

# Licence

# Environmental Protection Act 1986, Part V

Licensee:	Borrello Cheese Pty. Ltd.		
Licence:	L7829/2001/6		
Registered office:	Suite 6, 1 <sup>st</sup> Floor 23 Richardson Street SOUTH PERTH WA 6151		
ACN:	009 176 587		
Premises address:	Borrello Cheese Lot 3 on Plan 41468 and Lot 801 and 802 on Plan 59952, Rice Road OAKFORD WA 6113 as depicted in Schedule 1.		
Issue date:	Friday, 27 November 2015		
Commencement date:	Friday, 27 November 2015		
Expiry date:	Thursday, 26 November 2020		

### Prescribed premises category

Schedule 1 of the Environmental Protection Regulations 1987

Category number	Category description	Category production or design capacity	Approved Premises production or design capacity
17	<ul> <li>Milk processing: premises n which –</li> <li>a) Milk is separated or evaporated (other than a farm); or</li> <li>b) Evaporated or condensed milk, butter, ice cream, cheese or any other dairy product is manufactured,</li> <li>and form which liquid waste is or is to be discharged onto land or into waters</li> </ul>	100 tonnes or more per year	Not more than 2,000 tonnes per annual period

### Conditions

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

Date signed: 27 November 2015

**Lauren Trott** Officer delegated under section 20 of the *Environmental Protection Act 1986* 



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# 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 within 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: <a href="http://www.slp.wa.gov.au/legislation/statutes.nsf/default.html">http://www.slp.wa.gov.au/legislation/statutes.nsf/default.html</a>

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 Environment. You are required to comply with any conditions imposed by the Minister.

### Premises description and Licence summary

Borrello Cheese Pty. Ltd. (Borrello) is a family business where the main product is ricotta cheese along with a selection of other hard cheeses. The factory operates 6 days a week including a half day on Saturdays. Borrello undergoes a SAI Global Audit once a year and it is also regulated and inspected by the Department of Health.

### Infrastructure:

The factory includes a shop, cheese producing area, water tanks, water purifier and associated infrastructure including:

- Factory and cool room;
- 3 interceptor drains;
- 20,000L wastewater storage tank and dinosaur trailer for irrigation;
- 2 large rainwater tanks as back up water supply;
- Diesel contained in 20,000L tanks in a bunded area;
- Two 20,000L water storage tanks;
- Washdown bay for trucks; and
- Small storage tank for wastewater from washdown bay

#### Process:

- Approximately 40,000L of wastewater is generated every day from the factory and all wastewater is channeled to the interceptor drains which are connected in series. Solids are collected in the first two drains and the third drain in the series is the collection sump.
- Solids from the interceptor drains are pumped out approximately every two months by a contractor and disposed off-site;
- The wastewater from the sump is directed into a large overhead storage tank where it is periodically fed into a large tractor/trailer for irrigation onto the surrounding paddocks;
- Irrigation of the wastewater occurs on a daily basis on an average of 24 days each month;
- Approximately a 2 ha plot is irrigated each time and there is a minimum of 60 ha available for irrigation;
- The irrigation regime is recorded every day on maps which allows the operators to alternate plots, where each plot is rested for approximately 5 weeks between irrigation events;
- Sampling of the wastewater occurs twice a year from the discharge pipe of the wastewater storage tank;
- The Licensee is required to calculate the nutrient loading and the licence includes limits to the loading rate for nitrogen, phosphorus and biochemical oxygen demand (BOD);
- All water used in the manufacture of cheese is from an on-site production bore where the water is fed into a series of water storage tanks. Treatment of the water is in the first storage tank and includes a carbon filter, water softener and an iron removal filter; and



• Following treatment, the water is transferred to the second storage tank where, prior to being pumped into the factory, it is UV disinfected.

#### Location:

The Premises is located within 650m of a minor river called the Birriga Main Drain and the site is located within the Murray River catchment area and the Serpentine Groundwater area. The *EP (Peel Inlet-Harvey Estuary) Policy 1992* regulates nutrient input from commercial and industrial activities within the Policy area. Previous Annual Environmental Monitoring Reports have shown that the nutrient content of the wastewater to be irrigated and the nutrient loading per hectare is low (refer to risk assessment table in Decision Document).

A reading of the production bore was taken in April 2015 which notes the standing water level as 5.14m below ground level. There is no requirement to carry out groundwater monitoring on site and therefore, there is no indication of the groundwater direction, background readings or the standing water level of the groundwater in the paddocks where wastewater is irrigated. Soil type on the premises is a mixture of sand, loam and clay where the content of loam and clay is approximately 15%.

The nearest neighbour is a single residence (farmhouse) located 190m south of the premises boundary and 730m south east of the factory.

This Licence is the successor to licence L7829/2001/5 and includes updates to the format of the licence. The licences and works approvals issued for the Premises since 28 August 2001 include the 5 licences prior to issue of this Licence, as follows:

Instrument log		
Instrument	Issued	Description
W3493/2001/1	28/08/2001	Works approval to construct Premises
L7829/2001/1	20/01/2003	Licence issue
L7829/2001/2	27/01/2004	Licence issue
L7829/2001/3	26/11/2004	Licence issue
L7829/2001/4	24/10/2005	Licence issue
L7829/2001/5	14/10/2010	Licence issue
L7829/2001/6	27/11/2015	Licence issued and updated to new format

#### Severance

It is the intent of these Licence conditions that they shall operate so that, if a condition or a part of a condition is beyond the power of this Licence to impose, or is otherwise *ultra vires* or invalid, that condition or part of a condition shall be severed and the remainder of these conditions shall nevertheless be valid to the extent that they are within the power of this Licence to impose and are not otherwise *ultra vires* or invalid.

### END OF INTRODUCTION

# Licence conditions

# 1 General

- 1.1 Interpretation
- 1.1.1 In the Licence, definitions from the *Environmental Protection Act 1986* apply unless the contrary intention appears.
- 1.1.2 For the purposes of this Licence, unless the contrary intention appears:

'Act' means the Environmental Protection Act 1986;



'annual period' means the inclusive period from 1 August until 31 July in the following year;

**'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 5667.10**' means the Australian Standard AS/NZS 5667.10 Water Quality – Sampling – Guidance on sampling of waste waters;

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

'CEO' for the purpose of correspondence means;

Manager - Licensing (Process Industries)

At the following address:

Department Administering the Environmental Protection Act 1986 Locked Bag 33 CLOISTERS SQUARE WA 6850 Telephone: (08) 9333 7510 Facsimile: (08) 9333 7550 Email: info@der.wa.gov.au

'Licence' means this Licence numbered L7829/2001/6 and issued under the Act;

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

**'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;

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

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

- 1.1.3 Any reference to an Australian or other standard in the Licence means the relevant parts of the standard in force from time to time during the term of this Licence.
- 1.1.4 Any reference to a guideline or code of practice in the Licence means the version of that guideline or code of practice in force from time to time, and shall include any amendments or replacements to that guideline or code of practice made during the term of this Licence.
- 1.1.5 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 implement all practical measures to prevent stormwater run-off becoming contaminated by the activities on the Premises.



### 1.3 Premises operation

- 1.3.1 The licensee shall ensure that all wastewater generated from the manufacture of cheese and associated procedures, including factory washdown waters and any other potentially contaminated waters, and excluding the wastewater from the truck washdown area, passes through grease trap(s) before being irrigated on the premises.
- 1.3.2 The Licensee shall ensure that where wastes produced on the Premises are not taken off-site for lawful use or disposal, they are managed in accordance with the requirements in Table 1.3.2.

Table 1.3.2: Management of Waste			
Waste	Disposal	Operational requirements	
type	strategy		
Treated wastewater	Irrigation	<ul> <li>The Licensee shall ensure irrigation meets the following requirements:</li> <li>no irrigation generated run-off, spray drift or discharge occurs beyond the boundary of the Premises;</li> <li>no soil erosion or ponding occurs;</li> <li>vegetation cover is maintained over the wastewater irrigation areas; and</li> <li>irrigation does not occur on land that is water logged.</li> </ul>	
Grease trap	Disposal	The licensee shall ensure that all grease trap wastes are emptied at	
waste	off site	least every two months and the contents disposed off-site.	

# 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 Emissions to land

2.2.1 The Licensee shall ensure that where waste is emitted to land 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: Emissions to land			
Emission point reference [and location on Map of emission point]	Description	Source including abatement	
L1	Wastewater is irrigated onto paddocks located on Lots 3, 801 and 802.	Wastewater from milk processing operations via grease traps	

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

Emission point reference[and location on Map of emission point]	Parameter	Limit (including units)	Averaging period
	Load of total nitrogen	140 kilograms/hectare	Annually
L1	Load of total phosphorus	10 kilograms/hectare	Annually
	Load of BOD <sup>1</sup>	30 kilograms/hectare	Daily

Note 1: 5-day Biochemical Oxygen Demand



# 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 sampling is conducted in accordance with AS/NZS 5667.10; and
  - (c) all laboratory 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 six monthly monitoring is undertaken at least 5 months apart.
- 3.1.3 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.
- 3.1.4 The Licensee shall, where the requirements for calibration cannot be practicably met, or a discrepancy exists in the interpretation of the requirements, bring these issues to the attention of the CEO accompanied with a report comprising details of any modifications to the methods.

### 3.2 Monitoring of emissions to land

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 emissions to land					
Emission point reference and location on Map of emission point	Monitoring point reference and location on Map of monitoring locations	Parameter	Units	Averaging period	Frequency
	M1 – Wastewater holding tank	Volumetric flow rate (cumulative)	m³/day	Monthly	Continuous
		pH <sup>1</sup>	pH unit		
		Total suspended solids			
L1		Total dissolved solids		sample (A	Six monthly
		BOD			(April and
		Total nitrogen	Ŭ		October)
		Total phosphorus			

Note 1: In-field non-NATA accredited analysis permitted

### 3.3 Ambient environmental quality monitoring

3.3.1 The Licensee shall undertake the monitoring in Table 3.3.1 according to the specifications in that table and record and investigate results that do not meet any limit specified in condition 2.2.2.



Table 3.3.1 Monitoring of ambient en	vironmental quality			
Monitoring point reference and location, as shown in Schedule 1	Parameter	Units	Averaging period	
	Total nitrogen	kg/ha	norvoor	
M1	Total phosphorus	кула	per year	
	BOD	kg/ha	per day	

# 5 Information

### 5.1 Records

5.1.1 All information and records required by the Licence shall:

- (a) be legible;
- (b) if amended, be amended in such a way that the original and subsequent amendments remain legible or are capable of retrieval;
- (c) except for records listed in 5.1.1(d) be retained for at least 6 years from the date the records were made or until the expiry of the Licence or any subsequent licence; and
- (d) for those following records, be retained until the expiry of the Licence and any subsequent licence:
  - (i) off-site environmental effects; or
  - (ii) matters which affect the condition of the land or waters.
- 5.1.2 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.
- 5.1.3 The Licensee shall implement a complaints management system that as a minimum records the number and details of complaints received concerning the environmental impact of the activities undertaken at the Premises and any action taken in response to the complaint.

### 5.2 Reporting

5.2.1 The Licensee shall submit to the 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 5.2.1 in the format or form specified in that table.

Condition or table (if relevant)	Parameter	Format or form <sup>1</sup>
-	Summary of any failure or malfunction of any pollution control equipment and any environmental incidents that have occurred during the annual period and any action taken	None specified
Table 3.2.1	Volume, pH, total suspended solids, total dissolved solids, total nitrogen, total phosphorus and BOD	LR1
5.1.2	Compliance	Annual Audit Compliance Report (AACR)
5.1.3	Complaints summary	None specified

Note 1: Forms are in Schedule 2



- 5.2.2 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 previous monitoring results and Licence limits.

### 5.3 Notification

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

Condition or table (if relevant)	Parameter	Notification requirement <sup>1</sup>	Format or form <sup>2</sup>
2.1.2	Breach of any limit specified in the Licence	Part A: As soon as practicable but no later than 5pm of the next usual working day.	N1
		Part B: As soon as practicable	

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



# Schedule 1: Maps

# Premises map

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

6436880mN 64369020 Lot 802 Lot 801 Lot 3 Premises boundary 6433838mN 6433860mN LEGEND  $\leq_{\mathsf{N}}$ EPP,SGP Laxes Perth Metropolitan Ce 15cm Orthomosaic -Landgate 2011 Cadastre Road Cen Scale 1:14054 15cm Orthomo Landgate 2011

Geocentric Datum Australia 1994 Note: the data in this map have not been projected. This may result in geometric distortion or measurement inaccuracies.

repared for wee: 19/11/2015 4:04:25 PM

Information derived from this map should be confirmed with the data custodian acknowleged by the agency acronym in the legend.

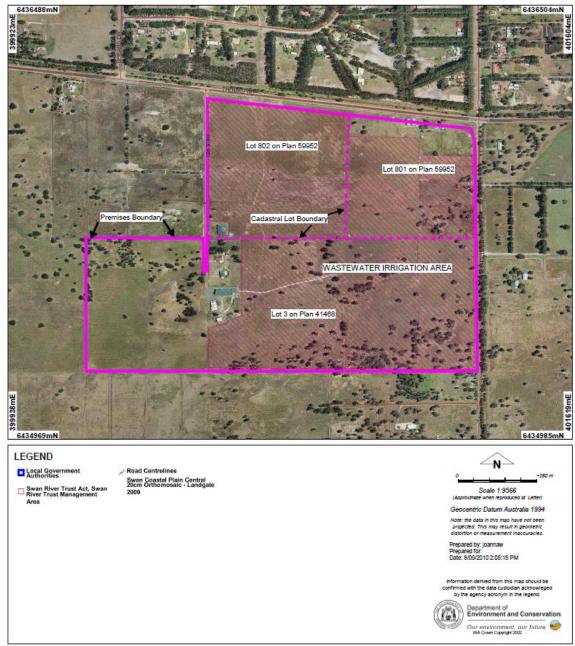


Hydrography, linea (hierarchy)



# Map of emission points

The locations of the emission points defined as L1 in Tables 2.1.1, 2.1.2 and 3.2.1 are shown in the pink hatched areas below.





# Map of monitoring locations

The location of the monitoring point **M1** defined in Tables 3.2.1 and 3.3.1 is shown below.



# M1 - Wastewater monitoring point



# 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:		ABN:
Trading as:		
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	С

No  $\Box$  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?:				
Yes Reported to DER verbally Date Reported to DER in writing Date	□ No			
d) Has DER taken, or finalised any action in relation to the non cor	npliance?:			
e) Summary of particulars of the non compliance, and what was th	e environmental impact:			
f) If relevant, the precise location where the non compliance occur	red (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:



# **SECTION C**

### SIGNATURE AND CERTIFICATION

This Annual Audit Compliance Report (AACR) may only be signed by a person(s) with legal authority to sign it. The ways in which the AACR must be signed and certified, and the people who may sign the statement, are set out below.

Please tick the box next to the category that describes how this AACR is being signed. If you are uncertain about who is entitled to sign or which category to tick, please contact the licensing officer for your premises.

If the licence holder is		The Annual Audit Compliance Report must be signed and certified:				
		by the individual licence holder, or				
An individual		by a person approved in writing by the Chief Executive Officer of the Department of Environment Regulation to sign on the licensee's behalf.				
A firm or other		by the principal executive officer of the licensee; or				
unincorporated company		by a person with authority to sign on the licensee's behalf who is approved in writing by the Chief Executive Officer of the Department of Environment Regulation.				
		by affixing the common seal of the licensee in accordance with the <i>Corporations Act 2001</i> ; or				
		by two directors of the licensee; or				
		by a director and a company secretary of the licensee, or				
A corporation		if the licensee is a proprietary company that has a sole director who is also the sole company secretary – by that director, or				
		by the principal executive officer of the licensee; or				
		by a person with authority to sign on the licensee's behalf who is approved in writing by the Chief Executive Officer of the Department of Environment Regulation.				
A public outbority		by the principal executive officer of the licensee; or				
A public authority (other than a local government)		by a person with authority to sign on the licensee's behalf who is approved in writing by the Chief Executive Officer of the Department of Environment Regulation.				
a local government		by the chief executive officer of the licensee; or				
a local government		by affixing the seal of the local government.				

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

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

SIGNATURE:	SIGNATURE:
NAME: (printed)	NAME: (printed)
POSITION:	POSITION:
DATE://	DATE://////
SEAL (if signing under seal)	



Licence: L7829/1001/6 Form: LR1 Name: Monitoring of emissions to land Licensee: Borrello Cheese Pty. Ltd. Period :

Emission point	Parameter	Result <sup>1</sup>	Averaging period	Method	Sample date & times
	Volumetric flow rate	L/s	continuous		
	рН	pH unit	Spot sample		
	Total suspended solids	mg/L	Spot sample		
M1	Total dissolved solids	mg/L	Spot sample		
	Total nitrogen	mg/L	Spot sample		
	Total phosphorus	mg/L	Spot sample		
	BOD	mg/L	Spot sample		

Note 1: All units are referenced to STP dry

Signed on behalf of: ..... Date: .....



Licence: L7829/2001/6

Licensee: Borrello Cheese Pty. Ltd.

Form: N1

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	L7829/2001/6
Name of operator	Borrello Cheese Pty. Ltd.
Location of Premises	Lots 3, 801 and 802 Rice Road, Oakford 6113
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	
Date	



# **Decision Document**

Environmental Protection Act 1986, Part V

Proponent: Licence:	Borrello Cheese Pty. Ltd. L7829/2001/6		
Registered office:	Suite 6, 1 <sup>st</sup> Floor 23 Richardson Street SOUTH PERTH WA 6151		
ACN:	009 176 587		
Promisos addross:	Borrello Cheoso		

Premises address: Borrello Cheese Lot 3 on Plan 41468 and Lots 801 and 802 on Plan 59952, Rice Road OAKFORD WA 6113

- Issue date: Friday, 27 November 2015
- Commencement date: Friday, 27 November 2015
- Expiry date: Thursday, 26 November 2020

#### Decision

Based on the assessment detailed in this document the Department of Environment Regulation (DER) has decided to issue a licence. DER considers that in reaching this decision, it has taken into account all relevant considerations.

Decision Document prepared by:

Nanette Schapel Licensing Officer

Decision Document authorised by:

Lauren Trott Delegated Officer



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# 1 Purpose of this Document

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



# 2 Administrative summary

Administrative details					
Application type	Works Approval   Image: Constraint of the second				
Activities that cause the premises to become	Category number(s)		Assessed design capacity		
prescribed premises	Milk processing		Not more than 2,000 tonnes per annum		
Application verified	Date: 27/08/2015				
Application fee paid	Date:04/09/2015				
Works Approval has been complied with	Yes No	N/A	$\square$		
Compliance Certificate received	Yes No	N/A			
Commercial-in-confidence claim	Yes No				
Commercial-in-confidence claim outcome					
Is the proposal a Major Resource Project?	Yes No				
Was the proposal referred to the Environmental Protection Authority (EPA) under Part IV of the <i>Environmental Protection Act 1986</i> ?					
Is the proposal subject to Ministerial Conditions?	Yes No EPA Report No:				
Does the proposal involve a discharge of waste	Yes No				
into a designated area (as defined in section 57 of the Environmental Protection Act 1986)?Department of Water consulted Yes \[ No \]					
Is the Premises within an Environmental Protection Policy (EPP) Area Yes No					
If Yes include details of which EPP(s) here.					
Environmental Protection (Peel Inlet-Harvey Estuary) Policy 1992					
Is the Premises subject to any EPP requirements? Yes⊠ No⊡					
If Yes, include details here,					
<i>The EP (Peel Inlet-Harvey Estuary) Policy 1992</i> requires that nutrients from any commercial/industrial activities within the Policy area do not impact on the Peel Inlet and Harvey Estuary.					



# 3 Executive summary of proposal and assessment

Borrello Cheese Pty. Ltd. (Borrello) is a family business where the main product is ricotta cheese along with a selection of other hard cheeses. The factory operates 6 days a week including a half day on Saturdays. Borrello undergoes a SAI Global Audit once a year and it is also regulated and inspected by the Department of Health.

### Infrastructure:

The factory includes a shop, cheese producing area, water tanks, water purifier and associated infrastructure including:

- Factory and cool room;
- 3 interceptor drains;
- 20,000L wastewater storage tank and dinosaur trailer for irrigation;
- 2 large rainwater tanks as back up water supply;
- Diesel contained in 20,000L tanks in a bunded area;
- Two 20,000L water storage tanks;
- Washdown bay for trucks; and
- Small storage tank for wastewater from washdown bay

#### Process:

- Approximately 40,000L of wastewater is generated every day from the factory and all wastewater is channeled to the interceptor drains which are connected in series. Solids are collected in the first two drains and the third drain in the series is the collection sump.
- Solids from the interceptor drains are pumped out approximately every two months by a contractor and disposed off-site;
- The wastewater from the sump is directed into a large overhead storage tank where it is periodically fed into a large tractor/trailer for irrigation onto the surrounding paddocks;
- Irrigation of the wastewater occurs on a daily basis on an average of 24 days each month;
- Approximately a 2 ha plot is irrigated each time and there is a minimum of 60 ha available for irrigation;
- The irrigation regime is recorded every day on maps which allows the operators to alternate plots, where each plot is rested for approximately 5 weeks between irrigation events;
- Sampling of the wastewater occurs twice a year from the discharge pipe of the wastewater storage tank;
- The Licensee is required to calculate the nutrient loading and the licence includes limits to the loading rate for nitrogen, phosphorus and biochemical oxygen demand (BOD);
- All water used in the manufacture of cheese is from an on-site production bore where the water is fed into a series of water storage tanks. Treatment of the water is in the first storage tank and includes a carbon filter, water softener and an iron removal filter; and
- Following treatment, the water is transferred to the second storage tank where, prior to being pumped into the factory, it is UV disinfected.

#### Location:

The Premises is located within 650m of a minor river called the Birriga Main Drain and the site is located within the Murray River catchment area and the Serpentine Groundwater area. The *EP* (*Peel Inlet-Harvey Estuary*) *Policy 1992* regulates nutrient input from commercial and industrial activities within the Policy area. Previous Annual Environmental Monitoring Reports have shown that the



nutrient content of the wastewater to be irrigated and the nutrient loading per hectare is low (refer to risk assessment table in Decision Document).

A reading of the production bore was taken in April 2015 which notes the standing water level as 5.14m below ground level. There is no requirement to carry out groundwater monitoring on site and therefore, there is no indication of the groundwater direction, background readings or the standing water level of the groundwater in the paddocks where wastewater is irrigated. Soil type on the premises is a mixture of sand, loam and clay where the content of loam and clay is approximately 15%.

The nearest neighbour is a single residence (farmhouse) located 190m south of the premises boundary and 730m south east of the factory.



# 4 Decision table

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

Works Approval / Licence section	Condition number W = Works Approval L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
General Conditions	L1.2.1 L1.3.2	Operation         Emission Description         Emission: Stormwater runoff can become contaminated with nutrient enriched         wastewater generated from the cheese processing activities.         Impact: Contamination of surrounding land and surface water drainage systems.         Potential impacts on ecology of surface water from the addition of nutrients, where the         nearest water body is the Birriga Main Drain situated 650m east of Lots 3 and 801.         Controls: Wastewater from the factory floor is directed through sieves to remove solids         prior to being stored in a tank. <u>Risk Assessment</u> Consequence: Insignificant         Likelihood: Unlikely         Risk Rating: Low         Regulatory Controls         L1.2.3 has been added to the licence to require the operator to take measures to         prevent stormwater run-off becoming contaminated by on site processes. Condition         L1.3.2 replaces Condition W2(b) on previous licence and requires the Licensee to         prevent irrigation run-off, spray drift or discharge beyond the Premises boundary,         manage the irrigation so as to prevent soil erosion and ponding ; maintain a healthy         vegetative cover and prevent water logging of the irrigated areas.	L7829/2001/6

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DECISION TABLE					
Works Approval / Licence section	Condition number W = Works Approval L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents		
		Residual Risk Consequence: Insignificant Likelihood: Unlikely Residual Risk Rating: Low			
Premises operation	L1.3.1 L1.3.2	Condition L1.3.1 requires all wastewater generated from manufacturing activities to be directed through a grease trap prior to being irrigated on site. Previous licence Condition S1 (L7829/2001/5) required the contents of the grease traps to be emptied at least once a month and the solid wastes disposed off-site. This Condition has been replaced by L1.3.2 which requires all wastes that are not removed off-site for lawful use/disposal, are managed in accordance to the irrigation requirements of Table 1.3.2 and grease trap wastes to be emptied at least every two months and the contents disposed off- site.	L7829/2001/6		
Emissions general	L2.1.1	Descriptive limits will be set through Condition L2.2.2 of the licence and therefore Condition L2.1.1 regarding recording and investigation of exceedances of limits has been included.	L7829/2001/6		
Point source emissions to surface water including monitoring	-	Previous licence L7829/2001/5 did not have any conditions for point source emissions to surface water. DER has considered whether the risk profile of emissions and discharges from the premises has significantly changed since the previous licence was granted. No (significant) changes have occurred. No new Conditions are considered necessary.	-		
Point source emissions to groundwater including monitoring	-	Previous licence L7829/2001/5 did not have any conditions for point source emissions to groundwater. DER has considered whether the risk profile of emissions and discharges from the premises has significantly changed since the previous licence was granted. No (significant) changes have occurred. No new Conditions are considered necessary.	-		
Emissions to land including monitoring	L3.2.1 L3.3.1	DER's assessment and decision making for emissions to land including monitoring are detailed in Appendix A.	L7829/2001/6 Environmental Protection (Unauthorised		



DECISION TAB	LE		
Works Approval / Licence section	Condition number W = Works Approval L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
			Discharges) 2004
Fugitive emissions	-	The previous licence L7829/2001/5 did not have any conditions for fugitive emissions. No new conditions are required as DER considers that fugitive emissions can be managed under the general provisions of the <i>Environmental Protection Act 1986</i> .	Environmental Protection Act 1986
Odour	-	The Department has not received any odour complaints concerning operations at the Premises and the previous licence L7829/2001/5 did not have any conditions for odour emissions. No new Conditions are required as DER considers that odour emissions can be managed under the general provisions of the <i>Environmental Protection Act</i> 1986.	Environmental Protection Act 1986
Noise	-	The previous licence L7829/2001/5 did not have any Conditions for noise emissions. No new Conditions are required as DER considers that noise emissions can be managed under the <i>Environmental Protection (Noise) Regulations 1987</i>	Environmental Protection (Noise) Regulations 1987
Monitoring general	L3.1.1, L3.1.2, L3.1.4	Condition W3(c) of previous licence L7829/2001/5 required the Licensee to ensure that monitoring of wastewater was in accordance with Australian Standard 5667 and W3(d) required the samples to be submitted to a laboratory with NATA accreditation. Conditions L3.1.1, L3.1.2, L3.1.3 and L3.1.4 in current licence (L7829/2001/6) have been included as monitoring requirements to ensure that quality data is provided to enable DER to assess the suitability of nutrient loading limits (as required by Condition L2.2.2) and monitoring is accurate and representative of the wastewater generated on site.	L7829/2001/6
Monitoring of inputs and outputs	-	The previous licence L7829/2001/5 did not have any conditions for the monitoring of inputs and outputs. DER has considered whether the risk profile of emissions and discharges from the premises has significantly changed since the previous licence was granted. No (significant) changes have occurred. No new Conditions are considered necessary.	-
Process monitoring	-	The previous licence L7829/2001/5 did not have any conditions for process monitoring. DER has considered whether the risk profile of emissions and discharges from the premises has significantly changed since the previous licence was granted. No (significant) changes have occurred. No new Conditions are considered necessary	-

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DECISION TABLE					
Works Approval / Licence section	Condition number W = Works Approval L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents		
Ambient quality monitoring	L1.3.2, L2.2.1, L2.2.2, L3.1.2, L3.2.1 and L3.3.1	DER's assessment and decision making for emissions to land including monitoring are detailed in Appendix A.	L7829/2001/6 EP (Unauthorised Discharges) 2004		
Meteorological monitoring	-	<ul> <li>The previous licence L7829/2001/5 did not have any conditions for meteorological monitoring. DER has considered whether the risk profile of emissions and discharges from the premises has significantly changed since the previous licence was granted. No (significant) changes have occurred. No new conditions are considered necessary.</li> <li>There are no specific conditions requiring improvements to the Premises</li> </ul>	-		
Improvements Information	- L5.1.3	Condition L5.1.4 has been included to require the Licensee to implement a complaints management system to record complaints including any actions taken in response to a complaint. A complaints report is to be included with the Annual Environmental Report, required by Condition L5.2.1 which replaces Condition G1 of previous licence.	- L7829/2001/6		
Licence Duration	N/A	The main risk associated with operations on site is the discharge of wastewater by irrigation. This risk has been assessed in Appendix A as a low risk. The licence will be issued for a period of 5 years, in accordance with factors within the document titled <i>Guidance Statement Licence Duration</i> (DER, revised May 2015).	Guidance Statement Licence Duration (DER, revised May 2015).		



# 5 Advertisement and consultation table

Date	Event	Comments received/Notes	How comments were taken into consideration
14/09/2015	Application advertised in West Australian (or other relevant newspaper)	No comments received	N/A
2411/2015	Proponent sent a copy of draft instrument	Borrello Cheese provided advice on soil type on Premises. All changes to licence conditions and premises description reviewed and agreed by Borrello Cheese	Description of soil types included in Decision Document



# 6 Risk Assessment

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

Table '	1:	Emissions	Risk	Matrix
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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

### Emissions to land including monitoring

Emission Description Emission: Nutrient rich wastewater irrigated to land

*Impact*: Potential for nutrient rich wastewater to impact on native vegetation on land surrounding the paddocks being irrigated. There is also the potential for the wastewater to infiltrate to the underlying groundwater. The area surrounding Borrello Cheese is zoned rural and includes farming lots and small residential areas such as the town of Oakford, which is located approximately 1km east. The closest neighbours to the irrigated paddocks include a single residence located 92m east and another single residence is located 200m south. DER has not received any complaints about odour emissions for Borrello Cheese.

There are no Ramsar wetlands or threatened fauna or flora communities within the vicinity. The area falls within the Geomorphic wetlands – Armadale Palusplain – which covers a wide area in the south west of Western Australia. The area is not subject to 100 year ARI flood levels and there are no watersheds, wetlands or Public Drinking Water Supply areas in the vicinity. The closest surface water body is a minor river called the Birriga Main Drain, situated 650m east of Lots 3 and 802.

Based on information received from the Licensee, the standing water level in the production bore onsite is 5.14m below ground level. Soils in the vicinity are a mixture of sand, loam and clay where the content of loam and clay is approximately 15%. Based on a recent site visit, the surrounding paddocks where wastewater is irrigated are relatively flat.

*Controls:* The factory floor is washed down at the end of production activities each day. Solid wastes, which have the potential to contain more nutrients, are directed through sieves and removed from the waste stream. The remaining wastewater is directed through grease traps, then stored in a tank prior to irrigation of surrounding paddocks by a tanker. The Licensee is required to monitor the wastewater twice a year so that nutrient loading can be determined. The total area of the Premises is 88ha and approximately 60ha of land is irrigated. This allows paddocks to be rotated with resting intervals of 5 weeks

<u>Risk Assessment</u> Consequence: Insignificant Likelihood: Unlikely Risk Rating: Iow

#### **Regulatory Controls**

The previous licence (L7829/2001/5) required the Licensee to manage the irrigated areas (Condition W2(b)), monitor the wastewater to be irrigated (Condition W3(b)) and determine the nutrient loading (Condition W3(a)). These requirements have been included in the current licence conditions where:

- L1.3.2 requires that, when irrigating wastewater, there is to be no run-off, spray drift, ponding or discharge which crosses the Premises boundary;
- L2.2.1 requires the Licensee to monitor the wastewater to be irrigated and stipulates that wastewater is only to be irrigated to specific paddocks;
- L3.2.1 requires biannual monitoring to be carried out;
- L3.1.2 requires that the biannual monitoring is at least 5 months apart. This is to ensure that the
  results are representative of the wastewater to be irrigated; and
- L3.3.1 requires the Licensee to record the nutrient loading of total nitrogen, total phosphorus and BOD.

DER acknowledges that the applicability of the limits sent in the previous licence (Condition W2(a)) and transferred to this licence reissue (Condition L2.2.2) have been retained on the basis that there



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have been no significant changes to the process since these limits were originally assessed and implimented. DER may require Borrello Cheese to investigate the potential impacts from long term wastewater irrigation practices and provide a nutrient irrigation management plan via a future licence amendment where the plan will need to demonstrate that the wastewater irrigated on the surrounding paddocks, and identified as L1 in Schedule 1 of the licence, is not impacting on the surrounding environment and underlying groundwater.

<u>Residual Risk</u> Consequence: Insignificant Likelihood: Unlikely Risk Rating: Iow