed to the anaerobic pond

Anaerobic ponds have anaerobic bacteria that convert Volatile Solids (VS) to Volatile Organic Compounds (VOCs), and then to low odour methane and carbon dioxide. The second stage is pH dependent.

All sheds are flushed with conventional flushing systems. Effluent (urine, faeces, spilt water and feed) falls through the slatted floors and are regularly flushed (daily to weekly depending on effluent loads) to one of two anaerobic ponds that have a capacity of 8.2 ML each; operations has only needed to use one pond while the second is there for backup capacity and sludge storage. Partially treated effluent flows from the anaerobic pond to the facultative pond (8 ML capacity) and then to the evaporative storage pond (12.5 ML capacity).

Effluent is treated in the facultative pond which is aerobic near the surface and anaerobic at greater depths. This provides second stage treatment after the anaerobic process, improving effluent stability for use in shed flushing. Flow between all ponds is by gravity.

A nutrient irrigation management plan is required if effluent is irrigated. This was assessed in the previous licences and irrigation allowed under licence, however a Nutrient Irrigation Management Plan was not submitted.

Westpork have installed a water meter at the piggery to measure recycled water use. Data collected from this meter during the first two years of operation will be used to assess the adequacy of the effluent treatment and storage system. If this identifies a deficiency in wet weather holding capacity, Westpork shall look at strategies to minimise water usage or to construct an evaporation basin to increase evaporation losses.

### **Recycled effluent**

The piggery uses 7.7 ML/yr of recycled effluent for flushing the piggery sheds.

### **Solids**

Solids are removed in a concrete lined separator.

### **Wastewater Treatment Ponds**

The ponds have permeability ratings to  $1 \times 10^{-9}$  metres per second. The ponds have 0.5m freeboard. No wastewater is currently irrigated. However, the owner has requested that the irrigation conditions remain in case of an extreme rainfall event and a wet year, so the option to irrigate is still available. This will require a Nutrient Irrigation Management Plan (NIMP) to be provided to DEC for approval.

### **Monitoring**

There are seven current groundwater monitoring bores. Two are on the waste side of the evaporative pond and 5 are between the evaporative pond and Gorn Road.

pH of the effluent is monitored weekly both at the entry of the anaerobic pond and the effluent recycled back to the piggery. Target levels of pH should be above 6.8 going into the anaerobic pond and 7.9 and 8.5 leaving the anaerobic pond. A pH of 6.5 or lower would indicate the anaerobic process is malfunctioning.



The effluent will be tested for:

- pH
- Volatile Solids - mg/l
- Total solids - mg/l
- Total Nitrogen - mg/l
- Total Phosphorus - mg/l

### **Pig carcasses**

Pig mortalities are collected from the piggery sheds daily and transported to the existing carcass disposal area at the site. Following placement carcasses are immediately covered with at least 500 mm of soil to ensure animal material is not exposed. The permeability of the active burial pit is unknown but the new pit being constructed under works approval WA 5158/2012/1 will be lined with impermeable material, or be built in impermeable clay to protect the groundwater,.

### **General**

A Waste Treatment System Procedures Manual has been developed and has procedures for malfunction and operating. It is kept on site.

## **1.4 REGULATORY CONTEXT**

### **1.4.1 Part IV Environmental Protection Act 1986, Environmental Impact Assessment**

Not required to be sent to the EPA

### **1.4.2 Part V Environmental Protection Act 1986, Environmental Management**

The site is currently licensed as L7279/1994/8. Westpork Pty Ltd under Category 2: Intensive Piggery within Schedule 1 of the Environmental Protection Regulations 1987. Westpork currently hold a works approval W5128/2012/1 for this site to construct an additional piggery shed (farrowing shed), a covered anaerobic pond (CAP) and associated infrastructure to increase the number of pigs on the premises. DEC has received no complaints regarding this premise.

### **1.4.3 Other Making Authorities' Legislation which applies**

The Department of Agriculture and Food (DAF) also regulate activities at piggeries in WA.

### **1.4.4 Rights in Water Irrigation Act 1914**

The Department of Water in Bunbury have advised that Westpork do not require a groundwater abstraction licence for this site.

### **1.4.5 Local Government Authority**

The Westpork Martup Hills Piggery is licensed as an offensive trade by the Shire of West Arthur. The Shire has approved the application providing they abide by DEC requirements.





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## **2.0 STAKEHOLDER AND COMMUNITY CONSULTATION**

### **SUBMISSIONS RECEIVED DURING 21 DAY PUBLIC COMMENT PERIOD**

The Application for licence details for this facility was advertised in the West Australian newspaper on 13 February 2012 as a means of advising stakeholders and to seek public comments. No submissions were received.

## **3.0 EMISSIONS AND DISCHARGES RISK ASSESSMENT**

DEC considers that conditions should focus on regulating emissions and discharges of significance. Where appropriate, emissions and discharges which are not significant should be managed and regulated by other legislative tools or management mechanisms.

The following section assesses the environmental risk of potential emissions from Martup Hills Piggery. In order to determine the site's appropriate environmental regulation, an emissions and discharges risk assessment was conducted of Martup Hills Piggery using the environmental risk matrix outlined in Appendix A. The results of this are summarised in Table 2.



**Table 2: Risk assessment and regulatory response summary table.**

Risk factor	Significance of emissions	Socio-Political Context of Each Regulated Emission	Risk Assessment	DEC Regulation (EP Act - Part V)	EAR Reference	Other management (legislation, tools, agencies)
Air emissions (point source)	Operation 1. N/A Current operation does not have any significant air emissions.	Low. DEC received no submissions and site is remote. Nearest receptor is 3.5 kilometres away.	E - No regulation, other management mechanisms.	LIC – N/A		Environmental Protection (Unauthorised Discharges) Regulations 2004
Dust emissions	Operation – significance of emission: 1 Activities on site have little potential to generate dust as the pigs are housed in sheds.	Low. DEC received no submissions and site is remote. Nearest receptor is 3.5 kilometres away.	E-No regulation, other management mechanisms.	LIC – No Conditions		Environmental Protection (Unauthorised Discharges) Regulations 2004
Odour emissions	Operation – significance of emission: 2 There is potential for odour emissions from piggery sheds, anaerobic ponds, and desludging pond.  DEC has received no odour complaints regarding present site activities.  Nearest receptor is 3.5 km to west of piggery and EPA recommended separation distance is 3.500 metres.  Proponent has consulted with the closest neighbour who has no objection to the proposed expansion.  There has been no odour complaints regarding the piggery since it commenced operation in 1986.	Low. DEC received no submissions and site is remote. Nearest receptor is 3.5 kilometres away.	D- EIPs, other management mechanisms/licence conditions (monitoring/reporting)/other regulatory tools	LIC– Odour conditions		Environmental Protection (Unauthorised Discharges) Regulations 2004
Noise emissions	Operations – significance of emission: 1 Piggery operates in an agricultural area.	Low. DEC received no submissions and site is remote. Nearest receptor is 3.5 kilometres away.	E-No regulation, other management mechanisms.	LIC– No Conditions		Environmental Protection (Noise) Regulations 1997
Light emissions	N/A There are no light emissions.	Low. DEC received no submissions and site is remote. Nearest receptor is 3.5 kilometres away.	E-No regulation, other management mechanisms.	LIC– N/A		General provisions of the EP Act
Discharges to water	Operations – Not applicable. There are no discharges to water.	Low. DEC received no submissions and site is remote. Nearest receptor is 3.5 kilometres away.	E-No regulation, other management mechanisms.	LIC – Bore monitoring conditions		Environmental Protection (Unauthorised Discharges) Regulations 2004



Discharges to land	Operations – Significance of emission: 2 There is some risk of discharge to land if wastewater ponds overtop. Risk is considered to be low as system has spare capacity. Current monitoring shows no contamination of groundwater and new pond is to have impermeable lining. Pig carcasses are placed in an unlined pit.	Low. DEC received no submissions and site is remote. Nearest receptor is 3.5 kilometres away. aquifer in this area,	D- EIPs, other management mechanisms/licence conditions (monitoring/reporting)/other regulatory tools	LIC – Conditions on freeboard. No effluent to be discharged beyond the premises boundary NIMP required for land irrigation. Conditions on carcass disposal and desludging of the ponds.	Environmental Protection (Unauthorised Discharges) Regulations 2004
Solid / liquid wastes	Operation – Significance of emission: 2 There is some risk from solid waste storage in desludging areas which will be the unused ponds. However volumes of waste are low and activities are confined to bunded areas. Waste will be taken off site on a regular basis for use as soil conditioner and fertiliser for surrounding farmland application.	Low DEC received no submissions and site is remote. Nearest receptor is 3.5 kilometres away.	D- EIPs, other management mechanisms/licence conditions (monitoring/reporting)/other regulatory tools	LIC – Conditions on current licence to continue	Controlled Waste Regulations 2004, EMS
Hydrocarbon/chemical storage	Not applicable. None stored on site.	N/A	N/A	LIC –N/A	
Native vegetation clearing	Not applicable. No clearing is required.	N/A	N/A	LIC – N/A	
Contaminated site identification	Operation: Significance of emission: 1 Ongoing and historical groundwater monitoring shows no contamination.	Low DEC received no submissions and site is remote. Nearest receptor is 3.5 kilometres away.	E – No regulation, other management mechanisms.	LIC –N/A	Contaminated Sites Act 2003



## 4.0 GENERAL SUMMARY AND COMMENTS

This site is considered to be low risk and the licence should be reissued for 5 years.

During operation of the facility the following potential emissions or discharges of significance have been assessed as requiring regulation via conditions.

- Odour;
- Wastewater; and
- Solid Waste.

### OFFICER PREPARING REPORT

\_\_\_\_\_  
Margaret Redfern  
Position: Environmental Officer  
Wheatbelt Regional Office  
Department of Environment and Conservation

26 September 2012

### ENDORSEMENT

\_\_\_\_\_  
Alan Kietzmann  
Position: Program Manager  
Wheatbelt Regional Office  
Department of Environment and Conservation

27 September 2012



## APPENDIX A: EMISSIONS AND DISCHARGES RISK ASSESSMENT MATRIX

**Table 3: Measures of Significance of Emissions**

Emissions as a percentage of the relevant emission or ambient standard		Worst Case Operating Conditions (95 <sup>th</sup> Percentile)			
		>100%	50 – 100%	20 – 50%	<20%*
Normal Operating Conditions (50 <sup>th</sup> Percentil	>100%	5	N/A	N/A	N/A
	50 – 100%	4	3	N/A	N/A
	20 – 50%	4	3	2	N/A
	<20%*	3	3	2	1

\*For reliable technology, this figure could increase to 30%

**Table 4: Socio-Political Context of Each Regulated Emission**

		Relative proximity of the interested party with regards to the emission				
		Immediately Adjacent	Adjacent	Nearby	Distant	Isolated
Level of Community Interest or Concern*	5	High	High	Medium High	Medium	Low
	4	High	High	Medium High	Medium	Low
	3	Medium High	Medium High	Medium	Low	No
	2	Low	Low	Low	Low	No
	1	No	No	No	No	No

Note: These examples are not exclusive and professional judgement is needed to evaluate each specific case

\*This is determined by DEC using the DEC "Officer's Guide to Emissions and Discharges Risk Assessment" May 2006.

**Table 5: Emissions Risk Reduction Matrix**

		Significance of Emissions				
		5	4	3	2	1
Socio-Political Context	High	A	A	B	C	D
	Medium High	A	A	B	C	D
	Medium	A	B	B	D	E
	Low	A	B	C	D	E
	No	B	C	D	E	E

**PRIORITY MATRIX ACTION DESCRIPTORS**

A = Do not allow (fix)

B = licence condition (setting limits + EMPs - short timeframes)(setting targets optional)

C = licence condition (setting targets + EMPs - longer timeframes)

D= EIPs, other management mechanisms/licence conditions (monitoring/reporting)/other regulatory tools

E = No regulation, other management mechanisms

Note: The above matrix is taken from the DEC Officer's Guide to Emissions and Discharges Risk Assessment May 2006.