



Licence

Environmental Protection Act 1986, Part V

Licensee: Shark Lake Food Group Pty Ltd

Licence: L7294/1998/11

Registered office: Suite 2
70 Lincoln Road
ESSENDON VIC 3040

ACN: 129 816 360

Premises address: Lot 21 on Plan 180121 and Lot 1043 on Plan 152576
Coolgardie-Esperance Highway
MYRUP WA 6450 as depicted in Schedule 1

Issue date: Thursday, 16 October 2014

Commencement date: Saturday, 18 October 2014

Expiry date: Monday, 17 October 2016

Prescribed Premises Category

Schedule 1 of the *Environmental Protection Regulations 1987*

Category number	Category description	Category production or design capacity	Approved Premises production capacity
15	Abattoir: premises on which animals are slaughtered	1000 tonnes or more per year	Not more than 7,350 tonnes (animal live weight) or 5,000 tonnes (hot carcass weight) per annual period
16	Rendering operations: premises on which substances from animal material are processed or extracted	100 tonnes or more per year	Not more than 10,000 tonnes per annual period
55	Livestock saleyard or holding pen: premises on which live animals are held pending their sale, shipment or slaughter	10 000 animals or more per year	Not more than 300,000 animals per annual period
83	Fellmongering: premises on which animal skins or hides are dried, cured or stored	1000 skins or hides or more per year	Not more than 300 000 skins per annual period

Conditions

This Licence is subject to the conditions set out in the attached pages.

Date signed: 17 December 2015

.....
Jonathan Bailes
Manager Licensing (Process Industries)
Officer delegated under section 20
of the *Environmental Protection Act 1986*



Contents

Introduction	2
Licence conditions	5
1 General	5
2 Emissions	11
3 Monitoring	11
4 Improvements	14
5 Information	15
Schedule 1: Maps	19
Schedule 2: Reporting & notification forms	24

Introduction

This Introduction is not part of the Licence conditions.

DER's industry licensing role

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

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

Licence requirements

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



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 for Environment.

Premises description and Licence summary

The Shark Lake Premises has been held a licence to operate an abattoir, fellmonger and rendering facility since 1998. The Premises was not constructed through a works approval. The licence was transferred to the current occupiers Shark Lake Food Group Pty Ltd (SLFG) in April 2008. The abattoir processes cattle and sheep and has an approved processing capacity of 5,000 tonnes hot standard carcass weight (HSCW) or 7,350 tonnes live weight (LW) per annual period.

The premises is located within the catchment of Meljilup Creek, which drains into Lake Warden, which is part of the Lake Warden System (LWS). Then LWS is a wetland of international significance under the Ramsar Convention. The State Salinity Action Plan lists the catchment for the LWS as a Natural Diversity Recovery Catchment. Lake Warden is located 2.2 km south of the Premises' southern boundary. The Premises is also situated within the Esperance Groundwater Area, gazetted under the Rights in Water and Irrigation Act 1914 and lies above a direct groundwater transport zone flowing to Pink Lake and the LWS. Surrounding land use is mainly agriculture and special rural small-holdings. The closest residence is approximately 1 km south-west of the premises and the Department of Agriculture and Food, Western Australia (DAFWA) has offices approximately 0.5 km south-east.

The premises was not initially constructed through a works approval and only one of the wastewater ponds (anaerobic Pond 1) and the bio-filter (for odour management) was assessed and constructed through Works Approval W4497/2008/1.

Works Approval W5107/2011/1 (expires 24 January 2018) was granted for the implementation of the Shark Lake Food Group Environmental Improvement Plan 2012-2016 (EIP) for the construction of three additional 10ML evaporation ponds. To date, two of these ponds have been constructed.

The stock holding yards and lairage for small stock cover an area of 2,280m² in total and have a maximum holding capacity of 4,935 units at any one time. The three stock holding yards for cattle are 3,840m² in total and have a maximum holding capacity of 773 units.

The rendering plant produces meat meal, blood meal and tallow using waste products from the abattoir. Sodium hydroxide is used in the hydrolyser to burn off wool on sheep heads and hocks prior to rendering. This is dosed into the hydrolyser at a rate of 50L per day and the system is purged daily into the effluent system. The cattle hides are refrigerated; all other skins are dried by osmosis through the addition of salt.

There are two hot water generating boilers on site. A 5,000kW capacity unit is the main hot water producing boiler and a 3,500kW unit is the back-up. They are powered by either sump oil or tallow (processed animal wastes). The sump oil is stored in a 35,000 litre tank and the tallow is stored in a 40,000 litre tank. These tanks are not currently provided with secondary containment and have the potential to discharge to land in the event of a leak or spill. A range of chemicals are stored in bunded containment on site and include mainly acid and alkali based cleaners such as caustic soda (10 to 60% concentration), which is stored in a 1,000L bunded plastic container.



In October 2014, SLFG advised the DER that the premises was incapable of storing effluent within its existing Pond 6 prior to the completion of further evaporation ponds. As a result of this limited ability to dispose of treated wastewater, SLFG and the Shire of Esperance reached an agreement to temporarily transfer wastewater from Pond 6 to the Myrup Truck Wash and Liquid Waste Facility (TWLWF) to prevent an overflow and discharge to land.

In October 2014, SLFG completed the construction of two additional evaporation ponds (Ponds 7 and 8) under Works Approval W5107/2011/1. The new ponds increased the site's effluent storage capacity by at least 20ML. Through the use of the new ponds, that site has demonstrated an ability to manage throughputs without risking an overtopping of evaporation ponds.

In the past all solid wastes have been removed for off-site disposal except for waste wood and cardboard which is burnt in a small open incinerator. A DER inspection on 21 January 2015 identified that other wastes such as plastics had been burnt in the incinerator despite licence conditions not allowing this. SLFG has provided a commitment that only wood and cardboard will be incinerated at the premises, whilst more sustainable options for re-use and recycling of the waste are investigated. As such, the use of the incinerator remains on the licence until the licence is due to be reissued in October 2016, while other waste management options are investigated.

This Licence amendment is to remove category 61 and to allow works to be carried out to upgrade infrastructure at the site. Other administrative changes have been made to update licence conditions and correct errors.

The licences and works approvals issued for the Premises since 18/10/1998 are:

Instrument log		
Instrument	Issued	Description
Instrument number and version	Date of issue or amendment	Reason for issue of instrument e.g. ministers decision must be recorded
L7298/1998/1	18/10/1998	New application - Grieves and Reid, Shark Lake Meat Works
L7298/1998/2	18/10/1999	Licence re-issue
L7298/1998/3	18/10/2000	Licence re-issue
L7298/1998/4	02/10/2001	Licence re-issue
L7298/1998/5	11/10/2002	Licence re-issue
L7298/1998/6	30/10/2003	Licence re-issue
L7298/1998/7	18/10/2004	Licence re-issue
L7294/1998/8	18/10/2005	Licence re-issue
L7298/1998/9	18/10/2006	Licence re-issue
L7298/1998/9	19/06/2008	Licence Transfer to Shark Lake Food Group Pty Ltd
L7294/1998/10	16/10/2008	Licence re-issue
W4497/2008/1	08/01/2009	Works Approval (installation of bio-filter and anaerobic Pond 1)
L7294/1998/10	17/07/2010	Licence amendment
L7294/1998/10	06/01/2011	Licence amendment
W5107/2011/1	25/01/2012	Works Approval (three new evaporation ponds and to increase throughput to 30,000 tpa (live weight)) expires 24/01/2018
L7294/1998/10	2/02/2012	Licence amendment
L7294/1998/10	01/10/2014	Licence amendment
L7294/1998/11	17/10/2014	Licence re-issue and update to new template
L7294/1998/11	03/10/2014	Licence amendment to allow SLFG accept liquid waste from Myrup TWLWF
L7294/1998/11	17/12/2015	Licence amendment to remove category 61 and allow general infrastructure upgrades



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*;

'AHD' means the Australian height datum;

'animals' means live cattle, sheep or goats;

'animal waste material' includes blood, bone, fat, paunch contents, animal effluent, and residues not directed to the wastewater treatment system;

'annual period' means the inclusive period from 1 October until 30 September in the following year;

'AS 3543' means the Australian Standard AS 3543 *Use of standard Ringelmann and Australian Standard miniature smoke charts*;

'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 5667.6' 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*;

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

'bimonthly' means every two calendar months;

'bio-filter' means the bio filter installed through works approval W4497/2008/1 at the location depicted in the map of emission points in Schedule 1;



'boilers' means the 5,000kW fully unattended boiler unit or 3,500kW back-up boiler that burn tallow and sump oil to generate steam and hot water for the site;

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

'CEO' for the purpose of correspondence means:

Chief Executive Officer
Department Administering the Environmental Protection Act 1986
Locked Bag 33
CLOISTERS SQUARE WA 6850
Email: info@der.wa.gov.au

'cookers' means any equipment, powered by a boiler, within the rendering facility used to heat animal waste material for the purpose of rendering;

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

'freeboard marker' means a measuring device installed in a pond that enables the freeboard of that pond to be visually measured in millimetres at any time;

'hardstand' means a surface with a permeability of 1×10^{-9} metres/second or less;

'HDPE' means high density polyethylene;

'impervious' means a permeability to water of 1×10^{-9} metres/second or less;

'kL' means kilolitres;

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

'Licence' means this Licence numbered L7297/1998/10 and issued under the Act;

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

'ML' means megalitres

'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;

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

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

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

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

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

'SWL' means standing water level measured in meters AHD;



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

'wastewater' means effluent generated from the abattoir, rendering and stockholding activities on the premises including contaminated stormwater;

'wastewater ponds' means all ponds containing untreated or treated wastewater described as Ponds 1 to 8 and Pond 11 at the locations depicted on the premises map and map of emission points and containment infrastructure locations in Schedule 1; and

'wastewater treatment system' means the pond-based system for treating, storing and wastewater, including interconnecting pipes and drains to and between ponds as shown on the premises map and map of emission points and containment infrastructure locations in Schedule 1.

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

1.1.3 Any reference to an Australian or other standard in the Licence means the relevant parts of the standard currently in force as may be amended or replaced 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 currently in force as may be amended or replaced from time to time during the term of this Licence.

1.1.5 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 General conditions

1.2.1 The Licensee shall operate and maintain all pollution control and monitoring equipment to the manufacturer's specification or any relevant and effective internal management system.

1.2.2 The Licensee shall immediately recover, or remove and dispose of spills of environmentally hazardous materials which occur outside an engineered containment system.

1.2.3 The Licensee shall:

- (a) implement all practical measures to prevent stormwater run-off becoming contaminated by the activities on the Premises.¹

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



1.3 Premises operation

1.3.1 The Licensee shall only conduct activities on the premises in accordance with the authorised processes set out in Table 1.3.1.

Table 1.3.1: Authorised Processes		
Animals/Waste	Processes	Process limits
Animals	Receipt, slaughter and processing	No more than 7,350 tonnes (live weight) or 5,000 tonnes (hot carcass weight) of animals may be slaughtered per annual period.
Animals	Holding and lairage	Animals must not be placed or held in the undrained stock holding yards indicated as point '2' on the map of emission points and containment infrastructure locations in Schedule 1.
Animal waste material for rendering	Storage, handling, hydrolysing and rendering	Not more than 10,000 tonnes of animal waste material shall be rendered per annual period. The Licensee must operate the rendering facility such that exhaust gases from the cookers are directed to the condenser and bio-filter.
Animal skins	Storage, handling and curing	Salt wastes must not be discharged to land or into the wastewater treatment system.
Blood	Storage, handling, and cooking	The Licensee must operate the blood cooker such that exhaust gases are directed to the condenser and bio-filter. Run-off from the blood storage, handling and cooking areas must be directed to the wastewater system.
Untreated wastewater	Physical and biological treatment	All wastewaters including wash down water, by-products wastewater and contaminated run-off shall be directed to the wastewater treatment ponds using impervious pipes or drains.
Treated wastewater	Evaporation	A net volume of no greater than 8ML of treated wastewater shall be stored in evaporation Pond 6 per annual period. No more than 20ML cumulative volume of treated wastewater shall be re-directed from evaporation Pond 6 into evaporation Ponds 7 and 8 per annual period. No net volume of treated wastewater must be stored in holding Pond 11 from the commencement to the end of each annual period. No irrigation or discharge of wastewater to land shall occur.
Tallow	Storage and burning to generate steam and hot water	Used in the boilers as a fuel.
Sump oil		No more than 385,000L of tallow or sump oil used per annual period.



1.3.2 The Licensee shall ensure that waste is only stored and/or treated within vessels or compounds provided with the infrastructure detailed in Table 1.3.2.

Table 1.3.2: Containment infrastructure		
Storage vessel or compound	Material	Infrastructure requirements
Solid waste storage bay	Manure collected from stock holding pens, lairage and transport vehicles, and paunch material	Covered and bunded hardstand area.
Blood tank	Blood	2 x 10 000L enclosed impermeable tanks, stored on a hardstand area.
Tallow tank	Tallow	1 x 12 000L; 1 x 16 000L; 1 x 40 000L; 1 x 90 000L enclosed impermeable tanks, stored on a hardstand area.
Sump oil tank	Sump oil	1 x 35 000L enclosed impermeable tank, stored on a hardstand area.
Pond 1 (Anaerobic pond)	Abattoir , rendering and stock holding yards wastewater	Lined to achieve a permeability of at least 1×10^{-9} m/s.
Pond 2 (Aerobic pond)		
Pond 3 (Aerobic pond)	Treated wastewater	Clay lined.
Pond 4 (Aerobic pond)		
Pond 5 (Aerobic pond)		
Pond 6 (Evaporation pond)		
Pond 7 (Evaporation pond)		
Pond 8 (Evaporation pond)		HDPE lined.
Pond 11 (Holding pond)		Lined with at least 1m of clay to achieve a permeability of at least 1×10^{-9} m/s.
Wastewater transfer pipeline from Pond 5 to Pond 6, 7 and 8		Constructed from impervious poly-pipe with intact joints.

1.3.3 The Licensee shall ensure that where waste produced on the Premises are not immediately taken off-site for lawful use or disposal, they are managed in accordance with the requirements in Table 1.3.3.



Table 1.3.3: Management of Waste		
Waste type	Disposal strategy	Operational requirements
Pre-slaughter deceased animals	Storage, handling, hydrolysing and rendering	Deceased livestock identified prior to slaughter must be rendered within 24 hours. Burial of deceased livestock must not occur.
Animal waste material for rendering	Storage, handling, hydrolysing and rendering	Stored within sealed buildings, covered vessels or containers prior to rendering. Raw animal waste material must not be stored for longer than 24 hours prior to rendering.
Manure collected from stock holding pens, lairage and transport vehicles, and paunch material	Storage and handling prior to removal off-site.	Stored in a covered and bunded hardstand area.
Animal skins	Storage, handling and curing	Sheep skins must be treated with salt within 8 hours of slaughter and stored on a covered hardstand area. Cattle skins must be refrigerated within 8 hours of slaughter.
Blood	Storage, handling, and cooking	Blood must be rendered the same working day it is generated.
Waste cardboard, paper, and untreated timber	Incineration	No other wastes must be incinerated.

- 1.3.4 The Licensee shall manage wastewater Ponds 2 to 8 and Pond 11 such that:
- (a) a minimum freeboard of 300mm is maintained;
 - (b) stormwater runoff is prevented from causing the erosion of inner and outer pond embankments;
 - (c) overflow of wastewater from the ponds does not occur;
 - (d) vegetation is prevented from growing on inner pond embankments; and
 - (e) a freeboard marker is maintained to enable the internal freeboard levels to be measured (in millimetres) at all times; and
- 1.3.5 The Licensee shall manage wastewater Pond 1 (anaerobic pond) such that a crust is maintained at all times.
- 1.3.6 The Licensee shall manage wastewater Pond 5 and Pond 6 such that:
- (a) all treated wastewater being directed to Pond 6 passes through flow meter 1 (PM1);
 - (b) all treated wastewater being directed to Ponds 7 and 8 from Pond 6 passes through flow meter 2 (PM2);
 - (c) all treated wastewater being directed from Pond 5 to Pond 11 passes through flow meter 3 (PM3);
 - (d) all treated wastewater being directed from Pond 11 to Pond 5 passes through flow meter 4 (PM4); and
- 1.3.7 The Licensee shall manage Ponds 6, 7, 8 and 11 such that the water transfer pipeline outlet is kept clear of the water surface level at all times.



2 Emissions

2.1 General

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

2.2 Point source emissions to air

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

Table 2.2.1: Emission points to air		
Emission point reference and location on Map of emission point and containment infrastructure locations	Emission point	Source, including any abatement
A1	Boiler house stack	Sump oil or tallow fired boilers
A2	Biofilter	Waste gases from the cookers passed through the condenser

2.2.2 The Licensee shall not cause or allow point source emissions to air greater than the limits listed in Table 2.2.2.

Table 2.2.2: Point source emission limits to air			
Emission point Reference	Parameter	Limit (including units) ¹	Averaging period
A1	Smoke	Ringelmann Shade 4 or greater for a period longer than four minutes	Spot Sample

Note 1: All units are referenced to AS 3543 Ringelmann and Australian Standard miniature smoke charts

3 Monitoring

3.1 General monitoring

3.1.1 The licensee shall ensure that:

- (a) all water samples are collected and preserved in accordance with AS/NZS 5667.1;
- (b) all wastewater samples are collected in accordance with AS/NZS 5667.10;
- (c) all surface water sampling is conducted in accordance with AS/NZS 5667.6;
- (d) all groundwater sampling is conducted in accordance with AS/NZS 5667.11; and
- (e) all samples are submitted to and tested by a laboratory with current NATA accreditation for the parameters being measured.

3.1.2 The Licensee shall ensure that:

- (a) monthly monitoring is undertaken at least 15 days apart;
- (b) quarterly monitoring is undertaken at least 45 days apart; and
- (c) annual monitoring is undertaken at least 9 months apart.

3.1.3 The Licensee shall record production or throughput data and any other process parameters relevant to any monitoring undertaken.

3.1.4 The Licensee shall ensure that all monitoring equipment used on the Premises to comply with the conditions of this Licence is calibrated in accordance with the manufacturer's specifications.



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

3.2 Monitoring of point source emissions to air

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

Table 3.2.1: Monitoring of point source emissions to air					
Emission point reference	Parameter	Units¹	Averaging period	Frequency	Method
A1	Smoke	Ringelmann Shade	Spot sample	Every 60 minutes during operation of the boilers	AS 3543

Note 1: All units are referenced to AS 3543 Ringelmann and Australian Standard miniature smoke charts

3.3 Monitoring of inputs and outputs

3.3.1 The Licensee shall monitor and record inputs/outputs in Table 3.6.1 according to the specifications in that table.

Table 3.3.1: Monitoring of inputs and outputs				
Input/output	Parameter/ substance	Units	Averaging period	Frequency
Input	Live Weight of animals processed at the Premises ¹	Tonnes	Monthly	Each batch of animals arriving at the Premises for the purpose of slaughter
	Water directed to the wastewater treatment system estimated using water usage	kL		Continuous
	Animal waste materials being rendered	Tonnes		Each load entering the rendering plant
Output	Animal waste material	Tonnes	Monthly	Each load leaving the premises.
	Animal skins	Number		

Note 1: Live weight to be calculated from hot standard carcass weight tonnages.



3.4 Process monitoring

3.4.1 The Licensee shall undertake the monitoring in Table 3.7.1 according to the specifications in that table.

Table 3.4.1: Process monitoring					
Monitoring point reference and location on Map of monitoring locations	Process description	Parameter/ Substance	Units	Frequency	Method
Ponds 6, 7, 8 and 11	Freeboard marker in Ponds 6, 7, 8 and 11	Freeboard	mm	Daily	Visually measured using the freeboard marker
PM1 – Flow meter 1	Pond 5	Cumulative water flows from Pond 5 to evaporation Pond 6	kL		Meter readings
PM2 – Flow meter 2	Pond 6	Cumulative water flows from Pond 6 to Ponds 7 and 8	kL		Meter readings
PM3 – Flow meter 3	Pond 5	Cumulative water flows from Pond 5 to holding Pond 11	kL		Meter readings
PM4 – Flow meter 4	Pond 11	Cumulative water flows from Pond 11 to evaporation Ponds 7 and 8	kL		Meter readings
P1, P2, and P3	Water transfer pipelines	Integrity of water transfer pipeline	None		Visually inspected for any leaks, punctures, diversions or failures, and verify that the outlet is above the water level in the receiving pond.
Boilers	Steam generation	Tallow and sump oil	Tonnes		Monthly
		Operating hours	Hours	Monthly	

3.5 Ambient environmental quality monitoring

3.5.1 The Licensee shall undertake the monitoring in Tables 3.5.1 and 3.5.2 according to the specifications in those tables and record and investigate results that do not meet any limit specified.



Table 3.5.1: Monitoring of ambient surface water quality				
Monitoring point reference and location on Map of monitoring locations	Parameter/ Substance	Units	Averaging period	Frequency
WQ1- WQ2 (Melijinup Creek)	pH	-	Spot sample	Monthly when water is present
	Electrical conductivity	µS/cm		
	Total Nitrogen	mg/L		
	Total Aluminium			
	Total Phosphorus			
	Total Suspended Solids			
Biochemical Oxygen Demand				

Table 3.5.2: Monitoring of ambient groundwater quality					
Monitoring point reference and location on Map of monitoring locations	Parameter/ Substance	Limits	Units	Averaging period	Frequency
GQ1, GQ2, GQ3, GQ4, GQ5, EPB1, EPB2, EPB3, EPB4 and EPB5	Standing water level(SWL)	>2m	m(AHD)	Spot sample	Quarterly
	pH	Between 6 and 8	-		
	Electrical conductivity	N/A	µS/cm		
	Boron	40	mg/L		Annually
	Cadmium	0.02			
	Chlorine residuals	-			
	Copper	20			
	Lead	0.1			
	Mercury	0.01			
	Zinc	30			
	Total Dissolved Solids	1500			
	Total Nitrogen	-			Quarterly
	Total Phosphorus	-			
	Total Aluminium	20			



4 Information

4.1 Records

- 4.1.1 All information and records required by the Licence shall:
- (a) be legible;
 - (b) if amended, be amended in such a way that the original and subsequent amendments remain legible or are capable of retrieval;
 - (c) except for records listed in 4.1.1(d) be retained for at least 6 years from the date the records were made or until the expiry of the Licence or any subsequent licence; and
 - (d) for those following records, be retained until the expiry of the Licence and any subsequent licence:
 - (i) off-site environmental effects; or
 - (ii) matters which affect the condition of the land or waters.
- 4.1.2 The Licensee shall ensure that:
- (a) any person left in charge of the Premises is aware of the conditions of the Licence and has access at all times to the Licence or copies thereof; and
 - (b) any person who performs tasks on the Premises is informed of all of the conditions of the Licence that relate to the tasks which that person is performing.
- 4.1.3 The Licensee shall complete an Annual Audit Compliance Report indicating the extent to which the Licensee has complied with the conditions of the Licence and any previous licence issued under Part V of the Act for the Premises for the previous annual period.
- 4.1.4 The Licensee shall implement a complaints management system that as a minimum records the number and details of complaints received concerning the environmental impact of the activities undertaken at the Premises and any action taken in response to the complaint.
- 4.1.5 The Licensee shall implement and maintain a flow recording log that contains the following information for all wastewater flows on the premises:
- (a) Flow meter name (PM1, PM2, PM3 or PM4, as identified in Schedule 1);
 - (b) Time and date of meter recording;
 - (c) Daily cumulative flows in kL;
 - (d) Place of flow discharge (e.g. name of receiving pond);
 - (e) Vertical freeboard measurement within the receiving pond before and after each wastewater flow;
 - (f) Monthly water transfer pipeline integrity inspections; and
 - (g) Name and person making entry.
- 4.1.6 The Licensee shall implement and maintain a smoke recording log on the premises that records the monitoring carried out in accordance with condition 3.2.1.



4.2 Reporting

4.2.1 The Licensee shall submit to the CEO an Annual Environmental Report within 28 calendar days after the end of the annual period. The report shall contain the information listed in Table 4.2.1 and where specified in the format or form specified in that table.

Table 4.2.1: Annual Environmental Report		
Condition or table (if relevant)	Parameter/ required information	Format or form¹
Table 3.3.1	Estimated wastewater volumes in kL directed to the wastewater treatment system per annual period (calculated from water usage).	None specified
Table 3.3.1	Operating hours per month for boilers; Type of fuel used and corresponding quantity in tonnes; and Any maintenance records for the boilers outlining conformance with manufacturer's environmental emission specifications.	None specified
Table 2.2.2	Limit exceedances for the annual period	None specified
Table 3.3.1	Number and species of animals and approximate live weight Tonnage of animals slaughtered each month, Tonnage of animal waste materials and manure leaving the premises. Tonnage of animal products being rendered. Number of animal skins leaving the premises.	None specified
Table 3.4.1	Pipeline integrity for the annual period and cumulative water flows from: <ul style="list-style-type: none"> • Pond 5 to evaporation Pond 6; • evaporation Pond 6 to Ponds 7 and 8; • Pond 5 to holding Pond 11; and • Holding Pond 11 to Pond 7 and 8. 	Log as per condition 4.1.5
3.8.1	Results of any investigation into ambient monitoring that did not meet any limit specified.	None specified
Table 3.8.1	Total nitrogen, total aluminium, total phosphorus, suspended solids, biochemical oxygen demand, electrical conductivity and pH.	None specified
Table 3.8.2	Standing water level, pH, electrical conductivity, total dissolved solids, boron, cadmium, chlorine residuals, copper, lead, mercury and zinc.	None specified
4.1.3	Compliance.	Annual Audit Compliance Report (AACR)
4.1.4	Complaints.	None specified

Note 1: Forms are in Schedule 2

4.2.2 The Licensee shall ensure that the Annual Environmental Report also contains:

- (a) any relevant process, production or operational data recorded under condition 3.1.3; and
- (b) an assessment of the information contained within the report against all previous monitoring results and Licence limits.

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



Table 4.2.2: Non-annual reporting requirements				
Condition or table (if relevant)	Parameter	Reporting period	Reporting date (after end of the reporting period)	Format or form¹
-	Copies of original monitoring reports submitted to the Licensee by third parties	Not Applicable	Within 14 days of the CEO's request	As received by the Licensee from third parties
Table 3.2.1	Monitoring of emissions to air	Quarterly	Within 30 days of the period ending	Log as per condition 4.1.6

Note 1: Forms are in Schedule 2

4.3 Notification

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

Table 4.3.1: Notification requirements			
Condition or table (if relevant)	Parameter	Notification requirement¹	Format or form²
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. Part B: As soon as practicable	N1
3.1.5	Calibration report detailing discrepancy or failure to meet specification	As soon as practicable but no later than 14 usual working days of becoming aware of them	None specified
3.4.1	Any detected leak, failure or malfunction of a wastewater transfer pipeline which has resulted in a discharge of wastewater to the environment	As soon as practicable but no later than 5pm of the next usual working day.	None specified

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

Note 2: Forms are in Schedule 2



5 Works

5.1.1 The Licensee shall construct the following works in accordance with the documentation detailed in Table 5.1.1:

Table 5.1.1: Construction Requirements¹		
Document	Parts	Date of Document
Shark Lake Food Group Application for a Works Approval To install new and/or upgrade existing; <ul style="list-style-type: none">• Stock holding yards• Temporary manure holding hardstand• Tank farm• Apron adjacent to the tank farm• Bioremediation hardstand• Interceptor traps• Light vehicle diesel refuelling hardstand• Roofing for cattle holding yards	All, including Drawings and Appendices	Undated (received by DER 25 June 2015)

Note 1: Where the details and commitments of the documents listed in condition 5.1.1 are inconsistent with any other condition of this licence, the conditions of this licence shall prevail.

5.1.2 The Licensee shall submit a compliance document to the CEO within four weeks of the completion of the works.

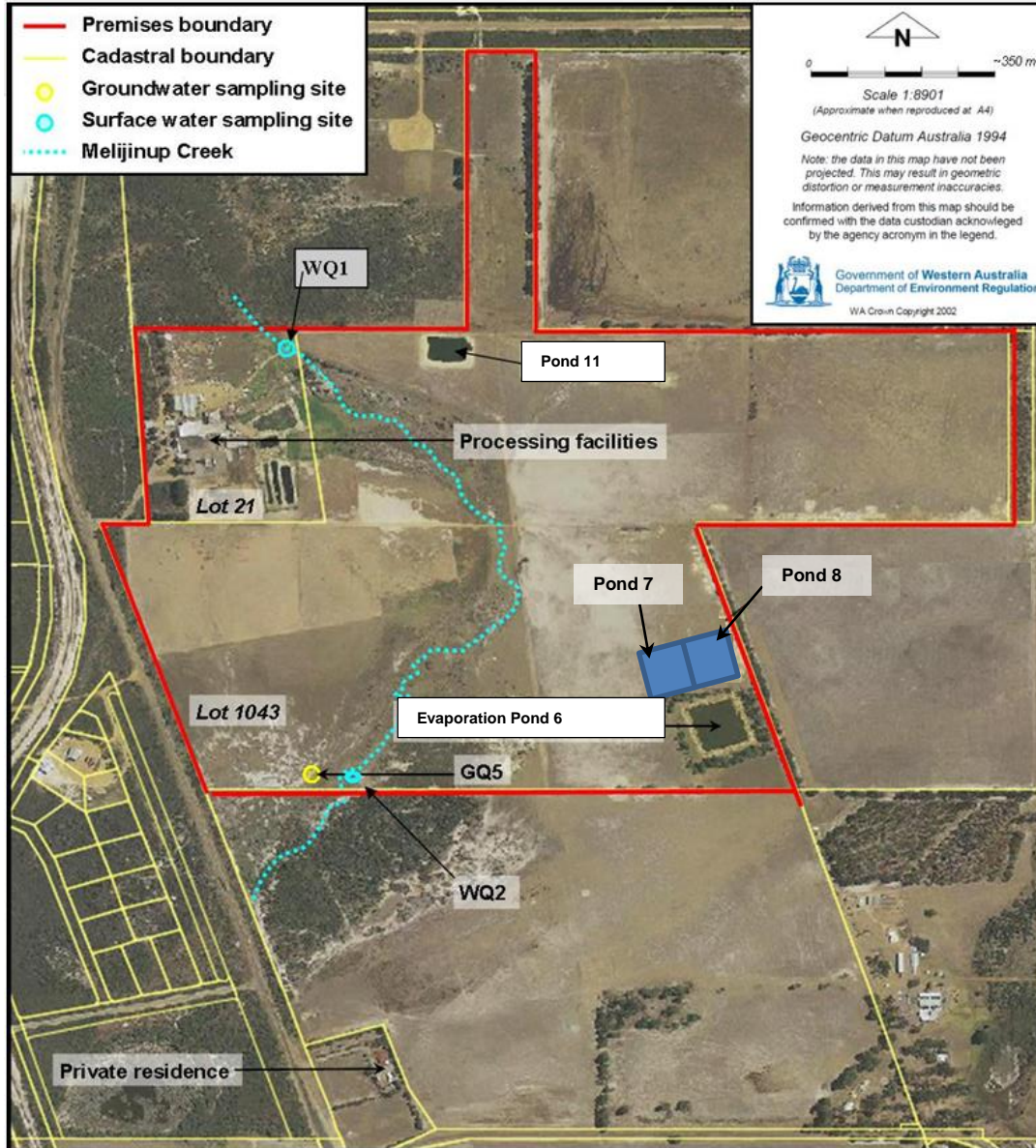
5.1.3 The compliance document shall:
(a) certify the extent to which the works were completed in accordance with condition 5.1.1 of this License; and
(b) be signed by a person authorised to represent the Licensee and contain the printed name and position of that person within the company.



Schedule 1: Maps

Premises map

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





Map of emission points and containment infrastructure locations

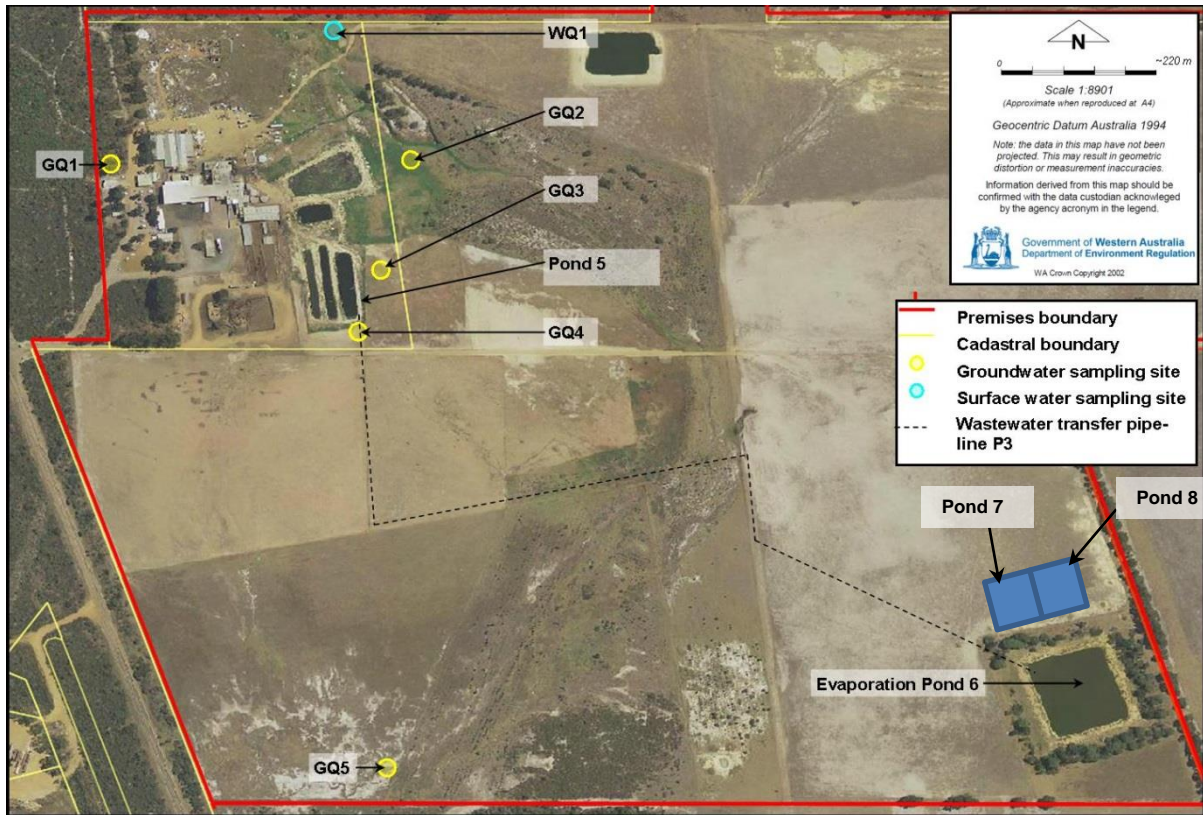
The locations of the emission points defined in Tables 2.2.1 and 2.5.1 are shown below.
The location of containment infrastructure defined in Table 1.3.2 is shown below.





Map of monitoring locations

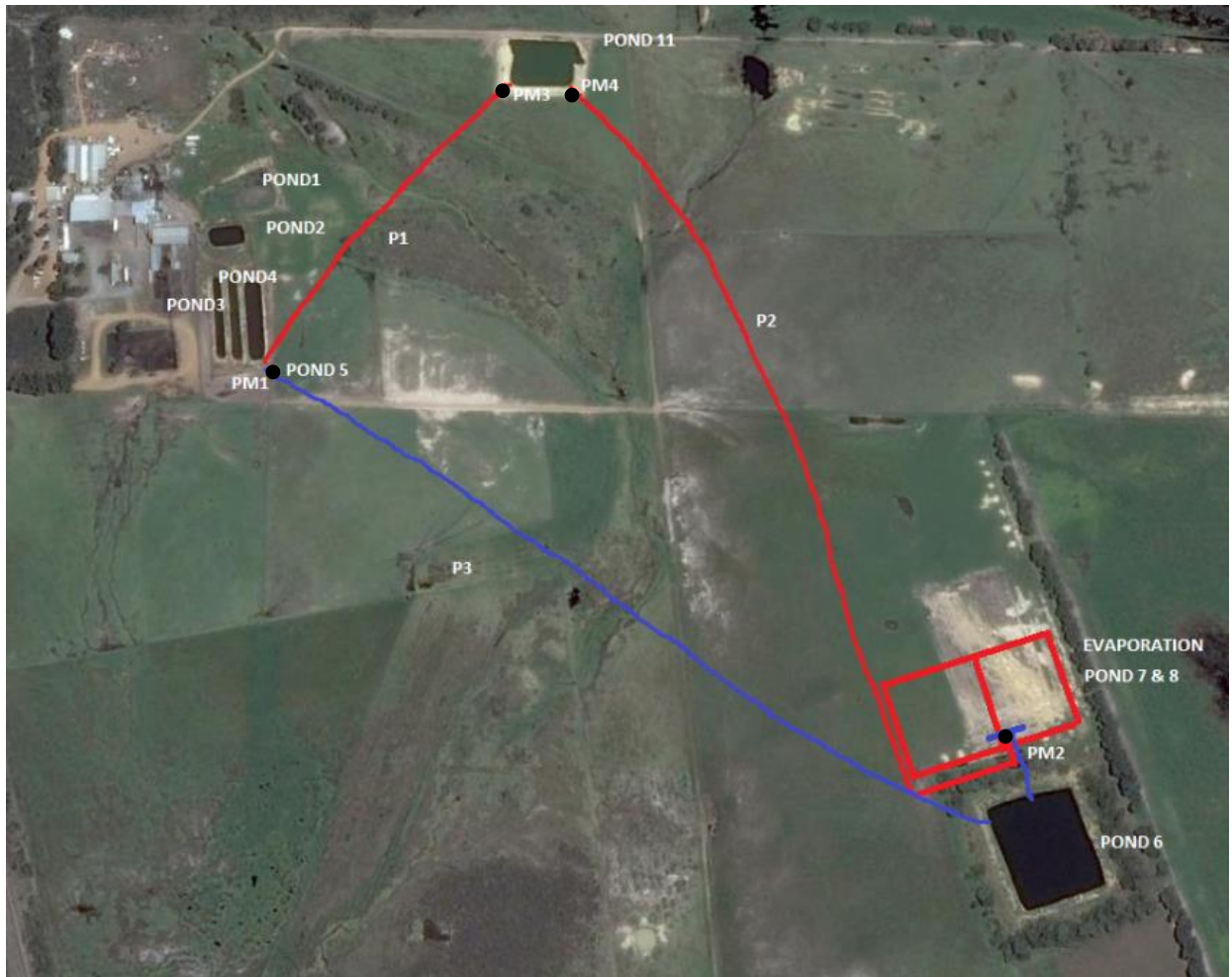
The locations of the monitoring points defined in Tables 1.3.2, 2.5.1, 2.5.2, 3.5.1, 3.7.1, 3.8.1, 3.8.2 and 3.8.3 are shown below.





Map of monitoring locations

The location of the monitoring points defined in Table 3.7.1 are shown below.





Map of monitoring locations

The location of the monitoring points defined in Table 3.8.2 are shown below.





Schedule 2: Reporting & notification forms

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

ANNUAL AUDIT COMPLIANCE REPORT PROFORMA

SECTION A LICENCE DETAILS

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

STATEMENT OF COMPLIANCE WITH LICENCE CONDITIONS

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

Yes Please proceed to Section C

No Please proceed to Section B

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

Initial:



SECTION B
DETAILS OF NON-COMPLIANCE WITH LICENCE CONDITION.

Please use a separate page for each Licence condition that was not complied with.

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

Each page must be initialled by the person(s) who signs Section C of this AACR

Initial:



Licence: L7294/1998/11
Form: N1

Licensee: Shark Lake Food Group Pty Ltd
Date of breach:

Notification of detection of the breach of a limit.

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

Part A

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

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

Part B

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

Name	
Post	
Signature on behalf of Shark Lake Food Group Pty Ltd	
Date	



Decision Document

Environmental Protection Act 1986, Part V

Proponent: Shark Lake Food Group Pty Ltd

Licence: L7294/1998/11

Registered office: Suite 2
70 Lincoln Road
ESSENDON VIC 3040

ACN: 129 816 360

Premises address: Lot 21 on Plan 180121 and Lot 1043 on Plan 152576
Coolgardie-Esperance Highway
MYRUP WA 6450

Issue date: Thursday, 16 October 2014

Commencement date: Friday, 17 October 2014

Expiry date: Thursday, 17 October 2016

Decision

Based on the assessment detailed in this document, the Department of Environment Regulation (the DER) has decided to issue an amended licence. The DER considers that in reaching this decision, it has taken into account all relevant considerations and that the Licence and its conditions will ensure that an appropriate level of environmental protection is provided.

Decision Document prepared by: Cristina Angel
Senior Licensing Officer

Decision Document authorised by: Jonathan Bailes
Delegated Officer



Contents

1	Purpose of this document	2
2	Administrative summary	3
3	Executive summary of proposal and assessment	4
4	Decision table	6
5	Advertisement and consultation table	14
6	Risk Assessment	14
	Appendix A	15

1 Purpose of this document

This Decision Document explains how the DER has assessed and determined the application for a works approval or licence, and provides a record of the DER's decision-making process and how relevant factors have been taken into account. Stakeholders should note that this document is limited to the DER's assessment and decision making under Part V of the *Environmental Protection Act 1986*. Other approvals may be required for the proposal, and it is the proponent's responsibility to ensure they have all relevant approvals for their Premises.



2 Administrative summary

Administrative details											
Application type	Works Approval <input type="checkbox"/> New Licence <input type="checkbox"/> Licence amendment <input checked="" type="checkbox"/> Works Approval amendment <input type="checkbox"/>										
Activities that cause the premises to become prescribed premises	<table border="1"> <thead> <tr> <th>Category number(s)</th> <th>Assessed design capacity</th> </tr> </thead> <tbody> <tr> <td>15</td> <td>Not more than 7350 tonnes per annual period (animal live weight) or 5000 tonnes per annual period (hot standard carcass weight)</td> </tr> <tr> <td>16</td> <td>Not more than 10 000 tonnes per annual period</td> </tr> <tr> <td>55</td> <td>Not more than 300 000 animals per annual period</td> </tr> <tr> <td>83</td> <td>Not more than 300 000 skins or hides per annual period</td> </tr> </tbody> </table>	Category number(s)	Assessed design capacity	15	Not more than 7350 tonnes per annual period (animal live weight) or 5000 tonnes per annual period (hot standard carcass weight)	16	Not more than 10 000 tonnes per annual period	55	Not more than 300 000 animals per annual period	83	Not more than 300 000 skins or hides per annual period
	Category number(s)	Assessed design capacity									
	15	Not more than 7350 tonnes per annual period (animal live weight) or 5000 tonnes per annual period (hot standard carcass weight)									
	16	Not more than 10 000 tonnes per annual period									
	55	Not more than 300 000 animals per annual period									
83	Not more than 300 000 skins or hides per annual period										
Applications verified	Date: 6/1/2015; 16/2/2015; 26/2/2015 and 25/6/2015										
Application fee paid	Date: N/A										
Works Approval has been complied with	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>										
Compliance Certificate received	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>										
Commercial-in-confidence claim	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>										
Commercial-in-confidence claim outcome	N/A										
Is the proposal a Major Resource Project?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>										
Was the proposal referred to the Environmental Protection Authority (EPA) under Part IV of the <i>Environmental Protection Act 1986</i> ?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Referral decision No: Managed under Part V <input type="checkbox"/> Assessed under Part IV <input type="checkbox"/>										
Is the proposal subject to Ministerial Conditions?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Ministerial statement No: EPA Report No:										
Does the proposal involve a discharge of waste into a designated area (as defined in section 57 of the <i>Environmental Protection Act 1986</i>)?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Department of Water consulted Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>										
Is the Premises within an Environmental Protection Policy (EPP) Area Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>											
Is the Premises subject to any EPP requirements? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>											



3 Executive summary of proposal and assessment

The Shark Lake Premises has been held a licence to operate an abattoir, fellmonger and rendering facility since 1998. The Premises was not constructed through a works approval. The licence was transferred to the current occupiers Shark Lake Food Group Pty Ltd (SLFG) in April 2008. The abattoir processes cattle and sheep and has an approved processing capacity of 5,000 tonnes hot standard carcass weight (HSCW) or 7,350 tonnes live weight (LW) per annual period.

The premises is located within the catchment of Melijinup Creek, which drains into Lake Warden, which is part of the Lake Warden System (LWS). Then LWS is a wetland of international significance under the Ramsar Convention. The State Salinity Action Plan lists the catchment for the LWS as a Natural Diversity Recovery Catchment. Lake Warden is located 2.2 km south of the Premises' southern boundary. The Premises is also situated within the Esperance Groundwater Area, gazetted under the *Rights in Water and Irrigation Act 1914* and lies above a direct groundwater transport zone flowing to Pink Lake and the LWS. Surrounding land use is mainly agriculture and special rural small-holdings. The closest residence is approximately 1 km south-west of the premises and the Department of Agriculture and Food, Western Australia (DAFWA) has offices approximately 0.5 km south-east.

Holding pens: Animals for slaughter are held in the holding pens and lairage for no longer than required for that day's processing. The site has paddocks for holding sheep for longer periods and cattle are brought onto the site as required.

Fell mongering: The sheep skins are salted at the premises in a tumbler, packaged, and sent over off-site for further processing. Cow hides are refrigerated and transported off-site for further processing.

Rendering Plant: SLFG operates a Keith 600 continuous rendering plant. The plant is capable of processing 4.5 tonnes per hour of mixed abattoir material (MAM). For every tonne of carcasses processed, approximately 700kg (70%) of MAM is produced. The rendering plant consists of three batch cookers fitted with cyclone steam conversion systems. All raw materials (bone, gut, fat, off-cuts, etc.) are placed in a heated steam-jacketed vessel unit and cooked until most of the water from the raw material is evaporated. Once this process has been completed, the cooked material is dropped into percolators and excess tallow is drained off into a tallow pit. All material is then passed through a tallow press to separate tallow and meat meal. Meat meal enters the meal-holding bin and is packaged into bags. Blood is treated separately and is rendered via a drying process.

Boilers: Once the tallow has been extracted from the meal product, it passes through a decanter to extract solids from the tallow. The tallow is stored on site and either removed off-site or used on-site as a fuel in the boilers. Sump oil is used as a backup fuel source or as the main fuel source when the tallow is sold off-site. The boilers, which operate on average 8 hours a day, 240 days a year, consume approximately 385,000L of tallow or sump oil annually. The boilers are used to generate steam and hot water for the site and their emissions trigger the reporting threshold for National Pollution Inventory (NPI) reporting.

Wastewater treatment system: Based on the current design capacity of the plant, approximately 36ML of effluent is expected to be generated each year. Effluent generated is discharged to a pond-based wastewater treatment system that treats effluent to a primary standard. Treated effluent is disposed of through evaporation from three evaporation ponds. SLFG holds a works approval (W5107/2011/1) to construct a fourth evaporation pond if deemed necessary.

Solid wastes: solid wastes primarily include manure and paunch material. These are stored on site on a short-term basis, pending off-site transport to a licence composting facility.



Key environmental issues associated with the operation of the facility include effluent management, waste management, and smoke and odour emissions. There is a significant risk of groundwater and surface water contamination given the location of the Premises and the age and condition of some of the existing infrastructure.

This licence amendment is to allow upgrades to site infrastructure, which includes the bunding and roofing of the stock holding yards, a bund and cement apron adjacent to the tank farm and light vehicle refuelling hardstand, the addition of an extra tallow tank, the installation of three interceptor traps, and a bioremediation hardstand.

Other amendments have been made to take account of recent changes made at the site:

- The addition of two new evaporation ponds to the wastewater treatment system approved under Works Approval W5107/2011/1 and the dam previously referenced as 'stock dam'.
- Removal of category 61 liquid waste facility as the site no longer accepts liquid waste from the Myrup Truck Wash.
- The addition of a new 5,000kW boiler and clarification of the use of sump oil and tallow as fuels.
- Improvement requirement conditions have been removed where those improvements have been completed.

The Licensee has requested to increase the production capacity from 7,350 tonnes (animal live weight) to 15,100 tonnes (animal live weight). The DER has not approved this amendment as supporting information accompanying the application was considered insufficient to enable an assessment of this request to be undertaken. This request will be considered as part of a future amendment once the required supporting information is available.

Other changes have also been made to reflect administrative changes implemented within the Department of Environment Regulation.

As part of this amendment, the DER has considered whether the risk profile of emissions and discharges from the premises has significantly changed since the previous licence was granted. No other significant changes have occurred and, therefore, the DER has not amended conditions and discharges relating to these unchanged emissions and discharges.



4 Decision table

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

DECISION TABLE			
Works Approval / Licence section	Condition number	Justification (including risk description & decision methodology where relevant)	Reference documents
General conditions	Previous L1.2.3	This condition has been removed in accordance with administrative changes implemented within the DER. The condition has been deleted as it is the occupier's responsibility to ensure that they comply with relevant legislative requirements for the storage and handling of environmentally hazardous materials. The unauthorised discharges of some environmentally hazardous materials are subject to the provisions of the <i>Environmental Protection (Unauthorised Discharges) Regulations 2004</i> .	DER public website at: www.der.wa.gov.au <i>Environmental Protection (Unauthorised Discharges) Regulations 2004.</i>
Premises operation	Previous L1.3.1- L1.3.8 Current 1.3.1-1.3.7	<p>These conditions have been updated reflect current site operating practices with regards to authorised processes, containment infrastructure and management of wastes.</p> <p>Table 1.3.1 (authorised processes) has been updated to include new wastewater treatment system ponds, requirements for blood processing, and the boilers using sump oil and tallow. An increase to the process limits from 7,350 tonnes (animal live weight) to 15,100 tonnes (animal live weight) has not approved pending submission of additional supporting information (i.e. annual wastewater balance).</p> <p>Table 1.3.2 (containment infrastructure) has been updated to include holding Pond 11 (previously referenced as 'stock dam') and a new 90,000L tallow tank situated at the tank farm.</p> <p><u>Pond 11</u> This dam has been used in the past as part of wastewater treatment system.</p>	<p>Application supporting documentation</p> <p><i>Environmental Protection (Unauthorised Discharges) Regulations 2004.</i></p> <p><i>Environmental Protection(Noise) Regulations 1997</i></p> <p>SLFG Response to IR3 (December 2014)</p>



DECISION TABLE			
Works Approval / Licence section	Condition number	Justification (including risk description & decision methodology where relevant)	Reference documents
		<p>However, approval was withdrawn by the DER because it was thought to be inadequately lined and discharging effluent to the ground. Following the submission of information by the Licensee, the DER has assessed the stock dam as suitable for inclusion into the wastewater treatment system. A risk assessment of this inclusion is provided in Appendix A.</p> <p><u>90,000L Tallow Tank</u> <i>Emissions:</i> Discharge of tallow to the environment through loss of containment. <i>Impact:</i> Contamination of surrounding land, surface water and groundwater. The potential failure of the WWTS if tallow drains to the anaerobic pond. Odours may be generated offsite if the WWTS fails or if any discharged tallow starts to putrefy before recovery. <i>Controls:</i> As part of the works approved by this amendment, the site intends to bund the tank farm area to contain a volume of 115.5m³ that is more than 110% of the largest tank contained within the tank farm. A concrete hardstand area surrounding the tank farm and general processing area will also be constructed and this will involve the construction of a series of sumps with isolation valves. This will allow isolation of any spills beyond the bunded area and will enable them to be recovered and lawfully disposed of.</p> <p><u>Risk Assessment</u> Consequence: Moderate Likelihood: Unlikely Risk Rating: Moderate</p> <p><u>Regulatory Controls:</u> Table 1.3.2 requires that tallow is stored in tanks, on an impermeable surface. The general provisions of the <i>Environmental Protection Act 1986</i> and the <i>Environmental Protection (Unauthorised Discharge) Regulations 2004</i> also apply to the premises.</p>	



DECISION TABLE			
Works Approval / Licence section	Condition number	Justification (including risk description & decision methodology where relevant)	Reference documents
		<p><u>Residual Risk</u> Consequence: Moderate Likelihood: Unlikely Risk Rating: Moderate</p> <p>Table 1.3.3 (management of waste) has been added to the licence to confirm operational requirements for the storage, handling and processing of waste materials generated on site. The table includes some requirements previously contained in Table 1.3.1. Other requirements have been added to reflect activities currently carried out on site and do not specify any additional requirements.</p> <p>Condition 1.3.4 (previously 1.3.3) has been updated to include the new ponds and exclude the anaerobic pond, which was unable to be compliant with the requirements due to the fact it is covered by a vegetated crust. Condition 1.3.5 has been added to require that the crust is maintained on the anaerobic pond at all times.</p> <p>Conditions 1.3.6 and 1.3.7 (previously 1.3.4 and 1.3.5) have been updated as required to include the new ponds.</p> <p>Previous conditions 1.3.6 to 1.3.8 have been removed as liquid waste is no longer accepted at the premises.</p>	
Emissions general	L2.1.1	Removal of reference of descriptive and numeric targets in accordance with Administrative changes implemented within the Department of Environment Regulation.	DER public website at: www.der.wa.gov.au



DECISION TABLE			
Works Approval / Licence section	Condition number	Justification (including risk description & decision methodology where relevant)	Reference documents
Point source emissions to air including monitoring	L2.2.1	<p>The inclusion of sump oil into source description of emission point A1. Previous emission point A2 (Waste incinerator) has been removed as this is not a point source emission. Waste paper and cardboard are currently burnt in an open container. This waste management activity has been included in Table 1.3.3. However, the licensee is investigating alternative recycling options and the option to burn the waste will be removed from the licence before any reissue in October 2016.</p> <p>Conditions 2.2.3 and 2.2.4 relating to targets have been removed in accordance with administrative changes implemented within the Department of Environment Regulation. The limit has been retained although a time frame of 4 minutes has been imposed to allow compliance to be assessed and also allow for short duration periods of black smoke that may occur during boiler start-up. The risk profile of this emission has not changed since the previous assessment and the controls are still deemed relevant.</p>	<p>Ambient Air Assessment Criteria, National Environmental Protection Measure (Ambient Air Quality)</p> <p>Application supporting documentation</p> <p>DER public website at: www.der.wa.gov.au</p>
Point source emissions to surface water and groundwater including monitoring	Previous L2.3-L2.4 L3.3-L3.4	Removal of nil condition sections of licence in accordance with administrative changes implemented within the Department of Environment Regulation.	NA
Emissions to land including monitoring	Previous L2.5 L3.5	Removal of nil condition sections of licence in accordance with administrative changes implemented within the Department of Environment Regulation.	NA



DECISION TABLE			
Works Approval / Licence section	Condition number	Justification (including risk description & decision methodology where relevant)	Reference documents
Fugitive emissions	Previous L2.6	<p><u>Emission Description</u> <i>Emissions:</i> Low-level fugitive dust emissions are expected from the earthworks and concrete manufacturing activities that are proposed to be undertaken on site as part of the upgrade works. <i>Impact:</i> Nuisance impacts on the nearest sensitive receptor, 1km from the abattoir and rendering plant. <i>Controls:</i> Separation distance. The site intends to undertake the upgrade works during normal business hours only. The batching plant will be operated alongside a shed and the aggregate will be kept covered when not being used. The cement will be kept in bags until it is required to be used. The operator undertakes to stop work if prevailing winds carry any dust to the premises boundary. Spilt materials will be cleaned up immediately.</p> <p><u>Risk Assessment</u> Consequence: Insignificant Likelihood: Unlikely Risk Rating: Low</p> <p><u>Regulatory Controls:</u> Low-risk dust emissions can be sufficiently regulated under section 49 of the <i>Environmental Protection Act 1986</i>.</p> <p><u>Residual Risk</u> Consequence: Insignificant Likelihood: Unlikely Residual Risk Rating: Low</p>	<p>Application supporting documentation</p> <p>DER public website at: www.der.wa.gov.au</p>
Odour	Previous L2.7.1	<p>Operation</p> <p><u>Emission Description</u> <i>Emission:</i> Odour emissions may be generated from animal holding, lairage,</p>	<p>DER public website at: www.der.wa.gov.au</p>



DECISION TABLE			
Works Approval / Licence section	Condition number	Justification (including risk description & decision methodology where relevant)	Reference documents
		<p>biofilter, tallow burning, storage of animal waste material, wastewater treatment system and from rendering operations.</p> <p><i>Impact:</i> Activities onsite such as the wastewater drainage and treatment from the abattoir, rendering and fellmonger are likely to produce significant odours from the site. The nearest sensitive receptor is 1 km away.</p> <p><i>Controls:</i> Separation distance. The Licensee constructed a bio-filter, through Works Approval W4497/2008/1, to treat odorous fumes from the cookers, which also pass through a condenser. A site visit by the DER in October 2015 showed negligible odour generated from the site despite the condenser not being operational at the time of the visit. Solid waste from abattoir and rendering operations are not disposed on the Premises and are removed off-site at appropriate intervals.</p> <p><u>Risk Assessment</u> <i>Consequence:</i> Insignificant <i>Likelihood:</i> Unlikely <i>Risk Rating:</i> Low</p> <p><u>Regulatory Controls</u> Generic odour condition L2.7.1 has been removed in accordance with administrative changes implemented within the Department of Environment Regulation. Low-risk Odour emissions can be sufficiently regulated under section 49 of the <i>Environmental Protection Act 1986</i>.</p> <p><u>Residual Risk</u> <i>Consequence:</i> Insignificant <i>Likelihood:</i> Unlikely <i>Risk Rating:</i> Low</p>	



DECISION TABLE			
Works Approval / Licence section	Condition number	Justification (including risk description & decision methodology where relevant)	Reference documents
Noise	Previous L2.8	<p>Operation</p> <p><u>Emission Description</u> <i>Emission:</i> Noise from upgrade works being undertaken at the premises including vehicle movements, earthworks and concrete manufacture works. <i>Impact:</i> Reduced amenity for the nearest sensitive receptor, a residential house 1 km away. <i>Controls:</i> Separation distance. Upgrade works will be undertaken during normal business hours.</p> <p><u>Risk Assessment</u> <i>Consequence:</i> Insignificant <i>Likelihood:</i> Unlikely <i>Risk Rating:</i> Low</p> <p><u>Regulatory Controls</u> Noise emissions from the Premises can be managed under the provisions of <i>Environmental Protection (Noise) Regulations 1997</i> and section 49 of the <i>Environmental Protection Act 1986</i> No additional conditions considered necessary.</p> <p><u>Residual Risk</u> <i>Consequence:</i> Insignificant <i>Likelihood:</i> Unlikely <i>Risk Rating:</i> Low</p>	<p><i>Environmental Protection(Noise) Regulations 1997</i></p> <p><i>Environmental Protection Act 1986</i></p> <p>Application supporting documentation</p>
Monitoring of inputs and outputs and Process monitoring	Previous L3.6.1 and 3.7.1	Alterations to these conditions have been made to include the addition of Pond 11 and to remove the monitoring of liquid waste from the Myrup Truck Wash and Wastewater Treatment Facility.	Application supporting documentation



DECISION TABLE			
Works Approval / Licence section	Condition number	Justification (including risk description & decision methodology where relevant)	Reference documents
Ambient groundwater quality monitoring	L3.5.1	Ambient groundwater quality targets have been replaced as limits in accordance with administrative changes implemented within the Department of Environment Regulation. Imposition of limits is a more stringent regulatory control and does not significantly change the risk profile of any fugitive emissions to groundwater, which the monitoring is designed to detect.	DER public website at: www.der.wa.gov.au
Meteorological monitoring	Previous L3.9	Removal of nil condition sections of licence in accordance with administrative changes implemented within the Department of Environment Regulation.	NA
Improvements	Previous L4.1.1- L4.1.2	Improvement requirements IR1, IR2, IR3, IR6, and IR7 and IR8, have been completed, or where a deviation has occurred, the DER has accepted this Licensee considers that the additional two ponds contain sufficient capacity. Operational capacity will be reviewed through a full year. A third pond can be added if required under Works Approval W5107/2011/1, which remains in force.	Application supporting documentation
Reporting	L4.1.1 – 4.3.1	Records, reporting and notification requirements have been updated to reflect the amended condition set and to take account of the administrative changes implemented within the DER.	DER public website at: www.der.wa.gov.au
Works	L5.1.1 – L5.1.3	The improvement to the site infrastructure has been authorised through this licence amendment. The improvements improve the ability of the licensee to control emissions and discharges from the premises. Works approval conditions have been included on the licence specifying the construction and construction compliance requirements.	Guidance Statement: Licensing and works approvals process
Licence duration	N/A	The licence duration has not been changed as a result of this amendment.	N/A



5 Advertisement and consultation table

Date	Event	Comments received/Notes	How comments were taken into consideration
23/10/2015	Proponent sent a copy of draft instrument	Comments provided through draft licence	Conditions updated as required
08/12/2015	Proponent sent a copy of revised draft instrument	Comments provided through draft licence	Wording updated in licence definitions and Table 1.3.1

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

Condition 1.3.2: Premises operation - inclusion of Pond 11 to wastewater treatment system

Emission Description

Emission: Seepage or overflow of contaminated wastewater from Pond 11 containing high biochemical oxygen demand (BOD), dissolved solids (salt), oil and grease, and nutrients (nitrogen and phosphorous) discharging to ground.

Impact: The premises is situated within the Esperance Groundwater Area, gazetted under the *Rights in Water and Irrigation Act 1914* and lies above a direct groundwater transport zone flowing to Pink Lake and the LWS. Groundwater at the Premises is 2-3m below ground level. Analysis of the site's soil type and landscape position indicates that the premises is situated on high recharging deep sandy soils with a shallow water table. These deep sandy soils are uniform and underlay all paddocks used by SLFG. The indicative saturated permeability of the soils has been assessed as between 1400 to 3000mm/day (Coffey, 2009b). Due to the nature of the soils on the premises and the topography, it is most likely that groundwater under the premises will recharge Melijinup Creek (Coffey, 2009a). Surrounding land use in the vicinity of the Premises is predominantly agricultural. There is potential for medium to long-term, localised impact on groundwater resource in the area.

Controls: Pond 11 has been tested by a third party NATA accredited geotechnical engineer to demonstrate that it has been constructed with at least 1m of clay with a permeability coefficient of 3×10^{-10} m/s. This is considered suitable for the containment of treated wastewater. The Licensee considers that the wastewater treatment system has sufficient capacity and that Pond 11 will be used as a temporary holding pond if required. All water stored in Pond 11 will be pumped back to the main evaporation ponds as soon as there is sufficient capacity.

Risk Assessment

Consequence: Moderate

Likelihood: Possible

Risk Rating: Moderate

Regulatory Controls:

Condition 1.3.1 specifies that Pond 11 must not contain an additional balance of wastewater from year to year. Condition 1.3.2 specifies the infrastructure requirements, including permeability, for wastewater containment ponds to minimise the impact on groundwater. Condition 1.3.4 requires maintenance of a 300mm freeboard, diversion of clean stormwater, prevention of vegetation growth on pond embankments, and no overflow to occur. Conditions 1.3.6 and 1.3.7 require that wastewater transfer is measured between ponds and that wastewater transfer pipes remain clear of the water surface level at all times. Condition 3.5.2 requires the licensee to assess ambient groundwater quality against water quality limits to determine if operations are having an impact on groundwater resources. An exceedance of a limit requires an investigation in accordance with condition 4.3.1.

Residual Risk Assessment

Consequence: Moderate

Likelihood: Possible

Risk Rating: Moderate