

Licence Number	L7294/1998/11
Licence Holder	Shark Lake Food Group Pty Ltd
ACN	129 816 360
Registered business address	Shark Lake Food Group Pty Ltd Suite 2 70 Lincoln Road ESSENDON VIC 3040
Date of amendment	23 March 2017
Prescribed Premises	Category 15 – Abattoir Category 16 - Rendering operations Category 55 - Livestock saleyard or holding pen Category 83 - Fellmongering
Premises	Shark Lake Food Group Lot 21 on Plan 180121 and Lot 1043 on Plan 152576 Coolgardie-Esperance Highway MYRUP WA 6450

Amendment

The Chief Executive Officer (CEO) of the Department of Environment Regulation (DER) has amended the above licence in accordance with section 59 of the *Environmental Protection Act 1986* as set out in this Amendment Notice.

Signed 23 March 2017

Jonathan Bailes

A/Senior Manager - Industry Regulation (Process Industries)

an officer delegated under section 20 of the Environmental Protection Act 1986 (WA)

Amendment Notice

This Notice is issued under section 59 of the *Environmental Protection Act* 1986 (EP Act) to amend the licence issued under the EP Act for a prescribed premises as set out below. This notice of amendment is given under section 59B(9) of the EP Act.

Amendment Description

Licence L7294/1998/11 was issued to Shark Lake Food Group Pty Ltd (the Licence Holder) on 16 October 2014 and expires on 24 September 2029.

The Licence Holder operates an abattoir, fellmonger, and rendering facility. The abattoir processes a mix of stock including beef, goats, and sheep. The premises are located within the catchment of Melijinup Creek which drains into Lake Warden, part of the Lake Warden System (LWS). The LWS is a wetland of international significance under the Ramsar Convention. The premises are also situated within the Esperance Groundwater Area, gazetted under the *Rights in Water and Irrigation Act 1914* and lie 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.

The Licence Holder has submitted an application to amend Licence L7294/1998/11 to make the following changes:

- 1. Update the authorised processes table and map of emission points and containment infrastructure locations to remove the restriction on the use of the main stock yard;
- 2. Increase the approved premises production capacity for category 15 abattoir to 10,000 tonnes Hot Standard Carcass Weight (HSCW);
- 3. Remove the tallow and sump oil fuel consumption quantity limit in the authorised processes table;
- 4. Update the process monitoring table to include new wastewater flowmeter locations;
- 5. Amend the frequency of wastewater meter monitoring in the process monitoring table and information section;
- 6. Remove the groundwater standing water level limit from the monitoring of ambient groundwater monitoring table;
- 7. Remove the groundwater pH limit from the monitoring of ambient groundwater monitoring table; and
- 8. Remove the works section as the infrastructure improvements have been made.

Decision

The Delegated Officer has made the following amendments to the licence:

1. Table 1.1.3 of the licence currently prohibits the holding of animals in two yard areas defined on the map of emission points and containment infrastructure locations in Schedule 1 of the licence, as these yards are not bunded or connected to the wastewater drainage and treatment system. The Licence Holder has advised that the main stock yard is now bunded and contained, and is suitable for use to receive animals that are being unloaded before they enter the abattoir lairage yards. The Licence Holder has advised that the other temporary holding yard will not be used for receiving animals as it is not bunded or contained. The Delegated Officer has updated the map in Schedule 1 of the licence accordingly.

- 2. The licence currently limits abattoir throughput to 5,000 tonnes (HSCW) per year (equivalent to approximately 7,350 tonnes animal live weight). The Licence Holder has operated above this level since at least 2010 as reported to DER in the premises annual environment reports. The Delegated Officer notes that the licence in force between February 2012 and October 2014 stated the abattoir approved production capacity as 30,000 tonnes per year. However, this was reduced to 5,000 tonnes in October 2014, consistent with the licence in force prior to February 2012. The rationale for the reduction was around uncertainty in the ability of the wastewater treatment system to contain the wastewater generated at higher production levels. Since 2014, the Licence Holder has installed additional evaporation pond capacity of approximately 20ML (Ponds 7 and 8 authorised through Works Approval W5107/2011/1). The Licence Holder has supplied water balance data demonstrating the wastewater treatment ponds retain excess capacity and that the existing condition requirements regarding freeboard are being maintained. This was confirmed by a DER Compliance Officer during a site inspection carried out on 28 June 2016. Therefore, the Delegated Officer has increased the abattoir approved throughput to 10,000 tonnes per year (HSCW) consistent with previous year's production and forecast future production.
- 3. The licence currently restricts the use of tallow and sump oil fuel in the boiler to not more than 385,000 litres per annual period. The Delegated Officer reviewed the previous decision report and was unable to determine the basis for the inclusion of the limit. It is assumed that the restriction was linked to historical dark smoke emissions associated with the use of the fuels in an old boiler. The old boiler has since been replaced by a new 5MW fully unattended boiler that has eliminated dark smoke emissions. Therefore, the Delegated Officer has removed the fuel consumption limit from Table 1.3.1 and monitoring requirements from Table 3.4.1 (the Licence Holder has confirmed that there is no fuel flowmeter on the boiler).
- 4. The Licence Holder has installed a new electronic flow meter between the solids removal Conshear and wastewater treatment Pond 1. The Delegated Officer has updated Table 3.4.1 and the maps of monitoring locations to include the new flowmeter and update the references and description of the other existing flowmeters.
- 5. Table 3.4.1 currently specifies daily monitoring of the wastewater flowmeters. The Licence Holder has advised that the new flowmeter between the Conshear and Pond 1 is the only one that is read daily. The other meters are only read when wastewater is transferred between ponds. The Delegated Officer has updated Table 3.4.1 to be consistent with this action and previous versions of the licence.
- 6. The licence currently places a standing water level (SWL) limit of greater than 2m on the quality of ambient groundwater. The Licence Holder is not able to meet the SWL limit in the shallow monitoring boreholes that are located downstream of the wastewater treatment ponds near Melijinup Creek at the lowest point of the premises. The SWL in these boreholes is linked to rapid rainfall recharge rates and the naturally high groundwater in these areas. Therefore, the Delegated Officer has removed the SWL limit from Table 3.5.2 as the Licence Holder is not able to comply with the limit given the influence of rainfall and natural groundwater levels. The requirement to monitor SWL in extraction bore GQ1 has also been removed as the submersible pump prevents measurement of this parameter. The units for SWL measurements have been changed from mAHD to meters below ground level (mbgl) as data has historically been provided in mbgl.
- 7. The licence currently places a pH limit of between 6 and 8 on the quality of ambient groundwater. The Licence Holder has advised that some groundwater samples have a pH of less than 6 (5.8-5.9) due to the naturally high soil acidity levels experienced on the south coast sandplain. The Delegated Officer has reviewed the information presented and removed the pH limit from Table 3.5.2 of the licence. Groundwater monitoring data will continue to be used to determined unusual or abnormal trends in groundwater quality that

may indicate impacts from the premises. The ability for the Licence Holder to measure pH in the field rather than a laboratory has been also added to Table 3.5.2 as the Licence Holder is unable to meet required sample preservation requirements due to the remote location of the premises.

8. The current version of the licence authorised infrastructure improvement works (section 5). All the works have been completed (with the exception of roofing over the animal holding yards). The completion of the improvement works was verified by a DER Compliance Officer during an inspection carried out on 28 June 2016. The Delegated Officer has removed the works section from the licence.

The Delegated Officer has also made amendments to conditions 3.3.1, 3.4.1 and 4.2.1 to correct typographical errors.

Instrument	Issued	Amendment		
L7294/1998/11	17/10/2014	Licence renewal and update to new template		
L7294/1998/11	03/10/2014	Licence amendment to allow acceptance of liquid waste		
L7294/1998/11	17/12/2015	Licence amendment to remove category 61 and allow general infrastructure upgrades		
L7294/1998/11	29/04/2016	Amendment by notice to amend licence expiry date		
L7294/1998/11	23/03/2017	Amendment Notice 1 Amendment to conditions and increase in category 15 approved premises production capacity		

Amendment History

Amendment

- 1. The map of emission points and containment infrastructure locations in Schedule 1 of the licence is replaced by the map of emission points and containment infrastructure locations attached to this Amendment Notice.
- 2. The approved premises production capacity for category 15 is amended from *not more than 5,000 tonnes (hot carcass weight) per annual period* to *not more than 10,000 tonnes hot standard carcass weight per annual period*.

3. Table 1.3.1 of the licence is amended by the deletion of the text shown in strikethrough below and the insertion of the red text shown in underline below:

Table 1.3.1: Autl	horised Processes			
Animals/Waste	Processes	Process limits		
Animals	Receipt,	No more than 7 ,350 tonnes (live weight) or 5,000 <u>10,000</u>		
	slaughter and	tonnes (hot <u>standard</u> carcass weight) of animals may be		
	processing	slaughtered per annual period.		
Animals	Holding and	Animals must not be placed or held in the undrained stock		
	lairage	temporary holding yards indicated as point '2' on the map of		
		emission points and containment infrastructure locations in		
		Schedule 1.		
Animal waste	Storage,	Not more than 10,000 tonnes of animal waste material shall		
material for	handling,	be rendered per annual period.		
rendering	hydrolysing and	The Licensee must operate the rendering facility such that		
	rendering	exhaust gases from the cookers are directed to the		
		condenser and bio-filter.		
Animal skins	Storage,	Salt wastes must not be discharged to land or into the		
	handling and	wastewater treatment system.		
	curing			
Blood	Storage,	The Licensee must operate the blood cooker such that		
	handling, and	exhaust gases are directed to the condenser and bio-filter.		
	cooking	Run-off from the blood storage, handling and cooking areas		
	Distant	must be directed to the wastewater system.		
Untreated	Physical and	All wastewaters including wash down water, by-products		
wastewater	biological	wastewater and contaminated run-off shall be directed to		
	treatment	the wastewater treatment ponds using impervious pipes or		
Treeted	Europen e vertiere	drains.		
Treated	Evaporation	A net volume of no greater than 8ML of treated wastewater		
wastewater		shall be stored in evaporation Pond 6 per annual period.		
		No more than 201/L cumulative volume of treated		
		inte eveneration Danda Z and 8 per appual period		
		No not volume of treated westowater must be stored in		
		holding Pond 11 from the common common to the and of		
		each annual period		
		No irrigation or discharge of wastewater to land shall occur		
Tallow	Storage and	The inigation of discharge of wastewater to land shall occur.		
Tallow	burning to	Used in the boilers as a fuel.		
Sump oil	denerate steam	No more than 385,000L of tallow or sump oil used per-		
	and hot water	annual period.		

4. Table 3.4.1 of the licence is amended by the deletion of the text shown in strikethrough below and the insertion of the red text shown in underline below:

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	<u>Daily</u>	Visually measured using the freeboard marker
PM1 – Flow motor 1	Pond 5	Cumulative- water flows from Pond 5 to- evaporation- Pond 6	<u>k</u> L		Meter readings
PM2 – Flow motor 2	Pond 6	Cumulative water flows from Pond 6 to Ponds 7 and 8	kL		Motor roadings
PM3 – Flow meter 3	Pond 5	Cumulativo water flows from Pond 5 to holding Pond 11-	kL	Daily	Motor roadings
PM4 – Flow motor 4	Pond 11	Cumulative- water flows from Pond 11 to- evaporation- Ponds 7 and 8-	<u>kL</u>		Meter readings
<u>PM1</u>	<u>Wastewater</u> <u>transfer</u> <u>between</u> <u>Conshear and</u> <u>Pond 1</u>	<u>Wastewater</u> input to wastewater treatment system		<u>Daily</u>	
<u>PM2</u>	<u>Wastewater</u> <u>transfer</u> <u>between Pond</u> <u>5 and Pond 6</u>	<u>Cumulative</u> <u>wastewater</u> <u>transfer between</u> <u>Pond 5 and</u> <u>Pond 6</u>			
<u>PM3</u>	<u>Wastewater</u> <u>transfer</u> <u>between Pond</u> <u>5 and Pond 11</u>	<u>Cumulative</u> <u>wastewater</u> <u>transfer between</u> <u>Pond 5 and</u> <u>Pond 11</u>	<u>kL</u>	<u>Before and</u> <u>after each</u> <u>transfer of</u> <u>wastewater</u>	<u>Meter readings</u>
<u>РМ4</u>	<u>Wastewater</u> <u>transfer</u> <u>between Pond</u> <u>6 and Pond 7</u> <u>and Pond 8</u>	Cumulative wastewater transfer between Pond 6 and evaporation Ponds 7 and 8			

Table 3.4.1: Process monitoring					
Monitoring point reference and location on Map of monitoring locations	Process description	Parameter/ Substance	Units	Frequency	Method
P1, P2, and P3	Water transfer pipelines	Integrity of water transfer pipeline	None	<u>Daily</u>	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 Operating hours	Tonnes Hours	Monthly Monthly	Meter readings None specified

5. Table 3.5.2 of the licence is amended by the deletion of the text shown in strikethrough below and the insertion of the red text shown in underline below:

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
	Standing water level(SWL) ^{1,2}	>2m -	m(AHD) <u>mbgl</u>		
	рН ²	Between 6- and 8-	-		Quarterly
	Electrical conductivity	N/A	µS/cm		
	Boron	40	_	Spot sample	
	Cadmium	0.02			Annually
GQ1,GQ2, GQ3,	Chlorine residuals	-			
GQ4, GQ5, EPB1,	Copper	20			
EPB2, EPB3, EDB1 and EDB5	Lead	0.1			
EF D4 and EF D5	Mercury	0.01			
	Zinc	30	mg/L		
	Total Dissolved Solids	1500			
	Total Nitrogen	-			Quarterly
	Total Phosphorus	-			
	Total Aluminium	20			
Note 1: Excluding extraction bore GQ1					

Note 2: In situ non-NATA accredited analysis permitted

- 6. The maps of monitoring locations in Schedule 1 of the licence are replaced by the maps of monitoring locations attached to this Amendment Notice.
- 7. Condition 4.1.5 of the licence is amended by the deletion of the text shown in strikethrough below and the insertion of the red text shown in underline below:
 - 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.
- 8. Table 4.2.1 of the licence is amended by the deletion of the text shown in strikethrough below and the insertion of the red text shown in underline below:

Table 4.2.1: An	nual Environmental Report	
Condition or table (if relevant)	Parameter/ required information	Format or form ¹
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: 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 an 8. 	Log as per condition 4.1.5
3.8.1 <u>3.5.1</u>	Results of any investigation into ambient monitoring that did not meet any limit specified.	None specified
Table 3.8.1 <u>3.5.1</u>	Total nitrogen, total aluminium, total phosphorus, suspended solids, biochemical oxygen demand, electrical conductivity and pH.	None specified
Table 3.8.2 <u>3.5.2</u>	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

- 9. The licence is amended by the deletion of the following conditions 5.1.1, 5.1.2, and 5.1.3:
 - 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 Requirements ¹		
Document	Parts	Date of Document
 Shark Lake Food Group Application for a Works Approval To install new and/or upgrade existing; 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 vards 	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 competition 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.
- 10. Condition 3.3.1 of the licence is amended by the deletion of the text shown in strikethrough below and the insertion of the red text shown in underline below:
 - 3.3.1 The Licensee shall monitor and record inputs/outputs in Table <u>3.6.1</u> <u>3.3.1</u> according to the specifications in that table.
- 11. Condition 3.4.1 of the licence is amended by the deletion of the text shown in strikethrough below and the insertion of the red text shown in underline below:
 - 3.4.1 The Licensee shall undertake the monitoring in Table 3.7.1 3.4.1 according to the specifications in that table.

Map of emission points and containment infrastructure locations

The locations of the emission points defined in Tables 2.2.1 and 3.2.1 are shown below. The location of containment infrastructure defined in Table 1.3.2 is shown below.



Photo Source: Google Earth <u>http://google.com.au/maps/</u> 15 March 2017

Map of monitoring locations

The locations of the monitoring points defined in Tables 3.4.1, 3.5.1 and 3.5.2 are shown below. The location of containment infrastructure defined in Table 1.3.2 is shown below.



Photo Source: Google Earth <u>http://google.com.au/maps/</u> 15 March 2017