

# Narrandera Poultry Production Complex (SSD 6882)

# 2017 ANNUAL REVIEW



Prepared by:



# ProTen

# Narrandera Poultry Production Complex

# Annual Review 2017

PREPARED BY:

SLR Consulting Australia Pty Ltd ABN 29 001 584 612 10 Kings Road New Lambton NSW 2305 Australia (PO Box 447 New Lambton NSW 2305 Australia) T: +61 2 4037 3200 F: +61 2 4037 3201 newcastleau@slrconsulting.com www.slrconsulting.com

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#### Table 1 - Annual Review Title Block

Name of operation	Narrandera Poultry Production Complex
Name of operator	ProTen Limited
Development consent / project approval #	SSD 6882
Name of holder of development consent / project approval	ProTen Limited
Water licence #	WAL 11788
Name of holder of water licence	ProTen Holdings Pty Ltd
Annual Review start date	14 December 2015
Annual Review end date	21 April 2017

I, David Kruger, certify that this audit report is a true and accurate record of the compliance status of the Narrandera Poultry Production Complex for the period between November 2015 and 21 April 2017 and that I am authorised to make this statement on behalf of ProTen Limited.

- a) The Annual Review is an 'environmental audit' for the purposes of section 122B(2) of the Environmental Planning and Assessment Act 1979. Section 122E provides that a person must not include false or misleading information (or provide information for inclusion in) an audit report produced to the Minister in connection with an environmental audit if the person knows that the information is false or misleading in a material respect. The maximum penalty is, in the case of a corporation, \$1 million and for an individual, \$250,000.
- b) The Crimes Act 1900 contains other offences relating to false and misleading information: section 192G (Intention to defraud by false or misleading statement—maximum penalty 5 years imprisonment); sections 307A, 307B and 307C (False or misleading applications/information/documents—maximum penalty 2 years imprisonment or \$22,000, or both).

Name of authorised reporting officer	David Kruger
Title of authorised reporting officer	Regional Operations Manager - Narrandera
Signature of authorised reporting officer	
Date	19/06/2017

Note.

# 1 STATEMENT OF COMPLIANCE

A summary of compliance at ProTen's Narrandera Poultry Production Complex (ProTen Narrandera, the Development) during the reporting period is provided in **Table 2**.

### Table 2 - Statement of Compliance

Were all conditions of the relevant approval(s) complied with?	Yes/No
Development Consent - SSD 6882	Yes
Environment Protection Licence - EPL 20748	No
Water Access Licence - WAL 11788	Yes

A summary of the non-compliances during the reporting period have been summarised in **Table 3**. There was one non-compliance during the reporting period which is discussed further in **Section 11**. The non-compliance category is described in **Table 4**.

Relevant Approval	Condition #	Condition Description Summary	Compliance Status	Comment	Where addressed
EPL 20748	M4.1	Met station	Non-Compliant	Met data was not recorded for Temperature at 2m between the 22 April 2016 and July 2016. No met data was recorded during the month of August due to a technical error.	Section 10

Table 3 - Non-Compliance

Table 4 - Com	pliance Status	Categories
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Risk Level	Colour Code	Description
High	Non-Compliant	Non-compliance with potential for significant environmental consequences, regardless of the likelihood of occurrence.
Medium	Non-Compliant	Non-compliance with potential for serious environmental consequences, but is unlikely to occur; or potential for moderate environmental consequences, but is likely to occur.
Low	Non-Compliant	Non-compliance with potential for moderate environmental consequences, but is unlikely to occur; or potential for low environmental consequences, but is likely to occur.
Administrative non-compliance	Non-Compliant	Non-compliance which does not result in any risk of environmental harm.

# 2 INTRODUCTION

# 2.1 Overview

ProTen Narrandera was granted Development Consent SSD 6882 on 9 November 2015 by the Planning Assessment Commission of NSW (PAC) to be established within a rural property approximately 26 kilometres (km) west of Narrandera in south western New South Wales (NSW) (see **Figure 1**). ProTen Narrandera is situated on approximately 1,160 hectares of rural land positioned off the Sturt Highway within the Narrandera local government area (LGA).

ProTen Narrandera commenced construction on 14 December 2015 and, when complete, will comprise five poultry production units (PPU) or farms, where broiler birds will be grown for human consumption (see **Figure 2**). Each PPU will comprise 16 tunnel-ventilated fully-enclosed climate-controlled poultry sheds, with associated support infrastructure and staff amenities (see **Figure 3**).

This Annual Review details the environmental performance of ProTen Narrandera for the twelve month reporting period from 22 April 2016 to 21 April 2017. This reporting period has been approved by the DPE to align with the Environment Protection Licence (EPL) Annual Return period. It has been prepared generally in accordance with the NSW Government *Annual Review Guideline* (2015), and to satisfy Schedule 4, Condition C8 of Development Consent SSD 6882.

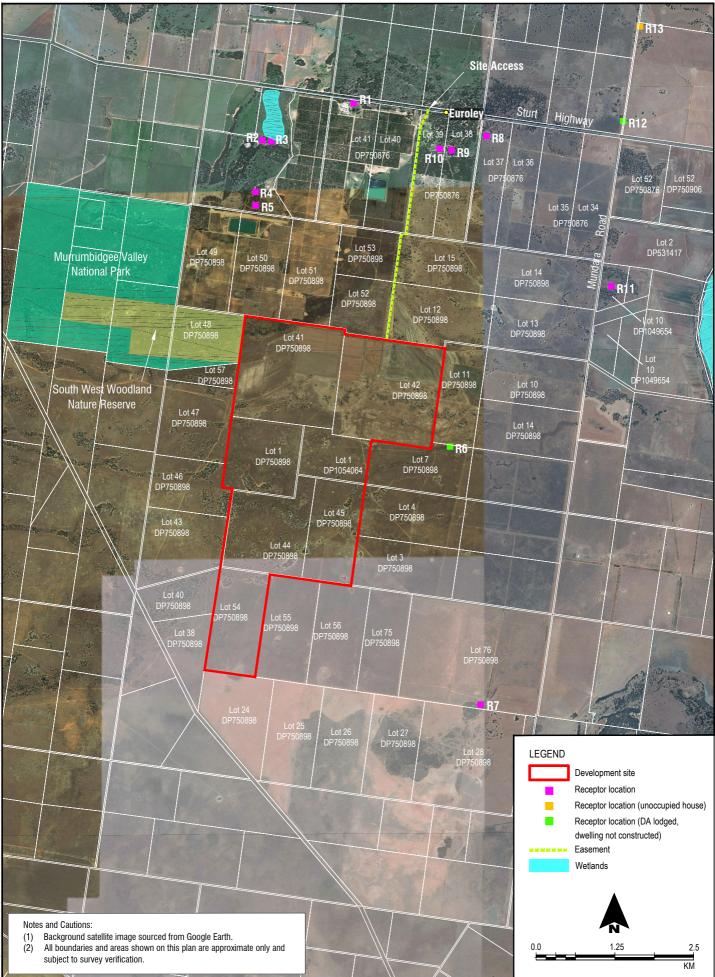
This is the first Annual Review prepared for the Development and also addresses activities conducted from the commencement of construction on 14 December 2015 until the commencement of the reporting period on 22 April 2016.

# 2.2 Company Contact Details

The company contacts for this report are listed in Table 5.

Table 5 - Company Contact Details	
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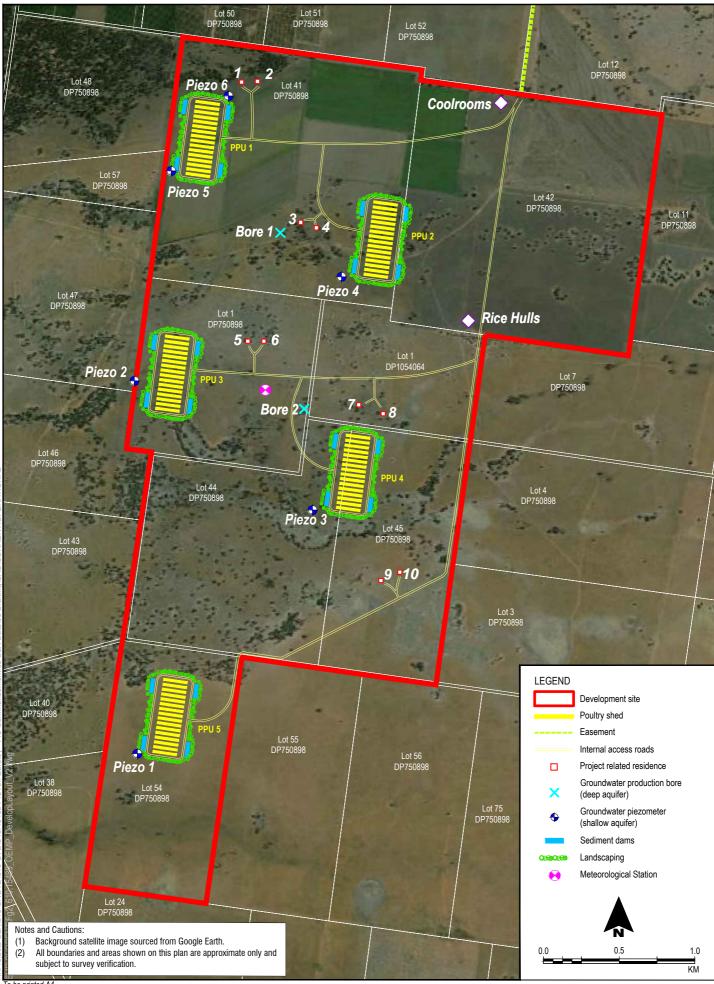
ProTen Narrandera					
Daniel Bryant	David Kruger				
Managing Director	Regional Operations Manager - Narrandera				
Ph: (02) 9458 1701	Ph: (02) 6962 1770				
Mob: 0438 498 292	Mob: 0439 400 127				
Email: Daniel@proten.com.au	Email: davidk@proten.com.au				



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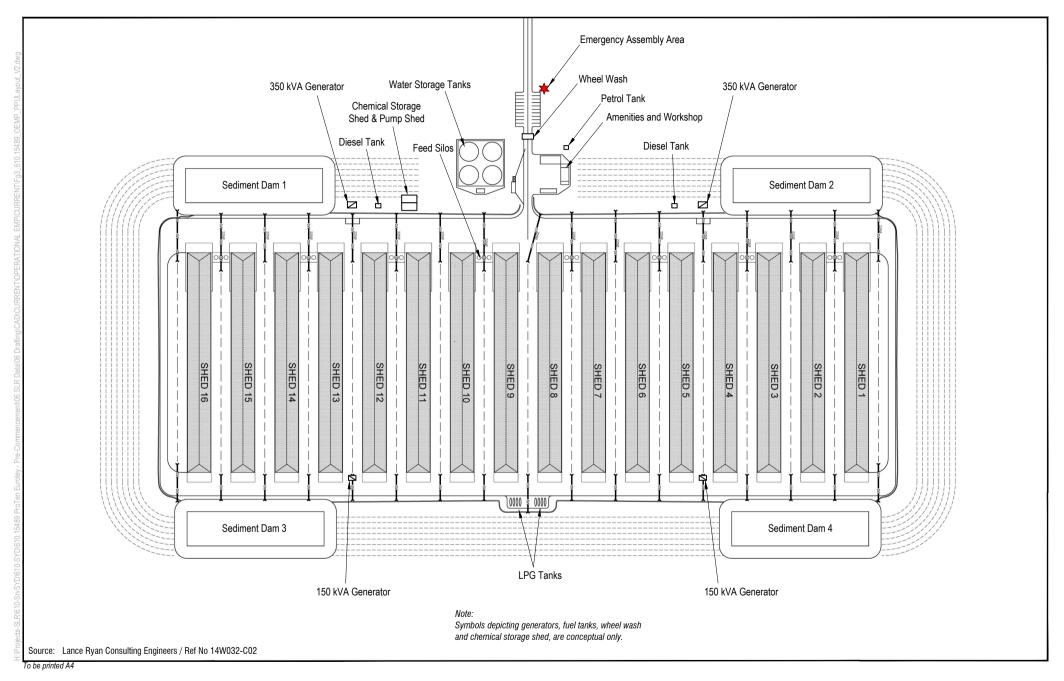
Development Site and Nearest Receptors



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SLR

Development Layout FIGURE 2



**SLR** 

Poultry Production Unit Layout

# 2.3 Report Scope

SLR Consulting (SLR) has been engaged by ProTen to prepare the Annual Review required under Schedule 4, Condition C8 of Development Consent SSD 6882 (see **Appendix A**). This condition imposes the requirements listed in **Table 6**:

Condition Number	Condition	Section Addressed
C8	Each year, the Applicant shall review the environmental performance of the satisfaction of the Secretary. This review must:	Development to the
C8(a)	Describe the Development that was carried out in the previous calendar year, and the Development that is proposed to be carried out over the next year;	Section 4 and 11
C8(b)	<ul> <li>Include a comprehensive review of the monitoring results and complaints records of the Development over the previous calendar year, which includes a comparison of these results against the: <ol> <li>the relevant statutory requirements, limits or performance measures/criteria;</li> <li>requirements of any plan or program required under this consent;</li> <li>the monitoring results of previous years ; and</li> <li>the relevant predictions in the EIS;</li> </ol> </li> </ul>	Sections 6, 7 and 10
C8(c)	Identify any non-compliance over the last year, and describe what actions were (or are being) taken to ensure compliance;	Section 10
C8(d)	Identify any trends in the monitoring data over the life of the Development;	Section 7
C8(e)	Identify any discrepancies between the predicted and actual impacts of the Development, and analyse the potential cause of any significant discrepancies; and	Section 6 and 7
C8(f)	Describe what measures will be implemented over the next year to improve the environmental performance of the Development.	Section 11

### Table 6 - Compliance with Schedule 4, Condition C8 of SSD 6882

In accordance with the approved Operational Environmental Management Plan (OEMP) (SLR, 2017a), this Annual Review covers the reporting period from 14 December 2015 to 21 April 2017, which correlates with the end of the reporting period for EPL 20748, and addresses all aspects listed under Condition C8.

The Annual Review is based on operational and environmental monitoring data supplied by ProTen Narrandera and various consultations with ProTen personnel.

# 3 APPROVALS

# 3.1 Overview

**Table 7** provides a summary of the current statutory instruments applicable to the continuing operation of ProTen Narrandera. Further details are outlined in the following sub-sections.

Table 7 - Current Consents,	Licences and Approvals
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Instrument	Issue Date	Regulatory Authority
Development Consent - SSD 6882	9 November 2015	Department of Planning and Environment (DPE)
Environment Protection Licence - EPL 20748	22 April 2016	Environment Protection Authority (EPA)
Water Access Licence - WAL 11788	8 April 2015	Department of Primary Industries - Office of Water (DPI - Water)

# 3.2 Development Consent

ProTen Narrandera was granted Development Consent SSD 6882 on 9 November 2015 by the PAC of NSW. Development Consent SSD 6882 approves the construction and operation of five PPUs, each comprising of 16 poultry sheds where broiler birds will be grown for human consumption.

**Table 8** summarises the key elements of the Development as approved by SSD 6882.

Development Characteristic	Proposed Development
Purpose	Birds grown for human consumption
Number of PPUs	Five
Number of poultry sheds per PPU	16, each measuring 160 metres long by 17 metres wide
Total number of poultry sheds	80
Type of poultry sheds	Tunnel-ventilated, fully-enclosed, climate-controlled
Maximum shed population	49,000 birds
Maximum PPU population	784,000 birds
Maximum Development population	3.92 million birds
Maximum bird density within sheds	40 kilograms per square metre (kg/m <sup>2</sup> )
Hours of operation	24 hours a day, 7 days a week
Production cycle length	Approximately 9 weeks, comprising a maximum bird occupation of 8 weeks and a cleaning phase of 1 week
Number of production cycles per year	On average, approximately 5.7

 Table 8 - Summary of Development

A copy of Development Consent SSD 6882 is attached as **Appendix A**.

# 3.3 Environment Protection Licence

ProTen Narrandera is a premises-based activity under Schedule 1 of the *Protection of the Environment Operations Act 1997* (POEO Act) as the complex holds more than 250,000 birds at any one time. As a result, ProTen Narrandera was required to obtain an EPL.

EPL 20748 was as issued by the Environment Protection Authority (EPA) on 22 April 2016 and is attached as **Appendix B**.

# 3.3.1 EPL Annual Return

The 2017 Annual Return, comprising a Statement of Compliance and a summary of any monitoring required by the EPL (including the recording of complaints), was submitted on 14 June 2017 for the reporting period of 22 April 2016 to 21 April 2017. The 2017 Annual Return reported the following:

- No complaints during the reporting period; and
- One non-compliance or reportable incident during the reporting period.

A copy the Annual Return is contained within **Appendix C**.

# 3.4 Water Access Licence

WAL 11788 was granted by DPI - Water on 8 April 2015 permitting the abstraction of 488 megalitres (ML) per year from the two groundwater production bores installed at the site (see **Figure 2**). These bores access the Deep Aquifer (Calivil Formation) in accordance with the WAL conditions and are capable of a maximum pump rate of 7 ML per day. A copy of WAL 11788 is contained in **Appendix D**.

# 3.5 Construction Environmental Management Plan

A Construction Environmental Management Plan (CEMP) (SLR, 2016a) was prepared to satisfy Schedule 4, Condition C1 of SSD 6882. The objective of the CEMP is to ensure the application of best practice environmental management during the construction phase of the Development and that environmental risks are properly managed.

The CEMP included the following management plans:

- Construction Traffic Management Plan;
- Construction Soil and Water Management Plan; and
- Landscape Management Plan.

# 3.6 Operational Environmental Management Plan

In accordance with Schedule 4, Condition C4 of SSD 6882, an OEMP was prepared and approved by the DPE in May 2017. The OEMP includes:

- Driver Code of Conduct;
- Air Quality Management Plan;
- Landscaping Management Plan
- Water Management Plan;
- Waste Management Plan;
- Emergency Plan;
- Biodiversity Management Plan;
- Aboriginal Cultural Heritage Management Plan;
- Emergency Disposal Biosecurity Plan;
- Flood Emergency and Evacuation Plan; and
- Complaints and Incidents Management Strategy.

The OEMP establishes the framework for managing and mitigating the potential environmental impacts of ProTen Narrandera over the life of the operation. It includes performance objectives, performance indicators, management commitments/strategies, monitoring and reporting requirements and contingencies for potential environmental impacts.

# 4 OPERATIONS

# 4.1 Overview

ProTen Narrandera comprises five PPUs, where birds are grown for human consumption. Each PPU comprises 16 tunnel-ventilated fully-enclosed climate-controlled poultry sheds, with associated support infrastructure and staff amenities. Each poultry shed has the capacity to house a maximum of 49,000 broiler birds, equating to a PPU population of up to 784,000 broilers and a total maximum site population of up to 3.92 million broilers.

ProTen Narrandera typically operates on a nine week production cycle, with a maximum bird occupation of eight weeks and a down-time of close to one week for cleaning and sanitisation in preparation for the next batch of birds. In summary, the cycle comprises the following major steps:

- 1. Delivery of Bedding Material clean and fresh bedding material, such as soft wood shavings, is delivered to the site from a storage facility near Hanwood and spread over the floor of the poultry sheds.
- 2. Delivery of Chicks day-old chicks are delivered to the site from one of Baiada's local hatchery facilities and placed onto the floor of the poultry sheds.
- **3.** Chick Nurturing chicks are nurtured and grown within the sheds, with their period of service depending on the live-weight of the birds. The desired processing age is primarily determined by customer weight specifications, but is normally achieved from five and eight weeks of age.
- 4. Removal of Birds as the birds reach their desired slaughter weight, they are removed from the sheds and transported to Baiada's processing complex near Hanwood. Shed thinning (partial depopulation) occurs at various times during the production cycle depending on the live-weight of the birds.
- 5. Removal of Poultry Litter when all the birds have been removed, after approximately eight weeks, the spent bedding material (poultry litter) is removed from the sheds and transported off-site for disposal or re-use.
- 6. Cleanout the poultry sheds are cleaned and sanitised to reduce the risk of pathogens and disease in preparation for the next batch of chicks. Additional activities including cleaning feed pans, water lines, feed silos, fan blades and other equipment.

# 4.2 Operating Hours

The Development operates 24 hours a day, seven days a week with the majority of activities being carried out between 7:00 am and 7:00 pm. For reasons of livestock welfare, as the birds reached their desired processing (slaughter) weight they are removed from the sheds and transported from ProTen Narrandera between 8.00 pm and 2.00 pm, when it is cooler and the birds are more settled.

There is typically one daily shift for farm workers commencing at 7.00 am and finishing at 4.00 pm.

# 4.3 Construction

Construction of ProTen Narrandera commenced on 14 December 2015 and has been undertaken on a staged basis. In summary the construction activities have included:

- Construction of a new intersection with the Sturt Highway;
- Construction of the new access road form the Sturt Highway to the development site;
- Site preparation and establishment works, including erosion and sediment control;
- Earthworks;

- Foundation and slab construction;
- Construction of the poultry sheds and ancillary infrastructure at each of the five PPUs;
- Construction of the 10 dwellings to house farm managers and farm assistant managers;
- Installation and/or upgrade of the required servicing infrastructure (water, electricity and LPG); and
- Construction of the surface water management systems.

At the end of the reporting period, construction of Farms 77, 78 and 79 had been completed and commissioned. Construction of Farms 75 and 76 have been commenced and will be completed during 2017.

# 4.4 Production

Schedule 2, Condition A6 of SSD 6882 permits a maximum population of 3.92 million broilers at ProTen Narrandera at any one time. **Table 9** lists the bird placement and production schedules at ProTen Narrandera over the reporting period.

Farm Number	Batch Number	Start Date	End Date	Birds In	Birds Out
79	1605	28 Apr 2016	21 Jun 2016	401,271	381,431
79	1606	1 Jul 2016	22 Aug 2016	780,260	727,637
78	1606	7 Jul 2016	28 Aug 2016	194,727	184,532
79	1701	8 Sep 2016	31 Oct 2016	773,906	732,985
78	1701	12 Sep 2016	3 Nov 2016	803,032	752,623
79	1702	11 Nov 2016	4 Jan 2017	775,238	737,317
78	1702	17 Nov 2016	8 Jan 2017	777,298	744,793
77	1702	21 Nov 2016	12 Jan 2017	383,847	366,329
78	1703	18 Jan 2017	11 Mar 2017	763,114	734,789
79	1703	19 Jan 2017	15 Mar 2017	767,649	737,537
77	1703	22 Jan 2017	15 Mar 2017	766,146	730,648
76	1703	13 Feb 2017	4 Apr 2017	188,859	180,698
		Total		7,375,347	7,011,319

Table	9 -	Production	Numbers
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The capacity of ProTen Narrandera did not exceed the approved maximum capacity of 3.92 million broilers throughout the reporting period.

# 5 ACTIONS TAKEN FROM PREVIOUS ANNUAL REVIEW

In accordance with the OEMP, this Annual Review is the first to be completed for ProTen Narrandera. All feedback and comments received from the DPE will be reported in the 2018 Annual Review.

# 6 ENVIRONMENTAL PERFORMANCE

This section provides an overview of the environmental management and performance of ProTen Narrandera during the reporting period.

# 6.1 General Site Maintenance

# 6.1.1 Construction

The CEMP was prepared prior to the commencement of construction to:

- Satisfy the requirements of Conditions C1 and C2 of SSD 6882;
- Ensure the application of best practice environmental management;
- Ensure that the commitments made in the EIS (SLR, 2015a) and RTS (SLR, 2015b) are fully implemented and/or complied with during construction; and
- Ensure that the environmental risks associated with the construction of ProTen Narrandera are properly managed.

In accordance with Schedule 4, Condition C15 of SSD 6882, an experienced Environmental Representative was appointed by ProTen Narrandera and approved by the Secretary to offer advice in relation to environmental performance and monitor the implementation of the CEMP.

In accordance with the CEMP, the Environmental Representative has undertaken regular environmental inspections during the construction of ProTen Narrandera to monitor the implementation of mitigation and management measures, and ensure compliance with the Development Consent and CEMP. Inspection reports were prepared and provided to ProTen summarising any complaints, incidents and non-compliances, as well as identifying any general issues to be addressed.

Environmental site inspections were undertaken by SLR during the reporting period on the following dates:

- 9 December 2015;
- 21 January 2016;
- 29 February 2016
- 31 March 2016;
- 26 May 2016;
- 28 July 2016;
- 20 September 2016;
- 28 November 2016;
- 1 February 2017; and
- 30 March 2017.

Overall, SLR concludes that environmental controls detailed in the CEMP were generally being implemented and the risk of adverse environmental impact from the construction of ProTen Narrandera is low.

# 6.1.2 Operation

Regular and effective site maintenance is essential to minimise the impacts of odour, dust, noise, pests and health as a result of site operation and management.

ProTen Narrandera operates in accordance with the approved OEMP to minimise the potential for adverse environmental impacts, extend the life of farm equipment, reduce operating costs and maximise operational efficiency.

Emphasis is placed on keeping the insides of the poultry sheds and surrounding environs as clean as possible, with maintenance activities including:

- Regular inspection and maintenance of ventilation systems, bird drinkers and bird feeders to avoid blockages, spillages and leaks;
- Regular examination and management of bird health within the poultry sheds;
- Stocking densities are in accordance with the National Animal Welfare Standards for the Chicken Meat Industry (Barnett et al, 2008);
- Daily inspection and removal of dead birds from within the sheds;
- Daily monitoring and maintenance of the bedding material to identify, remove and replace any caked material beneath drinking lines and/or areas with excessive moisture content;
- Regular site slashing and mowing;
- Maintenance of the landscape plantings;
- Implementation of pest control measures, which primarily comprises a preventative baiting system;
- Regular inspection and maintenance of water supply pumps and pipelines to identify and fix any blockages or leaks; and
- Maintenance of the internal access roads to minimise tyre wear and dust emissions.

# 6.2 Meteorological Monitoring

In accordance with Condition M4 of EPL 20748, an automatic weather station capable of providing real-time monitoring data is operational at the ProTen Narrandera. The station monitors the following parameters:

- Temperature (measured at 10 metres and 2 metres above ground level);
- Wind speed;
- Wind direction; and
- Rainfall.

Enviromet Meteorological Consultants have been engaged by ProTen to calibrate the weather station. The weather station was calibrated on 26 October 2016 and will be calibrated again in October 2017.

 Table 10 summarises the meteorological data collected at ProTen Narrandera during the reporting period.

No data was collected during August 2017 due to a fault with the processing chip within meteorological station. The processing chip failed and a new chip was installed but did not work. A new chip was then installed.

Meteorological Information	22-30 Apr 2016	May 2016	Jun 2016	Jul 2016	Aug 2016	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	1-21 Apr 2017
Maximum Temperature at 2m (°C)					-	21.5	29.6	38.0	38.8	43.8	45.6	38.9	29.2
Minimum Temperature at 2m (°C)		Not ree	corded		-	1.6	0.8	2.6	3.9	10.6	7.1	5.5	3.6
Average Temperature at 2m (°C)					-	11.9	14.0	19.2	23.3	26.2	24.1	23.1	16.9
Maximum Temperature at 10m (°C)	28.5	25.8	18.0	21.0	-	21.5	29.8	37.4	37.6	42.7	44.8	38.1	29.1
Minimum Temperature at 10m (°C)	7.7	4.1	0.2	1.3	-	4.6	3.6	6.8	8.4	11.7	8.7	7.6	6.8
Average Temperature at 10m (°C)	18.4	14.1	10.4	10.3	-	12.5	14.7	19.8	23.8	26.6	24.5	23.4	17.7
Total Rainfall (mm)	10.4	79.4	111.2	53.4	-	123.4	35.2	40.2	76.8	10.6	8.0	47.4	12.6
Average Wind Direction (degrees)	111.7	195.6	203.2	210.5	-	184.2	196.2	203.9	187.0	180.0	177.5	130.7	145.1
Average Wind Speed (m/s)	3.0	3.2	3.3	3.3	-	3.6	3.8	3.5	3.3	3.4	3.4	3.5	3.0

# 6.3 Air Quality Management

### 6.3.1 Construction

During construction, the main impact to air quality is dust generation as a result of wheel generated dust from the internal roads. However the impact of such emissions is low given the constructed nature of the roads and subsequent lower silt loading (compared to using unformed tracks). All feasible measures to minimise dust generation were undertaken in accordance with the CEMP, including:

- Vehicles on site are confined to designated roadways;
- Disturbance is limited to the smallest practicable area possible to allow for any essential construction activity;
- Disturbed areas are promptly rehabilitated and revegetated to a stable landform to minimise dust emissions;
- If necessary, dust is minimised by "wetting" down surfaces being worked and/or carrying traffic during dry periods;
- Plant and equipment is regularly maintained to ensure optimal operating condition;
- Vehicles do not exceed a general speed limit of 60 km per hour along the access road from the Sturt Highway and ProTen Narrandera, with a reduced speed limit of 40 km per hour to be adopted in the vicinity of all work sites;
- Vehicles entering or leaving the site have their loads covered; and
- Vehicles leaving the ProTen Narrandera are cleaned of dirt, sand and other materials to avoid tracking these materials on to the public road network.

# 6.3.2 Operation

Air quality is a sensitive issue associated with intensive poultry developments. Given the nature of such operations, it is inevitable that there may be intermittent releases of fugitive odours and particulate matter during the poultry production cycle.

An *Air Quality Management Plan* (AQMP) (PEL, 2016) has been prepared for ProTen Narrandera in accordance with Condition B3 of Development Consent SSD 6882. The following sources are identified as the primary potential sources of odour emissions:

- Shed operations during the bird growing phase;
- Shed operations during shed cleanout;
- Dead birds; and
- Spilt litter during cleanout.

The AQMP also addresses dust emissions. The following are identified as the primary potential sources of operational dust emissions from ProTen Narrandera:

- Wheel generated dust from unsealed roadways;
- Dust emissions from sheds;
- Materials handling and transfer (i.e. litter placement and removal); and
- Windblown dust from open areas.

Table 11 lists the criteria for particulate matter adopted in the EIS (SLR, 2015a).

Pollutant	Agency	Criterion	Averaging Time			
PM <sub>10</sub>	EPA	50 μg/m <sup>3</sup>	24-Hour Maximum			
F IVI10		30 μg/m <sup>3</sup>	Annual Mean			

# Table 11 - Particulate Matter Criteria

Mitigation measures and management strategies employed during the reporting period at ProTen Narrandera to reduce and manage adverse odour and dust emissions include:

- The conditions inside the poultry sheds are continuously monitored (automatic and alarmed) to ensure optimum conditions for bird welfare and bedding material/litter are maintained;
- Regular monitoring and maintenance of the tunnel ventilation systems and bird drinkers (nipple drinkers and drink cups) within the poultry sheds to avoid spillage, leaks and uneven distribution;
- Regular monitoring and maintenance of bird health within each of the poultry sheds;
- Stocking densities are in accordance with the National Animal Welfare Standards for the Chicken Meat Industry (Barnett et al, 2008);
- Daily monitoring of the bedding material within the sheds to identify, remove and replace any caked material beneath drinking lines and/or areas with excessive moisture content;
- Dead birds removed from the sheds on a daily basis and stored in the on-site chiller for removal from site;
- Poultry litter promptly removed from the sheds and transported off site at the end of each production cycle during the clean-out phase. Wherever possible the handling of this material is avoided during adverse climatic conditions, such as times of cold air drainage during early morning or towards night and strong winds. The shed ventilation systems are not used during the removal of bedding material;
- Spent litter is not spread on site;
- A 40km speed limit is imposed on site;
- Internal roads are maintained to minimise dust generation; and
- All trucks have their loads covered prior to exiting the site.

### 6.3.3 Environmental Performance

One complaint in relation to dust emissions was received by ProTen in February 2016. The complaint related to dust emissions from the internal access road and was investigated in accordance with the Complaints Management Strategy.

The complaint was found to be due to poor quality rock material used to construct the northern section of the access road. An alternative rock type was sourced for the completion of the southern section of the road and the northern section was subsequently reworked.

There is no requirement to undertake air quality monitoring under the SSD 6882 or EPL 20748. ProTen Narrandera will continue to implement the mitigation and management measures outlined in the AQMP.

# 6.4 Noise Management

# 6.4.1 Construction

In accordance with Condition B27 of Schedule 3 of SSD 6882, all construction works were undertaken during the following hours:

- a) 7:00am to 6:00pm Mondays to Fridays, inclusive;
- b) 8:00am to 1:00pm Saturdays; and
- c) At no time on Sundays or public holidays.

ProTen Narrandera has been constructed with the aim of achieving the construction noise management levels detailed in the *Interim Construction Noise Guideline* (ICNG) (Department of Environment and Climate Change, 2009). All feasible and reasonable noise mitigation measures have been implemented.

Construction of the Sturt Highway intersection and site access road were considered to represent the worst case for potential construction noise impacts due to the close proximity to some of the surrounding receptors. The intersection construction was completed in December 2015, with the access road being completed in January 2016. Construction of the new intersection was managed by the construction contractor in accordance with the Works Authorisation Deed (WAD) and in consultation with Narrandera Shire Council (Council) and Roads and Maritime Services (RMS).

The noise mitigation measures implemented during construction include:

- Plant and equipment operators were instructed to operate the items in a manner that minimises noise generation;
- All construction was completed between 7am 6pm Monday to Friday and between 8am 1pm on Saturday;
- Plant and equipment was regularly maintained to ensure optimal operating condition; and
- A circular one-way internal road system was established to minimise the use of reversing alarms and heavy vehicle manoeuvring.

# 6.4.2 Operation

Schedule 3, Condition B32 of SSD 6882 and Condition L3.1 of EPL 20748 outline the operational noise limits for ProTen Narrandera as presented in **Table 12**.

Location	Day	Day Evening		ght
Location	L <sub>Aeq (15min)</sub>	L <sub>Aeq (15min)</sub>	L <sub>Aeq (15min)</sub>	L <sub>A1 (1min)</sub>
All privately owned residential premises	35	35	35	45

Note: Noise generated by the Development is to be measured in accordance with the relevant procedures and exemptions (including certain meteorological conditions) of the INP. Appendix 9 of the INP sets out the meteorological conditions under which this criterion applies.

Operational noise mitigation measures and management strategies employed during the reporting period included:

- Plant and equipment operators were instructed to operate the items in a manner that minimises noise generation;
- Emergency standby diesel generators are only used when power from the electricity grid is lost;
- Plant and equipment is regularly inspected and maintained to ensure optimal operation condition;

- A circular one-way internal roadway was been established to minimise the use the reversing alarms and heavy vehicle manoeuvring;
- Audible alarms were maintained at a level not audible beyond the site boundary;
- Internal roads maintained to reduce traffic noise levels (among other objectives); and
- The majority of operational activities occurred between 7.00 am and 7.00 pm.

### 6.4.3 Environmental Performance

No complaints were received with regard to noise during the reporting period. During the site inspections no noise related issues were identified on site.

There is no requirement to undertake noise monitoring under the SSD 6882 or EPL 20748. ProTen Narrandera will continue to implement the noise mitigation and management measures outlined in the CEMP and OEMP.

# 6.5 Waste Management

### 6.5.1 Construction

Waste generated by the construction of ProTen Narrandera is managed in accordance with the CEMP. The predominant waste streams generated through construction are concrete, timber, packaging (i.e. plastics, cardboard and polystyrene) and general putrescible waste.

The following mitigation measures are implemented during the construction of ProTen Narrandera:

- Waste streams are managed in accordance with the reuse/recycling/disposal methods described in the CEMP;
- All waste materials are directed to a facility or premises lawfully permitted to accept the materials;
- Only wastes that cannot be cost effectively reused or recycled are sent to for disposal;
- Co-mingled recycling bins are provided at the Site Office and near work sites for container recycling to ensure these items do not end up at landfill;
- Skip bins are checked on a daily basis. If they are reaching capacity, removal and replacement is
  organised for the next 24 hours;
- Site disturbance is minimised to reduce unnecessary excavation;
- Portable, self-contained toilets and washroom facilities will be regularly serviced and emptied by a licensed contractor for offsite disposal at a licensed facility; and
- Equipment/plant/machinery/vehicles will be washed down within an appropriately bunded wash down bay.

### 6.5.2 Operation

A *Waste Management Plan* (SLR, 2016b) has been prepared in accordance with Schedule 3, Condition B21 of SSD 6882. Where possible, waste is managed to meet the principles of the waste management hierarchy shown in **Figure 4** by promoting waste as a resource through the following in order of preference:

- Waste avoidance through prevention or reduction of waste generation, which is best achieved through better design and purchasing choices;
- Waste reuse, without substantially changing the form of waste;
- Waste recycling through the treatment of waste that is no longer usable in its current form to produce new products;
- Energy recovery through thermal treatment of residual waste materials and from green waste processing; and

• Waste disposal, in a manner that causes the least harm to the natural environment.

The waste hierarchy shown on **Figure 4** ranks the waste management options in order of their environmental impacts, as established under the *Waste Avoidance and Resource Recovery Act 2001*.

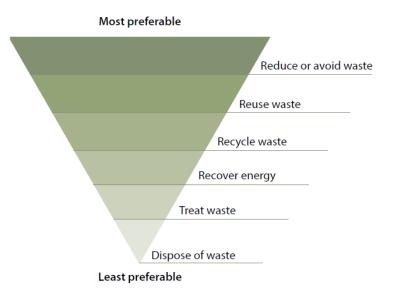


Figure 4 - Waste Hierarchy

Operations at ProTen Narrandera generate the following primary waste streams:

- **General daily waste** day-to-day general waste, including waste from the on-site managers housing, is placed in to enclosed skip bins and removed from the site by a licenced contractor on a regular basis for disposal at a local landfill facility;
- Chemical containers the only chemicals used on site are for sanitisation and disinfection purposes, along with pest and weed control. Chemicals are purchased from a local supply company and/or delivered to the site by Baiada Poultry (Baiada). Empty chemical containers are returned to the local supply company and/or Baiada for reuse, recycling or appropriate disposal. Alternatively a licensed contractor will be engaged to provide a chemical container pickup service for recycling, reuse or appropriate disposal. Any non-returnable chemical containers will be collected and managed via the drumMUSTER program;
- **Poultry litter** at the end of each production cycle, each poultry shed has around 225 m<sup>3</sup> of poultry litter, comprising around 135 m<sup>3</sup> of bedding material (soft wood shavings, rice hulls or chopped straw) and 90 m<sup>3</sup> of poultry manure which has accumulated over the eight weeks of bird occupation. Cumulative, this amounts to approximately 102,600 m<sup>3</sup> per year (based on 80 poultry sheds and 5.7 production cycles per year); and
- **Dead birds** dead birds are collected from the poultry sheds on a daily basis and stored in onsite chillers. Dead birds are not allowed to be stockpiled within the site for biosecurity reasons.

The management and mitigation measures listed below are implemented to minimise waste generation and ensure waste is effectively managed and disposed of offsite:

- No stockpiling or disposal of waste materials occurs within the bounds of ProTen Narrandera;
- Waste streams are managed in accordance with the reuse/recycling/disposal methods described in the *Waste Management Plan* and the OEMP;
- Waste materials removed from site are directed to a facility or premises lawfully permitted to accept the materials;
- Waste generated outside of ProTen Narrandera is not received at site for any purpose;
- Only wastes that cannot be cost effectively reused or recycled are sent for disposal;

- All loaded vehicles leaving the site have their loads covered;
- Poultry litter is not be stockpiled, stored or utilised within the site in any way;
- Dead birds are not disposed to land by burial or any other method at the premises (unless otherwise permitted by a relevant authority during an emergency animal disease event); and
- General waste skips are checked on a weekly basis. If the skips are reaching capacity, removal and replacement will be organised for the next 24 hours.

# 6.5.3 Environmental Performance

Waste volumes generated at the site are presented in Table 13.

Date	Quantity		
6 September 2016	2.36 tonnes		
16 September 2016	1.1 tonnes		
22 November 2016	0.6 tonnes		
16 December 2016	23 m <sup>3</sup>		
10 January 2017	1.2 tonnes		
25 January 2017	9.9 tonnes		
27 February 2017	3.18 tonnes		
6 April 2017	4.5 tonnes		

Waste is collected on an as needs basis by Cleanaway. Mixed waste is collected from ProTen Narrandera and sorted for recycling by Cleanaway at a licenced facility.

During site inspections SLR observed that the site was generally clean and tidy with rubbish placed in appropriate bins. Construction waste had been removed from completed farms.

No complaints were received in relation to waste generation or waste management during the reporting period.

# 6.6 Biodiversity Management

### 6.6.1 Construction

While the majority of the ProTen Narrandera development site has been historically cleared and used for agricultural production purposes, there are patches of native vegetation present. There have been minor impacts to native vegetation within the ProTen Narrandera site, including a small area of Sandhill Pine endangered ecologically community (EEC) which has been cleared to allow construction of the internal access road and a small area of low condition Black Box Grassy Open Woodland in the south site.

Prior to construction commencing, temporary fencing was installed to delineate and protect the area mapped by the Office of Environment and Heritage (OEH) (2011) as White Cypress Pine Open Woodland (equivalent to Sandhill Pine Woodland EEC) within the north western corner of the site (see **Figure 5**). A minimum 100 metre buffer is maintained between the construction footprint (including revegetation sites and vehicle access tracks) and the boundary of areas of remnant vegetation and the South West Woodland Nature Reserve (see **Figure 5**).

A *Biodiversity Offset Strategy* (SLR, 2015c) has been prepared to satisfy Condition B10 of SSD 6882. The strategy includes appropriate biodiversity credit and offsetting provisions to compensate for vegetation and habitat loss.

# 6.6.2 Operation

A *Biodiversity Management Plan* (BMP) (SLR, 2016c) has been prepared in accordance with Condition B12 of SSD 6882. As detail in the BMP, the key operational activities which may impact native flora and fauna at ProTen Narrandera include:

- Vehicle movements may result in vehicle strike of native birds and ground fauna (mainly reptiles and mammals);
- Introduction or spread of weeds and/or plant pathogens, primarily via vehicle movements;
- Dust generation may adversely affect plant growth;
- Excessive noise may inhibit or modify behaviour of certain native animals or cause dispersal from the noise source; and
- Lighting may adversely affect nocturnal fauna through eye-shine and exposure to predators.

The environmental controls listed below are implemented to minimise the potential for impacts to biodiversity:

- If any native fauna are by chance injured during operations, WIRES will be contacted to arrange
  proper care for the animal. WIRES will also be contacted to remove any bats discovered within
  the poultry sheds;
- The Fauna Management Protocol detailed in the OEMP will be followed (as required) for the identification and management of any rescued fauna;
- Vehicles do not exceed a general speed limit of 60 km/hour is adopted in the vicinity of the site;
- Efforts are made to ensure the poultry sheds and other site buildings are fully enclosed and maintained in an attempt to exclude bats from roosting within the sheds/buildings;
- Appropriate pest/vermin control measures are implemented to prevent and control pest/vermin populations and outbreaks; and
- Regular inspections of the Temporary Offset Area fencing are undertaken and repairs carried out as necessary.

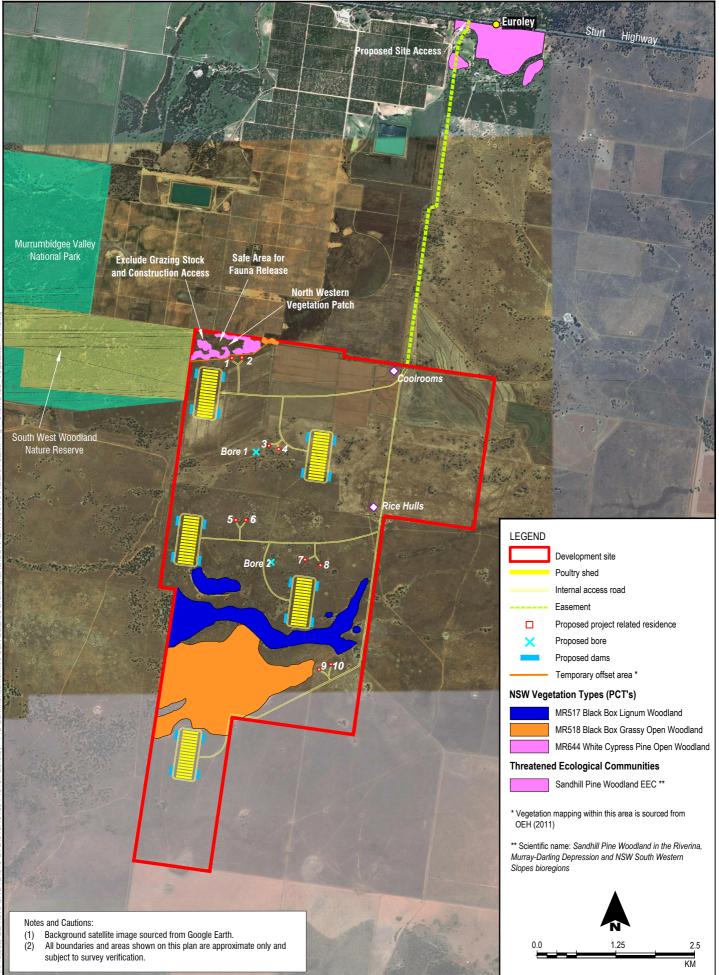
# 6.6.3 Environmental Performance

During the reporting period ProTen contacted WIRES prior to clearing to advise of proposed works and attempted to arrange a volunteer to be onsite, however, no volunteers have been available to attend. No fauna was required to be handled or relocated during clearing activities.

A preliminary inspection of the Temporary Offset Area was conducted on 31 March 2016. The following features were noted during the inspection:

- Widespread evidence of European Rabbit burrows and numerous scats;
- Presence of White Cypress Pine *Callitris glaucophylla* (noting that no detailed surveys or mapping of this vegetation have been conducted in the area);
- A mix of native and exotic grass in the groundlayer; and
- Low numbers of larger woody weeds, such as African Box-thorn.

During the reporting period, regular follow up inspections of the Temporary Offset Area were undertaken with no change to the condition of the area noted. Fencing remained in good condition and there was no evidence of the presence of stock within the offset area.



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Vegetation Areas and Temporary Offset Area FIGURE 5

# 6.7 Biosecurity, Hazard and Risk Management

# 6.7.1 Construction

As part of the CEMP prepared for ProTen Narrandera, the following environmental management and mitigation measures were implemented to prevent impacts associated with the use and storage of dangerous goods on site:

- Dangerous goods are stored and handled in accordance with:
  - Relevant Australian Standards; and
  - Environmental Protection Manual for Authorised Officers: Bunding and Spill Management (EPA, 1997).
- Fuels and oils are stored in in bunded areas in accordance with relevant Australian Standards and/or the Storing and Handling Liquids: Environmental Protection Participants Handbook;
- Safety Data Sheets (SDS) will be kept in the office and/or safety system;
- The actions specified on the respective SDS are implemented in the event of a minor chemical or fuel spill;
- Spill kits are maintained at key locations according to the construction schedule; and
- In the event of a major spill, the Environmental Incident Management System detailed in the CEMP is followed.

# 6.7.2 Operation

An *Emergency Disposal and Biosecurity Protocol* (SLR, 2016d) has been prepared in accordance with Condition B9 of Development Consent SSD 6882 and in consideration of various relevant guideline documents. All employees and contractors are provided with appropriate biosecurity training through site inductions and regular toolbox talks. Monitoring and recording of flock health is undertaken on a daily basis by both ProTen Narrandera and Baiada Poultry.

An *Emergency Plan* (SLR, 2016e) has also been prepared for ProTen Narrandera in accordance with Condition B25 of Development Consent SSD 6882. The Plan contains an inventory of hazardous substances, chemicals and fuels, including storage locations and volumes, including:

- Liquid petroleum gas (LPG), petrol and diesel for power and equipment requirements;
- Sanitation products used in the poultry sheds during the cleaning phase at the end of each batch;
- Sanitation products for the wheel wash facilities and foot baths;
- Disinfectant for the water supply;
- Pest and vermin control products (when necessary); and
- Weed control products (when necessary).

The following management strategies are implemented at ProTen Narrandera to minimise the potential for environmental incidents relating to the storage, handling and transport of potentially hazardous goods:

- LPG storage at each PPU will be maintained in accordance with the relevant requirements of *AS/NZS 1596:2014 The Storage and Handling of LP Gas* for public places and private places. This includes minimum separation distances of 10 metres from a public place and 17 metres from a protected place;
- LPG is delivered in specific-purpose rigid trucks at a frequency of less than once per week;
- All buildings are maintained to meet the relevant requirements of the Building Code of Australia;
- Fire extinguishers, fire blankets and hose reels are maintained at designated locations compliant with relevant Australian Standards;

- All diesel and petrol tanks are stored in bunded areas with a minimum bund volume of 110% of the volume of the largest single stored volume within the bund;
- Annual maintenance and testing is undertaken for high voltage electricity infrastructure;
- Employees and contractors are instructed in the proper use and handling of all chemicals used on site, as well as incident management procedures;
- Spill kits are provided and maintained at strategic locations around ProTen Narrandera; and
- Copies of the SDS for each chemical and fuel used on site is kept within the chemical storage facility and in the PPU office.

# 6.7.3 Environmental Performance

No biosecurity issues occurred during the reporting period.

# 6.8 Aboriginal Heritage Management

During the EIS process, field surveys identified six Aboriginal heritage sites within the ProTen Narrandera site comprising five scarred trees and one hearth. While some sites are located within close proximity to development infrastructure, they are not located within the disturbance footprint and have been/will be avoided during construction.

An Aboriginal Cultural Heritage Management Plan (ACHMP) (OzArk, 2016) has been prepared in accordance with Condition B55 of SSD 6882. In the event that a previously unrecorded or unanticipated Aboriginal object(s) is encountered during construction and/or operation, the *Unexpected Finds Protocol*, detailed in the ACHMP, CEMP and OEMP will be followed.

The following management and mitigation measures are implemented to avoid any impact to all Aboriginal heritage sites:

- The six identified Aboriginal sites are permanently fenced with a 10 m buffer. The fencing will be clearly visible and signed with "Do Not Enter";
- Additional mitigation measures are implemented in the vicinity of EPPC-ST5 (see ACHMP);
- ProTen Narrandera employees and contractors are made aware of the six identified Aboriginal heritage sites during site inductions and training; and
- Should any Aboriginal objects be uncovered during construction and/or operation, the *Unexpected Finds Protocol* (see ACHMP) will be followed.

### 6.8.1 Environmental Performance

During site inspections, SLR observed all the required fencing and signage to have been installed at the Aboriginal heritage sites and these have been maintained during the reporting period.

No unexpected finds were identified during the reporting period.

# 7 WATER MANAGEMENT

ProTen Narrandera uses and produces the following water classes. **Table 14** lists the classes of water at the site, describes their source, the target design objectives/performance criteria and the way each class is to be managed.

Water Resource Classification	Description and Source of Water	Target Design Objective	Treatment	
Dirty Water	Sediment laden runoff produced from exposed soils and disturbed surfaces. Generally characterised by a high turbidity and sediment load, and associated with temporary construction activities and unsealed access roads.	Based on Blue Book criteria (depends on the size and duration of the disturbance).	Dirty water runoff is contained within sediment basins or passed through sediment control devices to detain sediment and reduce turbidity before discharge to the natural environment.	
Wash Down Water	Water produced from the cleaning and wash down of the PPUs. Characterised by elevated nutrient levels.	An engineered surface water management system at each PPU has been designed with the total storage on site equivalent to 170 percent of the storage capacity required to contain runoff from a 100 year annual recurrent interval (ARI), 72 hour flood event.	Wash down water is directed to grassed swale drains between the poultry sheds designed to allow infiltration of the water into the topsoil for effective nutrient uptake by the grass. During heavy rainfall events, excess water from the swales is conveyed via pipes under the PPU ring road and to a table drain installed around the PPU perimeter. The table drain conveys the water to one of four small sediment dams located at the corners of each PPU.	
Clean Water	Surface water runoff produced from undisturbed clean water catchments such as forested areas or open pastures. Characterised by low turbidity and low nutrient content.	Clean water diversions designed, installed and maintained to convey a 100 year ARI rainfall event.	Diverted around disturbance areas and released to the natural environment.	
Groundwater	Groundwater contained within the aquifers.	N/A	Groundwater is extracted to meet operational water requirements.	
Sewage	Sewage produced from staff amenities and residences.	Designed, installed and managed in accordance with relevant council guidelines.	Treated and disposed of via on-site aerated wastewater management systems.	

Table 14 - Water Management Classifications
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# 7.1 Water Take

ProTen Narrandera operates under WAL 11788 which permits the abstraction of 488 megalitres per year (ML/year) (488,000 m<sup>3</sup>/year) from the two groundwater production bores installed at the site (refer **Figure 2**). These bores access the Deep Aquifer (Calivil Formation) in the Lower Murrumbidgee Groundwater Sources water sharing plans, and are capable of a maximum pump rate of 7 ML/day. A copy of WAL 11788 is contained in **Appendix D**.

Water usage at ProTen Narrandera is measured and recorded in iLeader software. Water usage from the commencement of operations to June 2017 is approximately 185.5 ML which is significantly below both the 460 ML/year predicted in the EIS.

The current water consumption by ProTen Narrandera is less than 40% of the authorised abstraction limit.

# 7.2 Surface Water

ProTen Narrandera is located within the catchment of the Murrumbidgee River, which covers 84,000 km<sup>2</sup> of southern NSW. The river flows to the north of the site and is located approximately 9 km at its nearest point. The nearest watercourse of significance is Yanco Creek, a regulated stream of the Murrumbidgee River system, flowing approximately 8 km to the east of the site at its closest point.

The site (and surrounding land) is very flat and slopes gently to the west. Two minor topographical depressions that act as minor drainage features traverse the site. These features do not have any formed banks and are only distinguishable as drainage features by their location topographically and vegetation present. There are also some constructed irrigation channels within the northern extent of the site.

# 7.2.1 Construction

A Construction Soil and Water Management Plan (CSWMP) has been prepared for ProTen Narrandera and provides a general framework for the overall management of soil and water resources during the construction phase, the CSWMP comprises:

- Standard erosion and sediment control (ESC) design drawings (as adapted from the Blue Book<sup>1</sup>); and
- Site-specific erosion and sediment control plans (ESCPs) prepared as part of the Development's civil design (Lance Ryan Consulting Engineers), which illustrate the nature and location of intended erosion and sediment control structures, relevant design specifications and sequencing.

The following general principles apply for the management of surface water, erosion and sedimentation at ProTen Narrandera during construction:

- All clean surface water from upslope is diverted around areas of disturbance;
- Temporary erosion and sediment control structures, such as hay bales and silt fencing, are used to prevent soil loss and sediment-laden runoff;
- Disturbed areas are promptly rehabilitated and revegetated to a stable landform;
- A regular maintenance program is implemented to ensure the continued integrity of the temporary erosion and sediment control structures;
- Topsoil is appropriately managed for future rehabilitation activity;
- Sediment basins are drawn down in the required management period (typically 5 days). The water is preferentially utilised for construction activities or disposed in an environmentally responsible manner; and
- Undertake progressive rehabilitation to stabilise disturbance areas as soon as practical to reduce the extent of exposed soils.

<sup>&</sup>lt;sup>1</sup> \* Managing Urban Stormwater – Soils and Construction Vol. 1 (Landcom, 2004), which is commonly known as the Blue Book.

# 7.2.2 Operation

ProTen Narrandera is a largely dry operation, with no effluent generated as a result of the poultryrearing process itself. The main operational water sources generated by ProTen Narrandera are:

- Wash down water from within the poultry sheds at the end of each nine week production cycle (approximately 5.7 times per year);
- Rainfall runoff from the shed roofs; and
- Rainfall runoff from the ground surfaces around the poultry sheds and additional improvements.

Approximately 12 kilolitres (kL) of water is used in the wash down process for each poultry shed at the end of each production cycle. This amounts to a total volume of 192 kL per PPU per production cycle for wash-down.

A *Water Management Plan* (WMP) (SLR, 2017b) has been prepared for ProTen Narrandera in accordance with Condition B45 of SSD 6882. The WMP details the best practice management and mitigation measures implemented at the site to manage surface water, including:

- Surface water management systems are visually inspected on a monthly basis, as well as prior to any predicted significant rainfall event and following significant rainfall events;
- Grassed swale drains between the poultry sheds are managed to minimise soil disturbance and maximise infiltration of runoff, as well as regularly slashed to encourage continual grass growth and associated nutrient up-take; and
- Dry-cleaning practices at the end of each production cycle are maximised to minimise the volume of wash water, along with the amount of poultry litter (and associated sediments and nutrients) washed out of the sheds.

# 7.2.2.1 Monitoring Results

The WMP and EPL 20748 detail the surface water monitoring requirements for ProTen Narrandera. During the reporting period, ProTen Narrandera engaged Aitken Rowe to undertake surface water monitoring. Three surface water monitoring events were undertaken with the following parameters sampled:

- pH (field);
- Electrical conductivity (EC) (field and laboratory);
- Total suspended solids (TSS);
- Nitrogen; and
- Phosphorus.

The periodic and reactive surface water quality monitoring regime for ProTen Narrandera is listed in **Table 15**.

Monitoring Site	Parameters	Frequency				
Initial Characterisation Sampling						
Drainage depressions within the Site (natural surface water quality characterisation)	Water quality	Quarterly grab samples when rainfall provides for ponded water over a period of 12 months				
Periodic Sampling						
One sediment dam at each PPU	<ul><li>Water quality</li><li>Water level</li><li>Photos</li></ul>	Quarterly grab sample when water is available				
Reactive Sampling						
Overflow from sediment dam	<ul><li>Water quality</li><li>Photos</li></ul>	Grab sample during overflow				
Any surface water impacted by a spill, discharge or other incident	Targeted analytes selected based on the nature of the incident	Immediately and/or as instructed by consulted government agencies				

### Table 15 - Surface Water Quality Monitoring Schedule

Table 16 summarises the surface water monitoring results for the reporting period.

	Date Sampled	General		Nutrients				
Site		pH (pH Units)	Electrical Conductivity (µS/cm)	Total Suspended Solids (mg/L)	Total Kjeldahl Nitrogen (mg/L)	Total Nitrogen (mg/L)	Nitrate/Nitrite as N (mg/L)	Total Phosphorus (mg/L)
ANZECC Criteria Limits		6.5 - 8.0	125 - 2,200	-	-	500	40	50
OEH Water Quality Objectives		6.5 - 8.5	125 - 2,200	-	-	500	-	50
Entry		7.2	141	277	2	3	0.9	0.3
Freezer Room Table Drain		7.2	125	193	2	3	1.1	0.4
Farm 77 Sth Table Drain		7.3	103*	657	2	3	1.1	0.3
Farm 77 Nth Table Drain	14 1010 0010	7.4	140	347	2	3	0.9	0.3
Farm 78 SE Dam	14 July 2016	7.6	137	1,360	2	4	1.6	0.6
Farm 79 SE Dam		7.8	170	1,330	4	6	1.7	0.6
Farm 78 SW Dam		7.7	155	1,330	<2	2	2.0	0.5
Farm 79 NW Dam		7.4	140	287	2	3	1.0	0.3
Farm 78 Sediment Dam		7.6	146	796	2	3	1.1	0.7
Farm 78 Swale Drain	29 Santambar	7.8	139	2,560	2	3	1.1	1.2
Farm 79 Sediment Dam	September 2016	7.4	160	230	2	7	5.3	0.9
Farm 79 Swale Drain		6.9	145	1,260	4	4	0.5	1.3
Farm 75 Roadside table		7.8	133	6,160	6	7	0.9	1.7
Farm 78 Sediment Dam	17 Marah	7.5	213	604	2	5	2.7	0.8
Farm 79 Sediment Dam	— 17 March 2017	7.7	275	89	<2	<2	0.9	0.2
Concrete batch plant table drain		7.5	230	3,350	5	5	<0.1	1.2
MIN		6.9	103	89	2	2	0.5	0.2
MAX 7.8		7.8	275	6,160	6	7	5.3	1.7
	AVERAGE	7.5	160	1,302	3	4	1.5	0.7

# Table 16 - Surface Water Monitoring Results

Note: \* exceeds the lower OEH Water Quality Objectives criteria limit

The laboratory results of surface water samples collected show all parameters to be within acceptable ranges (based on WMP trigger levels) with the exception of a single conductivity result (F77 Sth Table Drain) which was below the range prescribed within ANZECC and OEH water quality objectives.

The electrical conductivity of surface water samples collected during the reporting period were in the range 103  $\mu$ S/cm (below the trigger value) to 275  $\mu$ S/cm with and average value of 160  $\mu$ S/cm.

pH of the surface water samples collected during the reporting period were measured in the range 6.9 to 7.8, with an average value of 7.5.

The concentration of total suspended solids (TSS) in the surface water sampled was in the range 89 mg/L to 6160 mg/L over the reporting period, with an average value of 1032 mg/L. The 6160 mg/L was measured in a roadside table drain adjacent to construction activities at Farm 75.

All concentrations of nutrients analysed were significantly lower than the WMP trigger values. Nutrient concentrations were relatively uniform across the sampling locations during all sampling events.

Results of surface water monitoring suggest that surface water quality does not currently have the potential to negatively impact the environment.

During the 2018 Annual Review, a comparison will be made against the surface water quality results recorded during this reporting period.

# 7.3 Groundwater

Water is extracted from two groundwater production bores - Bore 1 and Bore 2 (see **Figure 6**), located in the Deep Aquifer. WAL 11788 permits the extraction of up to 488ML/year. As discussed in **Section 7.1**, since the commencement of operations ProTen Narrandera has used approximately 185.5 ML. Water extracted from the bores is treated as per the *National Water Biosecurity Manual – Poultry Production* (Department of Agriculture, Fisheries and Forestry [DAFF] 2009).

There are also 12 Shallow Aquifer piezometers located around the site which include six shallow and six deep piezometers. The ten piezometers located near the PPUs are to monitor any impact on the Shallow Aquifer as a result of the engineered surface water drainage systems managing rainfall runoff within the bounds of the respective PPU and wash down water. The remaining two piezometers are located near residences 1 and 2 and monitor any impact on the Shallow Aquifer as a result of domestic effluent (sewage) irrigation.

# 7.3.1 Construction

During the construction phase of ProTen Narrandera, the potential for impacts to groundwater is considered minimal. Despite this, the following mitigation measures have been implemented to reduce the potential for groundwater impacts:

- Works are planned and coordinated in order to limit the disturbance area through staging of works;
- All runoff from disturbed areas is treated for removal of sediment prior to leaving the site;
- If runoff from disturbance areas is contaminated with other pollutants, the water is collected to prevent it from leaving the site. This water is appropriately managed i.e. treated by a water management contractor;
- Runoff from access roads and stabilised entry/exit points reports to an appropriate sediment control device for treatment;
- Truck washdowns and cement truck washouts are conducted in approved areas only; and
- Washdown areas for equipment are located in bunded areas.

#### 7.3.2 Operation

Groundwater is managed in accordance with the WMP which is attached as part of the OEMP. The management strategies implemented on site during the reporting period include:

- Best management practices for chemical use and storage described in the OEMP are implemented; and
- On-going groundwater monitoring activities are undertaken in accordance with the WMP.

#### 7.3.2.1 Monitoring Results

#### Groundwater Level

A groundwater monitoring program is undertaken in accordance with the WMP. Groundwater levels from both the piezometers installed within the shallow aquifer (Shepparton Formation) and the production bores targeting the deep aquifer (Calivil Formation) over the reporting period are presented in **Table 17** and **Table 18**, respectively.

Piezometer ID	Standing Water Level (mTOC <sup>1</sup> )									
Plezometer iD	Feb-2016	Apr-2016	Oct-2016	Mar-2017	Average					
Piezo 1 shallow	n/a²	n/a <sup>2</sup>	n/a <sup>2</sup>	n/a <sup>2</sup>	n/a²					
Piezo 1 deep	27.1	25.9	24.4	25.8	25.8					
Piezo 2 shallow	n/a²	n/a²	n/a²	n/a <sup>2</sup>	n/a²					
Piezo 2 deep	25.9	25.9	n/a <sup>3</sup>	25.4	25.7					
Piezo 3 shallow	n/a²	n/a²	n/a²	n/a²	n/a²					
Piezo 3 deep	26.0	25.9	24.9	25.5	25.6					
Piezo 4 shallow	n/a²	n/a <sup>2</sup>	n/a <sup>2</sup>	n/a <sup>2</sup>	n/a²					
Piezo 4 deep	25.7	25.7	n/a <sup>3</sup>	25.6	25.7					
Piezo 5 shallow	n/a²	n/a²	n/a²	n/a²	n/a²					
Piezo 5 deep	25.6	25.7	n/a <sup>3</sup>	25.3	25.5					
Piezo 6 shallow	n/a²	n/a²	n/a²	n/a <sup>2</sup>	n/a²					
Piezo 6 deep	25.6	25.7	n/a <sup>3</sup>	25.3	25.3					

Table 17 - Piezometer Water Levels
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1 - metres below the top of the casing (mTOC)

2 - piezometer not monitored due to not being a component of the WMP at the time (historically dry)

3 - not monitored due to lack of access (flooding)

As shown in **Table 17**, the standing water levels for all deep piezometers have remained consistent between the first sampling event in February 2016 and the fourth event in March 2017. All shallow piezometers were unable to be sampled during the reporting period as they were not a required component of the WMP at the time and were historically dry.

#### Table 18 - Production Bore Water Levels

Bore ID	Standing Water Level (mBGL)			
DOID	August 2015			
Bore 1	24.5			
Bore 2	24.2			

#### Shepparton Formation

Groundwater level monitoring of the six piezometers installed in the shallow aquifer (Shepparton Formation) has been undertaken on three occasions at four of the piezometers and four occasions at the remaining two piezometers. Depths to groundwater during all monitoring events were between 24.4 and 27.1 m bgl equating to a range of groundwater elevations between 105.9 and 109.3 mAHD. The standing water levels for all deep piezometers have remained consistent between the first sampling event in February 2016 and the fourth event in March 2017.

All shallow piezometers have not been sampled to date as they were not a required component of the WMP until May 2017 and have been historically dry.

#### **Calivil Formation**

As shown in **Table 18**, depth to water within the production bores was approximately 24.5mBGL equating to a groundwater elevation of approximately 110 mAHD. As only a single data point has been provided for water levels in each of the production bores no comment on level trends can be made at present, though it is noted that the EIS (2015a) reported a depth to water within the Calivil Formation of 27mBGL.

#### Groundwater Quality

Groundwater quality was monitored at the six deep piezometers and two production bores during the reporting period. The monitoring results are detailed in **Table 19** and **Table 20** respectively.

		General Parameters			Major Ions								Nutrients			Misc
Piezo ID	Date	рН	Electrical Conductivity	Total Dissolved Solids	Sodium	Calcium	Potassium	Magnesium	Chloride	Sulphate	Carbonate as CaCO <sub>3</sub>	Bicarbonate as CaCO <sub>3</sub>	Ammonia as N	Nitrate as N	Phosphorus	Total organic carbon
		-	uS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
ANZECC	<u>Guidelines</u>	6.5 - 8.5	-	1,200	180	-	-	-	250	250	200	200	0.5	50	-	-
	Apr 2016	7.1	253	215	39	8.7	3.0	4.7	13	<5	<2	116	<0.1	<1	0.11	11.0
Piezo 1	Oct 2016	7.2	190	148	33	4.4	2.3	3.2	13	<5	<2	167	<0.1	<1	0.04	0.7
Deep	Mar 2017	7.1	190	135	32	4.8	1.1	3.7	16	4.6	<2	91	<0.1	<0.1	0.16	-
	Avg	7.1	211	166	35	5.9	2.1	3.9	14	5	2	125	<0.1	<1	0.10	5.9
	Apr 2016	7.1	305	220	49	9.2	3.4	5.7	22	<5	<2	122	<0.1	<1	0.12	5.0
Piezo 2	Oct 2016	6.9	179	141	17	-	1.1	3.5	69	-	<2	71	<0.1	<1	0.08	<0.5
Deep	Mar 2017	7.2	276	172	49	5.6	1.3	4.6	19	6	<2	126	<0.1	<0.1	0.02	-
	Avg	7.1	253	178	38	7.6	1.9	4.6	37	5.5	2	106	<0.1	<1	0.07	2.8
	Apr 2016	7.2	278	194	41	11.4	4.9	6.7	17	<5	<2	131	<0.1	<1	0.35	5.9
Piezo 3	Oct 2016	6.8	224	154	31	7.3	2.8	5.6	21	9	<2	74	<0.1	<1	0.03	6.5
Deep	Mar 2017	7.0	182	132	27	5.7	1.2	4.6	14	3	<2	72	<0.1	0.1	0.09	-
	Avg	7.0	228	174	33	8.1	3.0	5.6	17	6	<2	92	<0.1	<1	0.16	6.2
	Apr 2016	7.3	590	716	100	17.4	7.2	12.9	50	7	<2	248*	<0.1	<1	2.35	11.0
Piezo 4	Oct 2016	6.7	250	188	25	-	2.0	5.9	13	-	<2	192	<0.1	<1	0.07	0.9
Deep	Mar 2017	7.0	566	372	96	17.6	8.5	15.5	58	10	<2	210*	0.5	<0.1	1.85	-
	Avg	7.0	469	425	74	17.5	5.9	11.4	40	9	<2	217*	0.2	<1	1.42	6.0
	Apr 2016	6.9	273	214	37	11.7	3.3	7.9	12	<5	<2	122	<0.1	<1	0.07	2.2
Piezo 5	Oct 2016	6.7	178	139	18	-	1.2	3.7	14	-	<2	68	<0.1	<1	0.08	<0.5
Deep	Mar 2017	6.9	246	174	39	9.3	1.8	7.1	15	5	<2	108	<0.1	<0.1	0.07	-
	Avg	6.8	232	176	31	10.5	2.1	6.2	14	5	<2	99	<0.1	<1	0.07	1.4
	Apr 2016	7.0	409	276	56	18.5	4.8	11.5	35	<5	<2	210*	<0.1	<1	0.15	5.2
Piezo 6	Oct 2016	6.6	252	179	25	-	2.0	6.1	13	-	<2	140	0.2	<1	0.09	1.1
Deep	Mar 2017	6.8	347	-	51	13.0	2.3	9.2	36	6	<2	119	<0.1	<1	0.11	11
	Avg	6.8	336	228	44	15.6	3.0	8.9	28	6	<2	156	0.1	0.7	0.11	3.2

#### Table 19 - Shallow Aquifer Piezometer Groundwater Monitoring Results (Shepparton Formation)

General Parameters					Major Ions							Nutrients			Misc	
Bore ID	Date	рН	Electrical Conductivity	Total Dissolved Solids	Sodium	Calcium	Potassium	Magnesium	Chloride	Sulphate	Carbonate as CaCO <sub>3</sub>	Bicarbonate as CaCO <sub>3</sub>	Ammonia as N	Nitrate as N	Phosphorus	Total organic carbon
		-	uS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
ANZECC	Guidelines	6.5 - 8.5	-	1,200	180	-	-	-	250	250	200	200	0.5	50	-	-
	Aug 2015	6.6	685	-	84.3	29.7	1.9	22.0	144.0	18.9	-	-	<0.1	<0.5	0.04	<0.5
Bore 1	Apr 2016	6.8	149	104	14.0	6.7	1.9	5.1	9.0	<5	<2	70.0	<0.1	<1	0.11	<0.5
Dore I	Oct 2016	7.3	145	122	16.0	5.9	2.0	5.0	9.7	3.4	<2	67.0	<0.1	<0.1	<0.01	<0.5
	Avg	6.9	326	113	38.1	14.0	1.9	10.7	54.2	11.2	<2	68.5	<0.1	<0.1	0.08	<0.5
	Apr 2016	6.8	138	124	13.7	5.5	1.9	4.4	9.9	<5	<2	55.0	<0.1	<1	<0.1	<0.5
Bore 2	Oct 2016	7.0	132	117	15.7	5.4	2.0	4.6	9.5	2.3	<2	56.0	<0.1	0.3	<0.01	<0.5
	Avg	6.9	199	118	22.5	5.5	1.9	6.6	24.5	6.7	<2	59.8	<0.1	0.3	<0.1	<0.5

Table 20 - Deep Aquifer Production Bore Groundwater Monitoring Results (Cavill Formation)

#### Shepparton Formation

EC of groundwater from the six piezometers installed in the shallow Shepparton Formation aquifer was in the range 178 to 590  $\mu$ S/cm over the reporting period, with an average value of 288  $\mu$ S/cm.

pH of the groundwater from the six piezometers installed in the shallow Shepparton Formation aquifer was in the range 6.6 to 7.3 over the reporting period, with an average value of 7.0.

The concentration of total dissolved solids (TDS) in groundwater from the six piezometers installed in the shallow Shepparton Formation aquifer was in the range 132 to 716 mg/L over the reporting period, with an average value of 221 mg/L.

Laboratory analysis included three nutrient compounds including ammonia, nitrate and phosphorous. Ammonia concentrations were at or below the ANZECC guidelines at all locations. Nitrate and ammonia concentrations were generally at or below laboratory the laboratory limit of reporting (LoR). Concentrations of total phosphorous measured were in the range 0.03 to 2.35 mg/L with and average value of 0.3 mg/L.

The results of laboratory analysis show that none of the parameters measured were detected at levels greater than the relevant ANZECC quality standards in samples collected from the site piezometers.

None of the parameters assessed in samples from the site piezometers were measured at concentrations considered to represent a risk to the environment.

#### **Calivil Formation**

EC of groundwater from the two production bores installed in the deep Calivil Formation aquifer was in the range 132 to 685  $\mu$ S/cm over the reporting period, with an average value of 250  $\mu$ S/cm.

pH of the groundwater from the two production bores installed in the deep Calivil Formation aquifer was in the range 6.6 to 7.3 over the reporting period, with an average value of 6.9.

The concentration of total dissolved solids (TDS) in groundwater from the two production bores installed in the deep Calivil Formation aquifer was in the range 104 to 124 mg/L over the reporting period, with an average value of 117 mg/L.

Both ammonia and nitrate concentrations in samples from the site production bores were at or below laboratory LoR the exception of Bore 2 where a nitrate concentration of 0.3 mg/L was measured. The total phosphorus concentration in the sample collected from Production Bore 2 was below laboratory LoR whilst in the samples collected from Production Bore 1 were 0.04 and 0.11 mg/L.

The results of laboratory analysis show no exceedances of ANZECC quality standards was measured in the groundwater samples collected from the production bores and are considered to be representative of wider aquifer conditions.

None of the parameters assessed were measured at concentrations considered to represent a risk to the environment. Furthermore, laboratory results indicate that groundwater has not been impacted by site activities.

#### 7.3.3 Recommendations and Improvements

SLR completed a review of the water monitoring undertaken to date and in order to ensure that Condition B45 of SSD 6882 is satisfied. The following recommendations were made:

- Implement monitoring of surface water and groundwater in accordance with the WMP;
- Implement groundwater usage measurement and monitoring in accordance with the WMP;
- Survey all bores such that accurate elevation data for groundwater level measurement benchmarks are available for calculation of groundwater elevation and development of contour plots to determine groundwater gradients and flow directions; and
- Conduct additional training amongst sampling/monitoring staff to ensure that monitoring is undertaken in accordance with the WMP and required standards and that reporting expectations are understood and requirements achieved in future monitoring.

# 8 VISUAL AMENITY AND REHABILITATION

#### 8.1 Construction

In accordance with Schedule 3, Condition B46, all external lighting is mounted, screened, and directed to not impact on the surrounding environment, properties and roadways. All lighting is compliant with *Australian Standard AS4282 1997 - Control of the Obtrusive Effects of Outdoor Lighting.* 

#### 8.2 Operation

A Landscape Management Plan (LMP) (SLR, 2015d) has been prepared in accordance with Condition B47 of SSD 6882 and details the suitable location for tree and shrub species to be strategically planted around the perimeter of each PPU. They are to be planted in accordance with *Planning Guidelines Separating Agricultural and Residential Land Uses* (Queensland Department of Natural Resources, 1997), these being:

- A biological buffer of a minimum total width of around 40 metres;
- Consistent, yet random, plantings of a variety of tree and shrub species of differing growth habits, at spacings of around 4 to 7 metres;
- Species with long, thin and rough foliage are to be used to facilitate the capture of spray droplets and dust particles;
- A permeable barrier which allows air to pass through the buffer. The plantings will aim to achieve a porosity of around 0.5 (i.e. around 50 percent of the screen will be air space);
- The use of species that are hardy and fast growing; and
- Foliage from base to crown (i.e. lower and upper storey vegetation) is used to ensure that the buffer is effective in slowing and filtering air movement at all levels.

No landscaping has been undertaken at ProTen Narrandera during the reporting period.

#### 8.3 Further Improvement and Recommendations

As soon as practically possible, ProTen Narrandera should establish all landscape plantings, following the completion of construction at each PPU. The landscaping should be undertaken in accordance with the LMP.

On-going monitoring and maintenance activities should be maintained to ensure continual health and growth of the plantings.

# 9 INDEPENDENT ENVIRONMENTAL AUDIT

In accordance with Schedule 4, Condition C12 of SSD 668, an Independent Environment Audit is required within two years of the date of this consent, and every three years thereafter. Therefore, the first Independent Environment Audit is required prior to the 9 November 2017. The audit report will be submitted no later than three months after commissioning the audit.

# 10 COMPLAINTS, INCIDENCES AND NON-COMPLIANCES

#### 10.1 Complaints

A *Complaints Management Strategy* has been prepared as part of the OEMP. The *Complaints Management Strategy* aims to ensure that all complaints relating to the poultry operation are promptly and effectively addressed.

ProTen Narrandera's telephone number is clearly displayed on the site's entrance and a 24-hour hotline number (1800 776 994) is available for anyone wishing to make an enquiry or lodge a complaint.

One complaint was received during the reporting period. The complaint was received via the EPA on 25 February 2016 relating to dust emissions from the access road. The complaint was recorded and investigated in accordance with the *Complaints Management Strategy*. As discussed in **Section 6.3.3**, increased dust emissions were identified to be due to poor quality rock material which had been used on the northern section of the access road at the start of the project. On identification of this problem ProTen sourced an alternative rock type for the completion of the southern section of the access road. Dust emissions were observed to be significantly reduced on the southern section of the road.

To reduce the dust emissions from the northern section of the access road, ProTen reworked the road with an additional 100 mm of good quality rock.

#### 10.2 Incidents

Development Consent SSD 6882 defines an "incident" as:

A set of circumstances that:

- Causes or threatens to cause material harm to the environment; and/or
- Breaches or exceeds the limits or performance measures/criteria in this consent".

All environmental incidents are managed in accordance with the *Environmental Incidents Management System* as detailed in the CEMP and the OEMP.

No environmental incidents occurred during the reporting period.

#### 10.3 Non-Compliances

The monitoring of meteorological data is required in accordance with Condition M4.1 of EPL 201748. Between the 22 April 2016 and July 2016, no meteorological data was recorded for Temperature at 2m.

A technical error during the month of August resulted in no meteorological data being recorded for all parameters.

# 11 ACTIVITIES TO BE COMPLETED DURING THE NEXT REPORTING PERIOD

The following activities are proposed to be undertaken during the next reporting period:

- Landscaping across the site in accordance with the Landscape Management Plan;
- Sealing of the internal access road;
- Completion of construction at Farms 75 and 76;
- Commissioning of Farms 75 and 76;
- Continued surface water and groundwater monitoring in accordance with the WMP; and
- Analysis of surface and groundwater monitoring results to develop statistically significant trigger levels.

# 12 REFERENCES

Australian Poultry CRC (2008) National Animal Welfare Standards for the Chicken Meat Industry

Department of Environment and Climate Change (2009) Interim Construction Noise Guideline.

Landcom NSW (2004) Managing Urban Stormwater: Soils & Construction – Volume 1, 4<sup>th</sup> Edition.

NSW Government (2015) Annual Review Guideline

OzArk Environment and Heritage (2016) Narrandera Poultry Production Complex (SSD 6882), Aboriginal Cultural Heritage Management Plan

Pacific Environment Limited (2016) Narrandera Poultry Production Complex (SSD 6882), Air Quality Management Plan

SLR Consulting Australia (2015a) Euroley Poultry Production Complex SSD 6882, Environmental Impact Statement

SLR Consulting Australia (2015b) Euroley Poultry Production Complex SSD 6882, Response to Submission

SLR Consulting Australia (2015c) Euroley Poultry Production Facility, Biodiversity Offset Strategy

SLR Consulting Australia (2015d) Narrandera Poultry Production Complex (SSD 6882), Landscape Management Plan

SLR Consulting Australia (2016a) Narrandera Poultry Production Complex (SSD 6882), Construction Environmental Management Plan

SLR Consulting Australia (2016b) Narrandera Poultry Production Complex (SSD 6882), Waste Management Plan

SLR Consulting Australia (2016c) Narrandera Poultry Production Complex (SSD 6882), Biodiversity Management Plan

SLR Consulting Australia (2016d) Narrandera Poultry Production Complex (SSD 6882), Emergency Disposal and Biosecurity Plan

SLR Consulting Australia (2016e) Narrandera Poultry Production Complex (SSD 6882), Emergency Plan

SLR Consulting Australia (2017a) Narrandera Poultry Production Complex (SSD 6882), Operational Environmental Management Plan

SLR Consulting Australia (2017b) Narrandera Poultry Production Complex (SSD 6882), Water Management Plan

# APPENDIX A

# **Development Consent**

# Section 89E of the Environmental Planning and Assessment Act 1979

As delegate of the Minister for Planning under delegation executed on 14 September 2011, the Planning Assessment Commission of NSW (the Commission) approves the Development Application referred to in Schedule 1, subject to the conditions in Schedules 2 to 4.

These conditions are required to:

- prevent, minimise, and/or offset adverse environmental impacts;
- set standards and performance measures for acceptable environmental performance;
- require regular monitoring and reporting; and
- provide for the ongoing environmental management of the Development.

arry west

Garry West Member of the Commission

Andrew Stoeckel Member of the Commission

Sydney	9 November 2015	File: 15/01330
	SCHEDULE 1	
Application No.:	SSD 6882	
Applicant:	ProTen Limited	
Consent Authority:	Minister for Planning	
Land:	Part lot 39 DP 750876, part lots 12 and 15 1, 41, 42, 44, 45 and 54 in Deposited Plan 7 in Deposited Plan 1054064, Euroley, N Government Area	50898, and Lot 1
Development:	<ul> <li>Construction and operation of the Euroley Proceeding of the Poultry Production Units (PPU), of tunnel ventilated, fully enclosed, climate of sheds (a total of 80 sheds);</li> <li>a maximum operational capacity of 3.92 many one time;</li> <li>bulk earthworks;</li> <li>internal access roads and construction part on-site water detention dams;</li> <li>four new groundwater bores, located in part stormwater management infrastructure;</li> <li>intersection upgrade works along the Sturf eight (8) above ground LPG storage tanks capacity of 7,500 litres each (300,000 litres in total);</li> </ul>	consisting of 16 controlled poultry million broilers at ds; accommodation; airs; t Highway; s per PPU, with a

- feed, bedding, chemical and dead broiler storage; and
  supporting infrastructure, services and utilities.

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# DEFINITIONS

Act, the	Environmental Planning and Assessment Act, 1979
Applicant, the	ProTen Limited, or anyone else entitled to act on this consent
BCA	Building Code of Australia
Broiler	A breed of chicken bred and raised specifically for chicken meat production
CEMP	Construction Environmental Management Plan
Certifying Authority	Means a person who is authorised by or under section 109D of the <i>Environmental</i> Planning and Assessment Act 1979 to issue certificates
Construction	The demolition of buildings or works, the carrying out of works, including bulk earthworks, and erection of buildings and other infrastructure covered by this consent
Council	Narrandera Shire Council
Day	The period from 7am to 6pm on Monday to Saturday, and 8am to 6pm on Sundays and Public Holidays
Department	Department of Planning and Environment and its successors
Development	The Development to which this consent applies, the scope of which is described in Schedules 1, being for the construction and operation of an intensive livestock agriculture facility
DPI	NSW Department of Primary Industries
EEC	Endangered Ecological Communities
EIS	Environmental Impact Statement titled, <i>"Euroley Poultry Production Complex – SSD 6882</i> ", prepared by SLR Consulting Australia Pty Ltd, dated 20 May 2015
EPA	Environment Protection Authority
EPL	Environment Protection Licence under the <i>Protection of the Environment Operations Act</i> 1997
Evening	The period from 6pm to 10pm
Feasible	Feasible relates to engineering considerations and what is practical to build
Heavy vehicle	Any vehicle with a gross vehicle mass of 5 tonnes or more
Heritage	Encompasses both Aboriginal and historic heritage including sites that predate European settlement, and a shared history since European settlement such as a shared associations in pastoral landscapes as well as associations linked with the mission period
Heritage Item	An item as defined under the <i>Heritage Act 1</i> 977, and assessed as being of local, State and/ or National heritage significance, and/or an Aboriginal Object or Aboriginal Place as defined under the <i>National Parks and Wildlife Act 1</i> 974
ICNG	NSW Interim Construction Noise Guideline, DECC 2009
Incident	A set of circumstances that:
	<ul> <li>causes or threatens to cause material harm to the environment; and/or</li> </ul>
	<ul> <li>breaches or exceeds the limits or performance measures/criteria in this consent</li> </ul>
INP	NSW Industrial Noise Policy, EPA 2000
Management and Mitigation Measures	The Management and Mitigation Measures at Appendix 1 of this consent
Minister	Minister for Planning
Mitigation	Activities associated with reducing the impacts of the Development prior to or during those impacts occurring
Night	The period from 10pm to 7am on Monday to Saturday, and 10pm to 8am on Sundays and Public Holidays

NOW	NSW Office of Water
OEH	Office of Environment and Heritage
OEMP	Operational Environmental Management Plan
POEO Act	Protection of the Environment Operations Act 1997
PPU	Poultry Production Unit, a group of poultry sheds, feed and water storage, workshop, staff amenities, stormwater and wastewater infrastructure
Reasonable	Reasonable relates to the application of judgement in arriving at a decision, taking into account: mitigation benefits, cost of mitigation versus benefits provided, community views and the nature and extent of potential improvements
Regulation, the	Environmental Planning and Assessment Regulation 2000
RMS	Roads and Maritime Services
RTS	Response to Submissions titled, <i>"Euroley Poultry Production Complex (SSD 6882),</i> <i>Response to Submissions</i> ", prepared by SLR Consulting Australia Pty Ltd, dated 1 September 2015
Secretary	Secretary of the Department of Planning and Environment, or nominee
Site	Land referred to in Schedule 1

# SCHEDULE 2

# PART A: ADMINISTRATIVE CONDITIONS

#### OBLIGATION TO MINIMISE HARM TO THE ENVIRONMENT

A1. In addition to meeting the specific performance criteria established under this consent, the Applicant shall implement all reasonable and feasible measures to prevent and/or minimise any harm to the environment that may result from the construction or operation of the Development.

#### TERMS OF CONSENT

- A2. The Applicant shall carry out the Development in accordance with:
  - (a) State Significant Development Application SSD 6882;
  - (b) Environmental Impact Statement, titled "Euroley Poultry Production Complex SSD 6882" volumes one to three, prepared by SLR Consulting Australia Pty Ltd, dated 20 May 2015;
  - (c) Response to Submissions report, titled "Euroley Poultry Production Complex (SSD 6882), Response to Submissions" prepared by SLR Consulting Australia Pty Ltd dated 1 September 2015;
  - (d) the Management and Mitigation Measures located at Appendix 1; and
  - (e) the plans and drawings located at Appendix 2.
- A3. If there is any inconsistency between the plans and documentation referred to in Condition A2 above, the most recent document shall prevail to the extent of the inconsistency. However, conditions of this consent prevail to the extent of any inconsistency.
- A4. The Applicant shall comply with any reasonable requirement(s) of the Secretary arising from the Department's assessment of:
  - (a) any reports, plans or correspondence that are submitted in accordance with this consent; and
  - (b) the implementation of any actions or measures contained within these documents.

#### LIMITS OF CONSENT

A5. This consent lapses five years after the date from which it operates, unless the Development has physically commenced on the land to which the consent applies before the date on which the consent would otherwise lapse under Section 95 of the Act.

#### Farm Operations

- A6. The Applicant shall ensure that:
  - (a) the Development does not exceed a maximum population of 3.92 million broilers at any one time;
  - (b) the stocking densities of the Development comply at all times with the standards detailed in National Animal Welfare Standards for the Chicken Meat Industry (Barnett et al, 2008), as amended;
  - (c) the Development is not populated with 3.92 million broilers in one day at the commencement of each production cycle;
  - (d) the commencement of broiler population for each PPU is separated by a minimum of 36 hours; and
  - (e) the time period for the population of the entire farm (all five PPUs) shall be a minimum of 10 days.

#### Farm manager accommodation

A7. The ten residential dwellings for farm manager's accommodation as described in the EIS are only to be occupied by persons employed by the Applicant, their spouse and dependants for the operational life of the Development to manage poultry operations on-site and shall not be occupied or let for any other purpose.

#### STATUTORY REQUIREMENTS

A8. The Applicant shall ensure that all licences, permits and approvals are obtained and kept up to date as required throughout the life of the Development. No condition of this consent removes the obligation the Applicant to obtain, renew or comply with such licences, permits or approvals.

#### STRUCTURAL ADEQUACY

A9. The Applicant shall ensure that all new buildings and structures on the site are constructed in accordance with the relevant requirements of the *Building Code of Australia* (BCA).

Notes:

- Under Part 4A of the EP&A Act, the Applicant is required to obtain construction and occupation certificates for the proposed building works.
- Part 8 of the EP&A Regulation sets out the requirements for the certification of the project.

#### RESIDENTIAL WORKS

A10. The Applicant shall ensure that any residential works work must be carried out:

- (a) in accordance with the requirements of the BCA; and
- (b) in accordance with Part 6, Division 8A of the Regulation.

#### STAGED SUBMISSION OF PLANS AND PROGRAMS

A11. With the approval of the Secretary, the Applicant may:

- (a) submit any strategy, plan or program required by this consent on a progressive basis; and/or
- (b) combine any strategy, plan or program required by this consent.

#### DISPUTE RESOLUTION

A12. In the event of a dispute between the Applicant and a public authority, in relation to an applicable requirement in this consent or relevant matter relating to the Development, either party may refer the matter to the Secretary for resolution. The Secretary's determination of any such dispute shall be final and binding on the parties.

#### **SECTION 94A CONTRIBUTIONS**

A13. In accordance with Division 6 of Part 4 of the EP&A Act, the Applicant shall pay Narrandera Shire Council Section 94A contributions to the sum 0.5% of construction cost in the form of cash of bank cheque made out to Narrandera Shire Council. Evidence of payment to Council shall be submitted to the Certifying Authority prior to the issue of a Construction Certificate.

Note: The contributions shall be adjusted in accordance with the requirements of the current Narrandera Shire Council s94A Contributions Plan, February 2014, as amended.

#### UTILITIES AND SERVICES

A14. Utilities, services and other infrastructure potentially affected by the construction and operation of the Development shall be identified prior to construction to determine requirements for access to, diversion, protection, and/or support. Consultation with the relevant owner and/or provider of services that are likely to be affected by the Development shall be undertaken to make suitable arrangements for access to, diversion, protection, and/or support. All the relevant owner and/or support of the affected by the Development shall be undertaken to make suitable arrangements for access to, diversion, protection, and/or support of the affected infrastructure as required. The cost of any such arrangements shall be borne by the Applicant.

#### EASEMENTS

- A15. An easement for access to the Development site shall be created through the privately owned land described as lots 12 and 15 in Deposited Plan 750898 and Lot 39 in Deposited Plan 750876 between the Development site and the intersection with the Sturt Highway.
- A16. A section 88B restriction as to user shall be created so that the owner of the Development site shall be responsible for the construction and maintenance of the access road and any associated services such as drainage, within the easement for the life of the Development. The restriction as to user shall detail the required standard for maintenance including 50 m seal

extending from the Sturt Highway intersection and all weather gravel construction for the remainder in accordance with Austroads Guidelines.

A17. Narrandera Shire Council shall be prescribed within the s88B instrument as an authority whose consent is required to release, vary or modify the burden/benefits.

#### BOUNDARY ADJUSTMENT

A18. The Applicant is required to undertake boundary adjustments to ensure that each Poultry Production Unit and the associated ancillary manager's accommodation are wholly contained within its own allotment. Evidence of lodgement with the Lands Title Office to be submitted to the Certifying Authority prior to the issue of any Occupation Certificate for the development.

# SCHEDULE 3

#### PART B: ENVIRONMENTAL PERFORMANCE

#### AIR QUALITY AND ODOUR

#### Air Quality Discharges

B1. The Applicant shall install and operate equipment in line with best practice to ensure that the Development complies with all load limits, air quality criteria and air quality monitoring requirements as specified in the EPL for the site.

#### Odour

B2. The Applicant shall ensure the Development does not cause or permit the emission of any offensive odour (as defined in the POEO Act).

#### Air Quality Management Plan

- B3. Prior to the commencement of operation, the Applicant shall prepare an **Air Quality Monitoring Program** (AQMP) for the Development, to the satisfaction of the Secretary. The AQMP shall form part of the OEMP in Condition C4 and be prepared in accordance with Condition C6 and any other requirements of the EPL for the site. The AQMP shall:
  - (a) be prepared in consultation with the EPA;
  - (b) detail and rank all emissions from all sources of the Development, including particulate emissions;
  - (c) describe a program that is capable of evaluating the performance of the operation and determining compliance with key performance indicators;
  - (d) identify the control measures that that will be implemented for each emission source; and
  - (e) nominate the following for each of the proposed controls:
    - (i) key performance indicator;
    - (ii) monitoring method;
    - (iii) location, frequency and duration of monitoring;
    - (iv) record keeping;
    - (v) complaints register;
    - (vi) response procedures; and
    - (vii) compliance monitoring.

#### Odour Validation Audit

- B4. When directed by the EPA, the Applicant must submit an Odour Validation Report (OVR) to the EPA. The OVR must:
  - (a) be carried out by a suitably qualified independent expert experienced in the characterisation and treatment of odours from chicken broiler farms from the Development;
  - (b) include a summary of any odour complaints received and actions taken to reduce odour emissions where complaints are verified;
  - (c) where possible include a field odour survey that characterises the frequency, intensity, duration, offensiveness, location and extent of off-site odours;
  - (d) benchmark the design and management practices at the premises against industry best practice for minimising odour emissions, including investigation of newly developed and emerging control technology;
  - (e) within six (6) weeks after being directed by the EPA, present a report to the EPA that determines compliance with S129 of the POEO Act and recommend if additional odour mitigation measures are required;
  - (f) consider odour generation associated with stocking densities and rates and PPU population practices outlined in Condition A6;

- (g) where additional odour measures are recommended or odour issues are identified as being from stocking densities, rates or PPU population practices, appropriate mitigation measures or management practices must be nominated to ensure that odour is minimised as far as practicable; and
- (h) any odour mitigation measures nominated must include a timetable for implementation.

#### Meteorological Monitoring

B5. During the operational life of the Development, the Applicant shall ensure that there is a suitable meteorological station on the site that complies with the requirements in the latest version of the *Approved Methods for Sampling of Air Pollutants in New South Wales* guideline. The meteorological station must be maintained so as to be capable of continuously monitoring the following parameters: air temperature, wind direction, wind speed, rainfall and relative humidity and any other requirements specified in the EPL.

#### Dust Management

- B6. The Applicant shall carry out all reasonable and feasible measures to minimise dust generated by the Development.
- B7. During construction and operation of the Development, the Applicant shall ensure that:
  - (a) all vehicles on-site do not exceed a speed limit of 60 kilometres per hour;
  - (b) all loaded vehicles entering or leaving the site have their loads covered;
  - (c) all loaded vehicles leaving the site are cleaned of dirt, sand and other materials before they leave the site, to avoid tracking these materials on public roads; and
  - (d) all heavy vehicles do not use engine brakes.

#### ANIMAL WELFARE AND BEST PRACTICE

- B8. The Applicant shall ensure that the Development complies with the relevant requirements for the welfare of the broilers, particularly health, housing, watering, feeding, handling and transport, including, but not limited to those contained within the:
  - (a) National Animal Welfare Standards for the Chicken Meat Industry (Barnett et al. 2008)
  - (b) NSW DPI Best Practice Management for Meat Chicken Production in NSW Manual 2 (2012);
  - (c) National Farm Biosecurity Manual for Chicken Growers (ACMF, 2000);
  - (d) Model Code of Practice for the Welfare of Animals Domestic Poultry, 4<sup>th</sup> Edition (PISC, 2002);
  - (e) Model Code of Practice for the Welfare of Animals, Land Transport of Poultry (PISC, 2006); and
  - (f) Management and Mitigation Measures located at Appendix 1.

#### Disease Management

- B9. Prior to the commencement of operation, the Applicant shall prepare an **Emergency Disposal** and **Bio-security Protocol**, detailing the disposal procedures for a mass mortality event, to the satisfaction of the Secretary. The protocol shall form part of the OEMP in Condition C4 and be prepared in accordance with Condition C6. The protocol shall:
  - (a) be prepared in consultation with Council, DPI and other relevant government agencies;
  - (b) be consistent with the relevant AUSTVETPLAN manuals and supporting documents;
  - (c) describe the notification procedures;
  - (d) detail all transport routes to be used in a mass mortality event;
  - (e) detail any requirements to stage the mass disposal of dead broilers;
  - (f) detail the burial location(s) for the disposal of dead broilers, including plans and drawings;
  - (g) detail the measures to maintain quarantine control; and

(h) detail the mass mortality disposal procedures and options, consistent with section 6.12.2 of the EIS and section 2.1.10 of the RTS.

#### BIODIVERSITY

#### Biodiversity Offset Strategy

- B10. The Applicant shall implement the strategy for offsetting impacts as described in the *Biodiversity Offset Strategy* at Appendix K of the RTS prepared by SLR (dated 31 August 2015) and developed in accordance with the *Framework for Biodiversity Assessment* (OEH 2014) and the *NSW Biodiversity Offsets Policy for Major Projects* (OEH 2014). The advertisement period for the Expression of Interest on the Office of Environment and Heritage's 'Credit Wanted' register will be 12 months.
- B11. Within three months of the conclusion of the advertisement period, or as otherwise agreed to by the Secretary, the Applicant shall demonstrate to the satisfaction of the Secretary that the offset strategy actions set out in Section 4.3 of the *Biodiversity Offset Strategy* at Appendix K of the RTS prepared by SLR (dated 31 August 2015) have been completed.

#### **Biodiversity Management Plan**

B12. Prior to the commencement of operation, the Applicant shall prepare a **Biodiversity Management Plan** (BMP) for the Development to the satisfaction of the Secretary. The Biodiversity Management Plan shall form part of the OEMP in Condition C4 and be prepared in accordance with Condition C6 and the *Biodiversity Offset Strategy* prepared by SLR, dated 31 August 2015 (Appendix K of the RTS) and in consultation with the OEH.

#### TRAFFIC AND TRANSPORT

#### Site Access, Internal Roads and Parking

- B13. The Applicant shall ensure that:
  - (a) internal roads, driveways and parking (including grades, turn paths, sight distance requirements, aisle widths, aisle lengths and parking bay dimensions) associated with the Development are constructed and maintained in accordance with the latest versions of AS 2890.1 and AS 2890.2;
  - (b) the sweep path of the longest vehicle entering and exiting the subject site, as well as manoeuvrability through the site, is in accordance with AUSTROADS;
  - (c) the Development does not result in any vehicles queuing on the public road network;
  - (d) heavy vehicles and bins associated with the Development do not park or stand on local roads or footpaths in the vicinity of the site;
  - (e) all vehicles are wholly contained on site before being required to stop;
  - (f) all loading and unloading of materials is carried out on site;
  - (g) the proposed turning areas in the car park are kept clear of any obstacles, including parked cars, at all times.
  - (h) all trucks entering or leaving the site with loads have their loads covered;
  - trucks associated with the Development do not track dirt onto the public road network; and
  - (j) vehicles larger than B-Double class do not enter the site.

#### Road Works

- B14. Prior to the commencement of construction of any poultry shed, residential dwelling or structure on-site, the Applicant shall construct an intersection between the Sturt Highway and the proposed site access identified in the EIS to a Basic Right Turn (BAR) and Basic Left Turn (BAL) intersection treatment, in consultation with, and to the satisfaction of the RMS.
- B15. Any works associated with the proposed Development shall be at no cost to RMS.

#### Traffic Management Plan

- B16. Prior to the commencement of construction, the Applicant shall prepare a **Traffic Management Plan** (TMP) for the Development in consultation with Council and the RMS, to the satisfaction of the Secretary. The plan shall form part of the CEMP required under Condition C1. The TMP shall:
  - (a) detail the measures that would be implemented to ensure road safety, network efficiency and access during construction;
  - (b) contain a drivers code of conduct to:
    - (i) minimise the impacts of construction on the local and regional road network; and
    - (ii) minimise conflicts with other road users.
  - (c) detail heavy vehicle routes, access and parking arrangements; and
  - (d) if necessary, detail procedures for notifying any nearby residents of any potential disruptions to routes.

#### WASTE MANAGEMENT

- B17. All waste materials removed from the site shall only be directed to a waste management facility or premises lawfully permitted to accept the materials.
- B18. Waste generated outside the site shall not be received at the site for storage, treatment, processing, reprocessing, or disposal on the site, except as expressly permitted by a licence under the *Protection of the Environment Operations Act 1997*, if such a licence is required in relation to that waste.
- B19. The Applicant shall not stockpile, store or utilise spent bedding material in any way within the Development site.
- B20. Broiler mortalities shall not be disposed to land by burial or any other method at the premises, for the life of the Development, unless otherwise permitted by a relevant authority during a bio-security emergency at the site (refer to Condition B9 for further requirements for broiler disposal).

#### Waste Management Plan

- B21. Prior to the commencement of operation, the Applicant shall prepare a **Waste Management Plan** for the Development to the satisfaction of the Secretary. The Waste Management Plan shall from part of the OEMP in Condition C4 and be prepared in accordance with Condition C6. The WMP shall:
  - (a) detail the type and quantity of waste to be generated during construction and operation of the Development;
  - (b) describe the handling, storage and disposal of all waste streams generated on site, consistent with the Protection of the Environment Operations Act 1997, Protection of the Environment Operations (Waste) Regulation 2014 and the Waste Classification Guideline (Department of Environment, Climate Change and Water, 2009);
  - (c) detail the materials to be reused or recycled, either on or off site; and
  - (d) include the Management and Mitigation Measures included in Appendix 1.

#### HAZARD AND RISK

#### Dangerous goods

- B22. Dangerous goods, as defined by the *Australian Dangerous Goods Code*, shall be stored and handled strictly in accordance with:
  - (a) all relevant Australian Standards;
  - (b) for liquids, a minimum bund volume requirement of 110% of the volume of the largest single stored volume within the bund; and

(c) the Environment Protection Manual for Authorised Officers: Bunding and Spill Management, technical bulletin (Environment Protection Authority, 1997).

In the event of an inconsistency between the requirements listed from a) to c) above, the most stringent requirement shall prevail to the extent of the inconsistency.

B23. The Applicant shall ensure that the storage and transport of LPG for the Development complies with AS/NZS 1596:2014 - The Storage and Handling of LP Gas.

#### Pre-construction

- B24. Prior to the commencement of construction of the Development, other than site preparation works, or as otherwise agreed by the Secretary, the following studies shall be prepared:
  - (a) a Fire Safety Study for the Development, covering relevant aspects detailed in the Department's publication Hazardous Industry Planning Advisory Paper No. 2 - Fire Safety Guidelines and the New South Wales Government's Best Practice Guidelines for Contaminated Water Retention and Treatment Systems. The Study shall include a strict maintenance schedule for essential services and other safety measures. The Study shall meet the requirements of the NSW Fire Brigades; and
  - (b) a **Final Hazard Analysis** prepared in accordance with the Department's Hazardous Industry Advisory Paper No.6 Guidelines for Hazard Analysis.

#### Pre-commissioning

B25. Prior to the commencement of commissioning of the Development, the Applicant shall prepare a comprehensive **Emergency Plan** and detailed emergency procedures for the Development. The Plan shall be prepared in accordance with the Department's publication *Hazardous Industry Planning Advisory Paper No. 1 - Industry Emergency Planning Guidelines.* 

#### Pre-Startup

B26. The Applicant shall submit to the Secretary a report detailing compliance with Condition B24 and Condition B25 one month prior to the commencement of operation of the development.

#### NOISE

#### **Construction Noise**

- B27. Construction activities associated with the Development shall be undertaken during the following construction hours:
  - (a) 7:00am to 6:00pm Mondays to Fridays, inclusive; and
  - (b) 8:00am to 1:00pm Saturdays; and
  - (c) at no time on Sundays or public holidays.
- B28. Construction works outside of the standard construction hours identified in Condition B27 may be undertaken in the following circumstances:
  - (a) construction works that generate noise that is:
    - no more than 5 dB(A) above rating background level at any residence in accordance with the *Interim Construction Noise Guideline* (Department of Environment and Climate Change, 2009); and
    - (ii) no more than the noise management levels specified in Table 3 of the *Interim Construction Noise Guideline* (Department of Environment and Climate Change, 2009) at other sensitive receivers; or
  - (b) for the delivery of materials required outside these hours by the NSW Police Force or other authorities for safety reasons; or
  - (c) where it is required in an emergency to avoid the loss of lives, property and/or to prevent environmental harm;

- (d) works approved through an EPL, or by the Secretary; and
- (e) works as approved through the out-of-hours work protocol outlined in the CEMP.
- B29. Except as expressly permitted by the EPL, activities resulting in impulsive or tonal noise emission (such as rock breaking, rock hammering, pile driving) shall only be undertaken:
  - (a) between the hours of 8:00 am to 5:00 pm Monday to Friday;
  - (b) between the hours of 8:00 am to 1:00 pm Saturday; and
  - (c) in continuous blocks not exceeding three hours each with a minimum respite from those activities and works of not less than one hour between each block.

For the purposes of this condition 'continuous' includes any period during which there is less than a one hour respite between ceasing and recommencing any of the work the subject of this condition.

B30. The Development shall be constructed with the aim of achieving the construction noise management levels detailed in the *Interim Construction Noise Guideline* (Department of Environment and Climate Change, 2009). All feasible and reasonable noise mitigation measures shall be implemented and any activities that could exceed the construction noise management levels shall be identified and managed in accordance with the CEMP.

Note: The Interim Construction Noise Guideline identifies 'particularly annoying' activities that require the addition of 5dB(A) to the predicted level before comparing to the construction NML.

B31. Where Feasible and Reasonable, operation noise mitigation measures shall be implemented at the start of Construction (or at other times during Construction) to minimise Construction noise impacts.

#### **Operational Noise Limits**

B32. The Applicant shall ensure that noise from the operation does not exceed the limits in Table 1 below

Location	Day Evening		Night			
	L <sub>Aeq(15 minute)</sub>	L <sub>Aeq(15</sub> minute)	L <sub>Aeq(15 minute)</sub>	LA1 (1 minute)		
All privately owned residential premises	35	35	35	45		

#### Table 1 – Noise Limits dB(A)

Note: Noise generated by the Development is to be measured in accordance with the relevant procedures and exemptions (including certain meteorological conditions) of the INP. Appendix 9 of the INP sets out the meteorological conditions under which this criterion applies.

#### **Noise Modifying Factors**

B33. If noise from an activity is substantially tonal, intermittent or impulsive in nature or contains major components within the low frequency range (as described in Chapter 4 of the *NSW Industrial Noise Policy* (Environment Protection Authority, 2000)), 5 dB(A) shall be added to the measured noise level when comparing the measured noise with the limits specified in Table 4.1 of the INP.

Note: Low frequency noise is currently under review by the Environment Protection Authority and the Department of Planning and Environment.

#### SOIL, WATER QUALITY AND HYDROLOGY

#### Flooding

- B34. The design of the rice hull storage structures must incorporate flood proofing to ensure that broiler feed remains dry in the event of a 1 in 100 year flood event.
- B35. Minimum floor levels for habitable buildings should be based on protection from the 1 in 100 year flood event plus 500 mm freeboard.
- B36. Prior to the commencement of operation, the Applicant shall prepare an **Emergency and Evacuation Plan** to the satisfaction of the Secretary. The Emergency and Evacuation Plan shall form part of the OEMP in Condition C4 and be prepared in accordance with Condition C6. The Emergency and Evacuation Plan shall:
  - (a) be prepared in consultation with Narrandera Shire Council and the NSW State Emergency Service;
  - (b) describe all reasonable flood recovery measures;
  - (c) detail assembly and evacuation points;
  - (d) detail transportation routes and procedures in a flood event;
  - (e) incorporate the Flood Management Plan at Section 6.5.6 of the EIS;
  - (f) detail the procedures for managing flood risks during construction and operation of the development, including procedures for the protection of infrastructure, staff and broilers; and
  - (g) detail the management measures for the supply of feed in a flood event.

#### **Construction Soil and Water Management**

B37. Soil and water management measures consistent with *Managing Urban Stormwater - Soils and Construction Vol. 1* (Landcom, 2004) (the Blue Book) shall be employed during the construction of the Development to minimise soil erosion and the discharge of sediment and other pollutants to land and/or waters.

#### Surface Water Discharge Limits

B38. The Applicant shall ensure that all licensed surface water discharges from the site comply with the discharge limits (volume and quality) set for the Development in any EPL or relevant provisions of the POEO Act.

#### Stormwater

B39. The Applicant must design, construct, operate and maintain all stormwater and water storage facilities on site with the internal surfaces equivalent to, or better than, a clay liner of a minimum permeability of 1 x 10<sup>-9</sup> metres per second and a clay liner thickness of no less than 600mm, or an equivalent alternative.

#### Groundwater

- B40. The groundwater bores for the Development shall be constructed in accordance with the *Minimum Construction Requirements for Water Bores in Australia, Third Edition, February 2012,* (National Uniform Drillers Licensing Committee, 2012).
- B41. Groundwater extracted from the bores shall be treated in accordance with the standards contained within the *National Water Biosecurity Manual Poultry Production* (DAFF, 2009).
- B42. Groundwater extraction for the purposes of the Development shall be limited to the provisions of any water access licence(s) issued by the DPI.

#### Bunding

B43. The Applicant shall store all chemicals, fuels and oils used on-site in appropriately bunded areas in accordance with the requirements of all relevant Australian Standards, and/or EPA's *Storing and Handling Liquids: Environmental Protection – Participants Handbook.* 

#### Domestic Effluent

B44. The Applicant shall obtain the relevant license/approval from Council under section 68 of the Local Government Act 1996 prior to the commencement of construction for all domestic effluent disposal and management systems on-site.

#### Water Management Plan

- B45. Prior to the commencement of operation, the Applicant shall prepare a **Water Management Plan** to the satisfaction of the Secretary. The Water Management Plan shall form part of the OEMP in Condition C4 and be prepared in accordance with Condition C6. The WMP shall:
  - (a) be prepared in consultation with the DPI;
  - (b) detail water use, metering, disposal and management on-site;
  - (c) detail the number and location of piezometers on-site;
  - (d) detail the water licence requirements for the Development;
  - (e) detail the management of wastewater streams on-site;
  - (f) contain a Surface Water Management Plan, including;
    - (i) a program to monitor:
      - surface water flows and quality;
      - surface water storage and use; and
      - sediment basin operation;
    - (ii) sediment and erosion control plans;
    - (iii) surface water impact assessment criteria, including trigger levels for investigating any potentially adverse surface water impacts;
    - (iv) a protocol for the investigation and mitigation of identified exceedances of the surface water impact assessment criteria; and
  - (g) contain a Groundwater Management Plan, including:
    - (i) baseline data on groundwater levels and quality;
    - (ii) a program to monitor groundwater levels and quality;
    - (iii) groundwater impact assessment criteria, including trigger levels for investigating any potentially adverse groundwater impacts; and
    - (iv) a protocol for the investigation and mitigation of identified exceedances of the groundwater impact assessment criteria.
  - h) contain a Contingency plan for the operation of the facility during extreme weather events such as heat wave or drought. Examples of contingency options may include (but are not limited to) securing sufficient additional water access licences to service the facility during inclement conditions, or adjusting the scale of the operation to meet the available water supply.

#### LANDSCAPE

#### External Lighting

B46. All external lighting associated with the Development shall be mounted, screened, and directed in such a manner so as not to create a nuisance to the surrounding environment, properties and roadways. The lighting shall be the minimum level of illumination necessary and shall comply with Australian Standard *AS4282 1997 – Control of the Obtrusive Effects of Outdoor Lighting*.

#### Landscape Management Plan

B47. Prior to the commencement of operation, the Applicant shall prepare a Landscape Management Plan (LMP) to manage the revegetation and landscaping works on-site, to the

satisfaction of the Secretary. The LMP shall form part of the OEMP in Condition C4 and be prepared in accordance with Condition C6. The LMP shall:

- (a) detail the species to be planted on-site to achieve a vegetation buffer of 40 metres around each PPU;
- (b) describe the monitoring and maintenance measures to manage revegetation and landscaping works; and
- (c) be consistent with the Management and Mitigation Measures at Appendix 1.

#### **GREENHOUSE GAS**

B48. The Applicant shall implement all reasonable and feasible measures to minimise energy use on site and greenhouse gas emissions produced on-site.

#### HERITAGE

#### Protection of Aboriginal Heritage Items

- B49. Prior to the commencement of construction of any poultry shed, residential dwelling or structure on-site, the Applicant shall undertake a pre-clearance pedestrian archaeological survey for linear alignments. Representatives from relevant Registered Aboriginal Parties are to be included in this assessment.
- B50. Prior to the commencement of construction of any poultry shed, residential dwelling or structure on-site, the Applicant shall undertake a pre-clearance archaeological survey for the internal road alignment and impact area associated with the revised location of PPU5. Representatives from relevant Registered Aboriginal Parties should be included in this assessment.
- B51. Any subsequent alterations to the Development footprint that are outside the study areas of the Aboriginal Heritage Impact assessment (prepared by OzArk, dated April 2015 at Appendix J of the EIS) and pre-clearance surveys, should be assessed in accordance with the *Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales* (OEH, 2010) as amended.
- B52. The three know Aboriginal sites (EPPC-ST1, EPPC-ST2 and EPPC-H1) shall be fenced during construction and operation of the Development to exclude vehicles, pedestrians and animals from the sites.

#### **Unexpected Finds Protocol**

- B53. If any archaeological relics are uncovered during the course of construction of the Development, then all works shall stop immediately in that area and the OEH Heritage Branch contacted. Depending on the possible significance of the relics, an archaeological assessment and an excavation permit under the *NSW Heritage Act 1977* may be required before further work can continue in that area.
- B54. If any Aboriginal objects are uncovered during work, excavation or disturbance of the work area, work must stop immediately and the Regional Operations Group of the OEH is to be contacted. If Aboriginal objects/places are known to be directly or indirectly adversely affected, the Applicant will need to apply for, and be issued, an Aboriginal Heritage Impact Permit (AHIP) by OEH to comply with the *National Parks and Wildlife Act 1974*.

#### Aboriginal Cultural Heritage Management Plan

- B55. Prior to the commencement of operation, the Applicant shall prepare an **Aboriginal Cultural Heritage Management Plan** to the satisfaction of the Secretary. The plan shall form part of the OEMP in Condition C4 and be prepared in accordance with Condition C6 and shall:
  - (a) describe the management actions, including fencing, for the three known Aboriginal sites (EPPC-ST1, EPPC-ST2 and EPPC-H1) during construction and operation; and

(b) incorporate any additional sites found during pre-clearance surveys.

# **SCHEDULE 4**

# ENVIRONMENTAL MANAGEMENT, REPORTING AND AUDITING

#### CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN

- C1. The Applicant shall prepare a **Construction Environmental Management Plan** to the satisfaction of the Secretary. The Plan must:
  - (a) be approved by the Secretary prior to the commencement of construction;
  - (b) identify the statutory approvals that apply to the Development;
  - (c) outline all environmental management practices and procedures to be followed during construction works associated with the Development;
  - (d) describe all activities to be undertaken on the site during construction of the Development, including a clear indication of construction stages;
  - (e) detail how the environmental performance of the construction works will be monitored, and what actions will be taken to address identified adverse environmental impacts;
  - (f) describe the roles and responsibilities for all relevant employees involved in construction works associated with the Development; and
  - (g) include the management plans under Condition C2 of this consent.
- C2. As part of the Construction Environmental Management Plan for the Development, required under condition C1 of this consent, the Applicant shall include the following:
  - (a) Dust Management (see Condition B6 and B7);
  - (b) Traffic Management (see Condition B16);
  - (c) Construction Soil and Water Management (see Condition B37); and
  - (d) Community Consultation and Complaints Handling.
- C3. The Applicant shall carry out the construction of the Development in accordance with the CEMP approved by the Secretary (and as revised and approved by the Secretary from time to time), unless otherwise agreed by the Secretary.

#### OPERATIONAL ENVIRONMENTAL MANAGEMENT PLAN

- C4. The Applicant shall prepare an **Operational Environmental Management Plan** (OEMP) for the Development to the satisfaction of the Secretary. The OEMP must:
  - (a) be submitted to the Secretary for approval prior to the commencement of operation;
  - (b) be consistent with the NSW DPIs Best Practice Management for Meat Chicken Production in New South Wales – Manual 2 (Meat Chicken Growing Management);
  - (c) be prepared by a suitably qualified and experienced expert;
  - (d) provide the strategic framework for environmental management of the Development;
  - (e) identify the statutory approvals that apply to the Development;
  - (f) describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the Development;
  - (g) describe the procedures that would be implemented to:
    - (i) keep the local community and relevant agencies informed about the operation and environmental performance of the Development;
    - (ii) receive, handle, respond to, and record complaints;
    - (iii) resolve any disputes that may arise;
    - (iv) respond to any non-compliance;
    - (v) respond to emergencies; and
  - (h) include the following environmental management plans:
    - (i) Air quality (see Condition B3, B4 and B5);
      - (ii) Emergency Disposal and Bio-security Protocol (see Condition B9);
      - (iii) Biodiversity (see Condition B10 to Condition B12 inclusive);
      - (iv) Waste (see Condition B21);
      - (v) Emergency and evacuation (see Condition B36);
      - (vi) Water (see Condition B45);

- (vii) Landscaping (see Condition B47); and
- (viii) Aboriginal Cultural Heritage (see Condition B55).
- C5. The Applicant shall operate the Development in accordance with the OEMP approved by the Secretary (and as revised and approved by the Secretary from time to time), unless otherwise agreed by the Secretary.

#### MANAGEMENT PLAN REQUIREMENTS

- C6. The Applicant shall ensure that the environmental management plans required under Condition C4 of this consent are prepared by a suitably qualified person or persons in accordance with best practice and include:
  - (a) detailed baseline data;
  - (b) a description of:
    - (i) the relevant statutory requirements (including any relevant approval, licence or lease conditions);
    - (ii) any relevant limits or performance measures/criteria; and
    - the specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the Development or any management measures;
  - (c) a description of the measures that would be implemented to comply with the relevant statutory requirements, limits, or performance measures/criteria;
  - (d) a program to monitor and report on the:
    - (i) impacts and environmental performance of the Development;
    - (ii) effectiveness of any management measures (see (c) above);
  - (e) a contingency plan to manage any unpredicted impacts and their consequences;
  - (f) a program to investigate and implement ways to improve the environmental performance of the Development over time;
  - (g) a protocol for managing and reporting any:
    - (i) incidents;
    - (ii) complaints;
    - (iii) non-compliances with statutory requirements; and
    - (iv) exceedances of the impact assessment criteria and/or performance criteria; and
  - (h) a protocol for periodic review of the plan.

#### **Revision of Strategies, Plans and Programs**

- C7. Within 3 months of the submission of an:
  - (a) annual review under Condition C8;
  - (b) incident report under Condition C10; or
  - (c) audit under Condition C12.

The Applicant shall review, and if necessary revise, the strategies, plans, and programs required under this consent to the satisfaction of the Secretary.

Note: This is to ensure the strategies, plans and programs are updated on a regular basis, and incorporate any recommended measures to improve the environmental performance of the Development.

#### ANNUAL REVIEW

- C8. Each year, the Applicant shall review the environmental performance of the Development to the satisfaction of the Secretary. This review must:
  - (a) describe the Development that was carried out in the previous calendar year, and the Development that is proposed to be carried out over the next year;

- (b) include a comprehensive review of the monitoring results and complaints records of the Development over the previous calendar year, which includes a comparison of these results against the:
  - (i) the relevant statutory requirements, limits or performance measures/criteria;
  - (ii) requirements of any plan or program required under this consent;
  - (iii) the monitoring results of previous years; and
  - (iv) the relevant predictions in the EIS;
- (c) identify any non-compliance over the last year, and describe what actions were (or are being) taken to ensure compliance;
- (d) identify any trends in the monitoring data over the life of the Development;
- (e) identify any discrepancies between the predicted and actual impacts of the Development, and analyse the potential cause of any significant discrepancies; and
- (f) describe what measures will be implemented over the next year to improve the environmental performance of the Development.

#### REPORTING

#### Incident Reporting

- C9. Within 24 hours of the occurrence of an incident that causes (or may cause) harm to the environment, the Applicant shall notify the Secretary and any other relevant agencies of the incident.
- C10. Within seven (7) days of the detection of the incident, the Applicant shall provide the Secretary and any relevant agencies with a detail report on the incident.

#### Regular Reporting

C11. The Applicant shall provide regular reporting on the environmental performance of the Development on its website, in accordance with the reporting arrangements in any plans or programs approved under the conditions of this consent.

#### AUDITING

#### Independent Environmental Audit

- C12. Within 2 years of the date of this consent, and every 3 years thereafter, unless the Secretary directs otherwise, the Applicant shall commission and pay the full cost of an Independent Environmental Audit of the Development. This audit must:
  - be conducted by a suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Secretary;
  - (b) include consultation with the relevant agencies;
  - (c) assess the environmental performance of the Development and assess whether it is complying with the requirements in this consent, and any other relevant approvals, relevant EPL(s) (including any assessment, plan or program required under these approvals);
  - (d) review the adequacy of any approved strategy, plan or program required under the abovementioned consents; and
  - (e) recommend measures or actions to improve the environmental performance of the Development, and/or any strategy, plan or program required under these consents.

Note: This audit team must be led by a suitably qualified auditor, and include relevant experts in any other fields specified by the Secretary.

C13. Within 3 months of commissioning this audit, or as otherwise agreed by the Secretary, the Applicant shall submit a copy of the audit report to the Secretary, together with its response to any recommendations contained in the audit report.

#### ACCESS TO INFORMATION

C14. Within 6 months of the date of this consent, the Applicant shall:

- (a) make copies of the following publicly available on its website:
  - (i) the documents referred to in Condition A2;
  - (ii) all current statutory approvals for the Development;
  - (iii) all approved strategies, plans and programs required under the conditions of this consent;
  - (iv) a comprehensive summary of the monitoring results of the Development, reported in accordance with the specifications in any conditions of this consent, or any approved plans and programs;
  - a complaints register consistent with that provided in Appendix C of the EIS, updated on a monthly basis;
  - (vi) the annual reviews of the Development;
  - (vii) any independent environmental audit of the Development, and the Applicant's response to the recommendations in any audit;
  - (viii) any other matter required by the Secretary; and
- (b) keep this information up to date,

to the satisfaction of the Secretary.

#### ENVIRONMENTAL REPRESENTATIVE

- C15. Prior to the commencement of construction of the Development, or as otherwise agreed by the Secretary, the Applicant shall nominate for the approval of the Secretary a suitably qualified and experienced Environment Representative(s) that is independent of the design and construction personnel. The Applicant shall employ the Environmental Representative(s) for the duration of construction through the life of the Development, or as otherwise agreed by the Secretary. The Environment Representative(s) shall:
  - be the principal point of advice in relation to the environmental performance of the Development;
  - (b) monitor the implementation of environmental management plans and monitoring programs required under this consent and advise the Applicant upon the achievement of these plans/ programs;
  - (c) have responsibility for considering and advising the Applicant on matters specified in the conditions of this consent, and other licences and approvals related to the environmental performance and impacts of the Development;
  - (d) be given the authority to approve / reject minor amendments to the OEMP. What constitutes a "minor" amendment shall be clearly explained in the Construction Environment Management Plan required under condition C1;
  - (e) be given the authority and independence to require reasonable steps be taken to avoid or minimise unintended or adverse environmental impacts, and failing the effectiveness of such steps, to direct that relevant actions be ceased immediately should an adverse impact on the environment be likely to occur; and
  - (f) be consulted in responding to the community concerning the environmental performance of the Development where the resolution of points of conflict between the Applicant and the community is required.

# APPENDIX 1: MANAGEMENT AND MITIGATION MEASURES (Source: EIS)

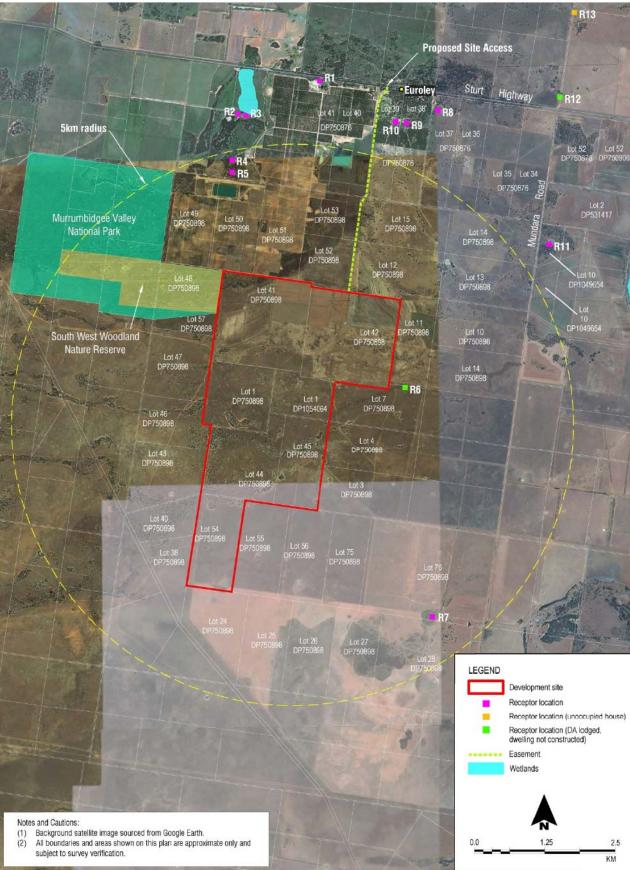
Asp	ect/Commitment	EIS Section
Ger	ieral	
•	<ul> <li>ProTen will carry out the Development at Euroley generally in accordance with the Development application and this EIS report.</li> <li>The Development site will not accommodate more than 3.92 million birds at any one time.</li> <li>Construction will be undertaken within the hours of: <ul> <li>a. Monday to Friday, 7.00 am to 6.00 pm;</li> <li>b. Saturday, 8.00 am to 1.00 pm; and</li> <li>c. No construction work on Sunday and public holidays</li> </ul> </li> <li>The poultry Development will operate 24 hours a day, seven days a week, with the majority of activities carried out between 7.00 am and 7.00 pm.</li> <li>The Complaints and Incident Management Strategy contained within Appendix C of the EIS will be implemented to ensure that all complaints and incidents relating to the poultry operation, if they occur, are promptly and effectively addressed.</li> </ul>	
Air	Quality and Odour	
<u>Dur</u> ∙	Ing Construction No disturbance will occur outside of the nominated disturbance footprint, and disturbed areas will be promptly rehabilitated and revegetated to a stable landform to minimise dust emissions. Dust will be minimised by 'wetting' down surfaces being worked or carrying traffic in dry periods.	
Dur	ing Operation	
• • •	A meteorological station will be installed within the Development site to collect on- going and up-to-date weather data. The poultry sheds and feed silos will be fully enclosed to reduce the level of moisture and to minimise emissions of dust/particulate matter. The insides of the poultry sheds and the surrounds will be maintained at all times to ensure a clean and sanitary environment, including regular monitoring and maintenance of the tunnel ventilation systems and bird drinkers to avoid spillage, leaks and uneven distribution. Stocking densities and bird health within each of the poultry sheds will be regularly checked and, if necessary, appropriate corrective measures will be implemented. Daily monitoring and maintenance of the bedding material will be undertaken to identify, remove and replace any caked material beneath drinking lines and/or areas with excessive moisture content. Internal access roads will be appropriately maintained to minimise dust and noise emissions.	
Noi		
• • •	A 60 km/hr speed limit will be adopted on the site access road between the Development site and the Sturt Highway. Plant and equipment will be maintained in good repair and operators will be appropriately instructed on how to minimise noise generation at all times. Noise generating equipment purchased by the operator will comply with relevant occupational health and safety requirements. Emergency standby diesel generators will only be used when power from the electricity grid is lost and they will be appropriately sited and housed to minimise noise emissions. A unidirectional traffic movement system, via a one-way circulation road around each PPU site, will be established with appropriate signage to	

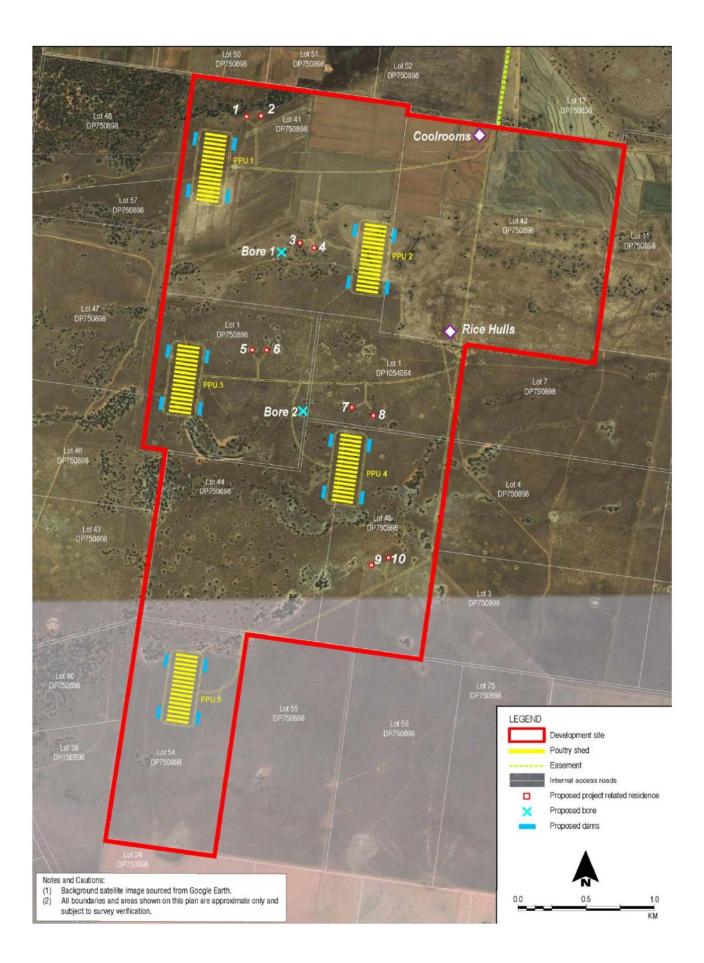
Tra	ffic and Transport	
•	An intersection between the Sturt Highway and the Development site access	Section 6.4.4
	road will be constructed at the location shown on Figure 1.2 (in the EIS),	
	with a basic right turn treatment (BAR) and basic left turn treatment (BAL)	
	intersection in accordance with Austroads Guide to Road Design, Part 4A:	
	Unsignalised and Signalised Intersections.	
•	The site access road from the Sturt Highway to the Development site will	
	be constructed to a minimum width of 6.5 metres, with a pavement and	
	road surface suitable for B-doubles.	
•	The access road will be bitumen sealed for a minimum length of 50 metres	
	from the Sturt Highway intersection.	
•	Advance signposting on the approach to the Sturt Highway intersection will	
	be erected in both directions warning of trucks turning. In addition, an	
	intersection direction sign opposite the access will be erected to further help	
	identify the access point.	
•	The farm access will meet the minimum requirements of AS 2890.2, to	
	accommodate the turning movements of the largest vehicles generated by	
	the poultry Development.	
•	The internal PPU access roads will be constructed as one-way circulation	
	roads (ring roads) around the perimeter of each PPU to enable traffic to	
	enter, exit and manoeuvre in a forward direction. The roads will be	
	constructed as all-weather rural- type roads able to carry the anticipated	
-	heavy vehicle movements.	
•	Suitable signage will be erected indicating internal traffic direction and speed	
	limits to ensure the orderly and safe use of the site, as well as to minimise	
	the potential for traffic conflict and noise.	
•	All internal roads will be maintained clear of obstruction and used	
0	exclusively for the purposes of transport, loading-unloading and parking.	
	face Water and Flooding	
•	Temporary erosion and sediment control structures, such as hay bales and	
	silt fencing, will be used during construction and regularly maintained to	
	prevent soil loss and sediment-laden runoff. All clean extraneous surface water from upslope will be diverted around	
•	areas of disturbance.	
	The stormwater management system described in Section 3.12 (of the	
•	EIS) will be constructed and appropriately maintained.	
	Staff members will be instructed in the proper use and handling of all	
•	chemicals used on-site. If appropriate, this will include completion of training	
	such as SMARTtrain or ChemCert (or similar).	
•	All chemical use will be undertaken in full compliance with the relevant	
ľ	statutory requirements, including the <i>Pesticides Act</i> 1999.	
	Wastewater generated by the on-site staff amenities and accommodation will	
	be appropriately treated and disposed of via on-site wastewater	
	management systems installed and operated in accordance with the	
	requirements of Council and relevant standards/guidelines.	
Flo	oding	Section 6.5.5 and
•	Habitable finished floor levels within farm managers' accommodation will be	Section 6.5.5 and 6.5.6
	set at a minimum of 500 mm above adjacent ground level to reduce the	0.0.0
	likelihood of floodwater ingress to buildings.	
•	Finished floor levels of the poultry sheds will be set at a minimum of 300 mm	
	above adjacent ground level to reduce the likelihood of floodwater ingress to	
	buildings.	
•	The flood management plan described in Section 6.5.6 (of the EIS) will be	
	implemented where necessary.	
Gro	bundwater	
•	Groundwater wells will be designed by a suitably qualified engineer or	Section 6.6.3
	hydrogeologist, and the design and construction will be undertaken in	
	accordance with the Minimum Construction Requirements for Water Bores	
	in Australia (National Uniform Drillers Licensing Committee, 2012). The	

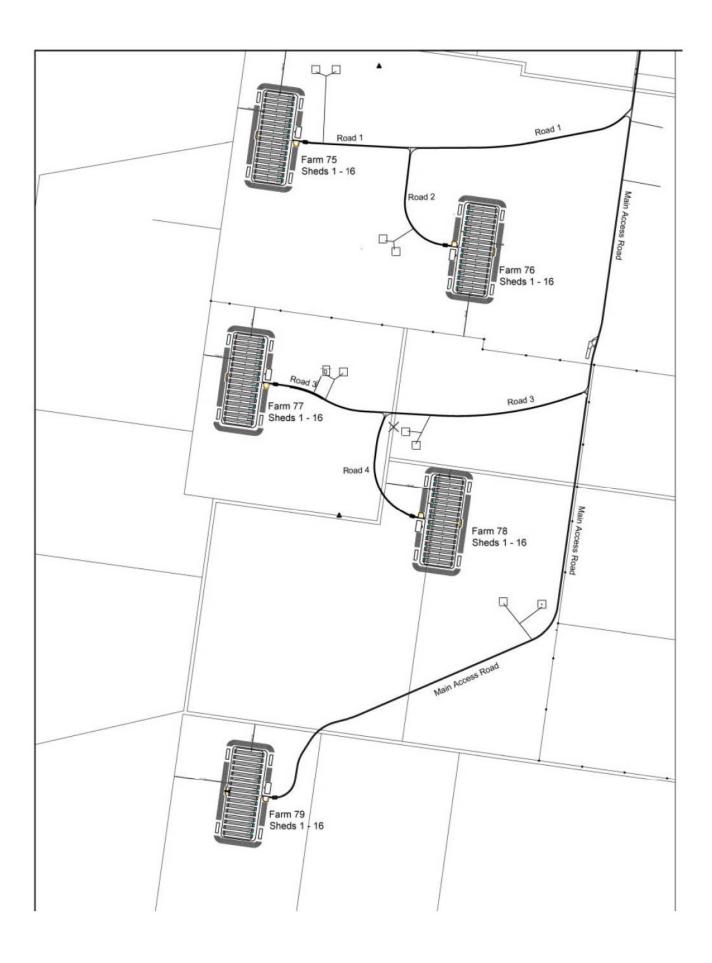
:	installation of the wells should include normal Development practice, including a commissioning test on the well. Monitoring of wells will comply with the existing WAL conditions. There will be no on-site disposal of bird carcasses or associated waste in the event of a mass-mortality, unless directed to do so by the DPI.	
Bio	diversity	
	No disturbance will occur outside of the nominated disturbance footprint.	Section 6.7.5
	Erosion and sediment control measures will be installed and maintained to	
	prevent the erosion and sedimentation impact on any areas downstream supporting remnant vegetation.	
•	Weed management practices will be implemented to minimise the spread of exotic species into natural areas within the site.	
•	A biodiversity offset strategy for the Project will be finalised in accordance with the actions detailed in <b>Section 6.7.5</b> (of the EIS), in consultation with OEH and within 12 months of gaining Project Approval.	
•	Landscape plantings will be established in accordance with the Landscaping Strategy contained in <b>Section 3.13</b> of the EIS, which will increase the total area under vegetation within the locality, create habitat and increase the	
	local biodiversity.	
Abo	priginal Heritage	
•	No disturbance will occur outside of the nominated disturbance footprint.	Section 6.8.4
•	The three aboriginal sites identified on site will be fenced during construction activities. The hearth will remain fenced during operation of the poultry production complex.	
•	Should any Aboriginal artefact be uncovered all works will cease in that locale and the OEH will be notified. Works will only recommence when an appropriate and approved management strategy has been agreed to by all of the relevant stakeholders.	
Vis	ual Amenity	
	The luminaires on each poultry shed will be aimed downwards and only	Section 6 10 3
	switched on during loading-unloading and servicing activities outside of daylight hours and during heavy fog.	
•	The landscaping strategy described in <b>Section 3.13</b> (of the EIS) will be implemented and maintained in order to improve the visual and environmental amenity of the poultry Development.	
Die		
BIO	security and Poultry Disease	
•	ProTen will meet all standards of care and management for animal health and welfare detailed in the <i>National Animal Welfare Standards for the</i> <i>Chicken Meat Industry</i> (Barnett et al, 2008).	
•	ProTen will implement a suite of biosecurity measures in accordance with the <i>National Farm Biosecurity Manual for Chicken Growers</i> (Australian Chicken Meat Federation 2010). A copy of this manual will be kept at the Development site and staff will be provided with training in the relevant parts of the Manual.	
•	In the unlikely event of a major disease outbreak, the EPA and DPI will be contacted as soon as the breakout is suspected. Immediate measures will be implemented to isolate the infected PPU site(s), effect strict quarantine procedures to prevent the spread of the disease, and notify all relevant stakeholders. Where permitted, urgent ring vaccination of flocks within the controlled area will be organised.	
•	Upon confirmation that it is an exotic disease outbreak and immediate slaughter of farm stock is necessary, slaughter will be managed by the DPI in co-ordination with the EPA and technical service units of the poultry industry. The birds will be slaughtered within the poultry sheds.	
•	If ProTen's preferred option of disposal of infected birds at Baiada's protein recovery plant cannot be realised for various reasons such as quarantine requirements, disposal of diseased poultry via in-shed composting, or offsite burial at Jeanella will be undertaken in consultation with the DPI and EPA.	

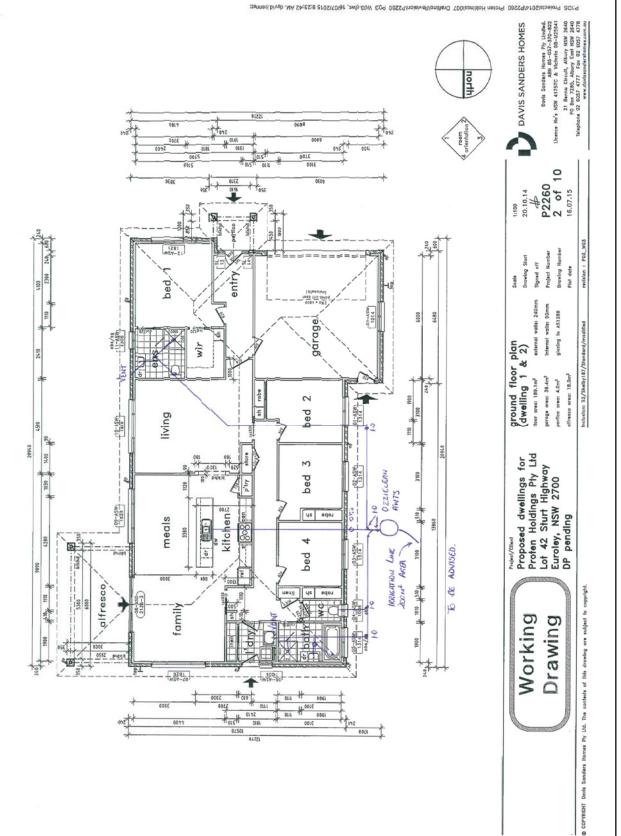
Wa		
•	No on-site stockpiling or disposal of waste materials will occur.	Section 3.10
•	Day to day general waste will be placed into enclosed skips and removed from each PPU site by a licensed contractor on a regular basis.	
•	Chemical Containers - a chemical supply company will be engaged to provide a chemical delivery and pickup service direct to the Development site. At each delivery of new chemical supplies, empty chemical containers will be retrieved by the chemical company for recycling or appropriate disposal.	
•	Poultry litter will be promptly removed from the sheds and transported off-site in covered trucks by an approved contractor at the end of each production cycle during the clean-out phase.	
•	Dead birds will be collected from the poultry sheds on a daily basis and stored in on-site chillers for daily removal to Baiada's rendering plant near Hanwood on Kidman Way.	
Gre	eenhouse Gas and Energy Efficiency	
•	Low lux internal shed lighting will be installed within the poultry sheds. External shed lighting will only be used when necessary during times of low light and/or heavy fog. The integrity of the poultry sheds will be regularly checked in order to identify and rectify any air leaks, which place additional load on ventilation fans.	
•	Ventilation fans and heaters will be regularly maintained and serviced to ensure optimal performance and efficiency.	
•	Automatic control systems will continuously monitor internal shed lighting, temperature, humidity and static pressure, and adjust the ventilation to suit conditions resulting in less energy to regulate the internal shed conditions.	

#### **APPENDIX 2: SITE PLANS**









NSW Goverment Department of Planning and Environment

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# APPENDIX B



Our reference: EF16/1645; DOC16/59520-09

The Chief Executive Officer ProTen Holdings Pty Ltd PO Box 1746 NORTH SYDNEY NSW 2060

Dear Mr Bryant

#### **Re** Environment Protection Licence – Narrandera Poultry Production Complex

Thank you for your application received on 4 February 2016 by the Environment Protection Authority (EPA) for an environment protection licence for your poultry production complex on the Sturt Highway at Euroley.

We have carefully considered your application and have determined to issue a Scheduled Development Work and Scheduled Activity – Premises Based licence for the facility to accommodate a maximum of 3.92 million birds.

Environment Protection Licence No 20748 has been assigned to the facility and is enclosed. The licence has been prepared consistent with your development consent and various management plans.

#### Annual Return Requirement

The licence anniversary date is 22 April 2016. Each year from 2017 an Annual Return will be generated on the anniversary date by the EPA and sent to the licence holder for the purpose of reporting compliance with the licence conditions. Where monitoring is required by your licence, you must enter a summary of the results in the Annual Return.

#### Pollution Incident Response Management Plan

Prior to becoming operational, a Pollution Incident Response Management Plan (PIRMP) must be prepared in accordance with Part 5.7A of the *Protection of the Environment Operations Act 1997* (POEO Act). For more information about the PIRMP requirements please refer to the EPA's website at http://www.epa.nsw.gov.au/legislation/20120227egpreppirmp.htm.

#### **Publishing of Pollution Monitoring Data**

All licensees who undertake pollution monitoring data as part of a condition of their Environment Protection Licence must publish that monitoring data in accordance with Section 66 (6) of the POEO Act. If you operate a website you must publish that monitoring data on the website. If you do not

> PO BOX 397 Griffith NSW 2680 Suite 7, 130-140 Banna Avenue Griffith NSW Tel: (02) 6969 0700 Fax: (02) 6969 0710 ABN 30 841 387 271 www.epa.nsw.gov.au

maintain a website then you must make the pollution monitoring data available when requested. For more information about the EPA's requirements for publishing pollution monitoring data please refer to the EPA's website at <u>http://www.epa.nsw.gov.au/licensing/pubmonitdata.htm</u>.

If you have any further enquiries about this matter please contact me by telephoning 02 6969 0700.

Yours sincerely

22.04.2016

JASON PRICE Acting Head, Griffith Unit Environment Protection Authority

## **Environment Protection Licence**

Licence - 20748

Licence Details
Number:
Anniversary Date:

20748 22-April

#### Licensee

PROTEN HOLDINGS PTY LIMITED

PO BOX 1746

NORTH SYDNEY NSW 2060

#### Premises

NARRANDERA POULTRY PRODUCTION COMPLEX

STURT HIGHWAY

UROLY NSW 2700

#### **Scheduled Activity**

Livestock intensive activities

#### Fee Based Activity

Bird accommodation

#### Region

#### South West

Suites 7-8, Level 1 Griffith City Plaza, 130-140 Banna Avenue GRIFFITH NSW 2680 Phone: (02) 6969 0700

Fax: (02) 6969 0710

PO Box 397 GRIFFITH

NSW 2680

Environment Protection Authority - NSW Licence version date: 22-Apr-2016



Scale

> 1000 T accommodation capacity

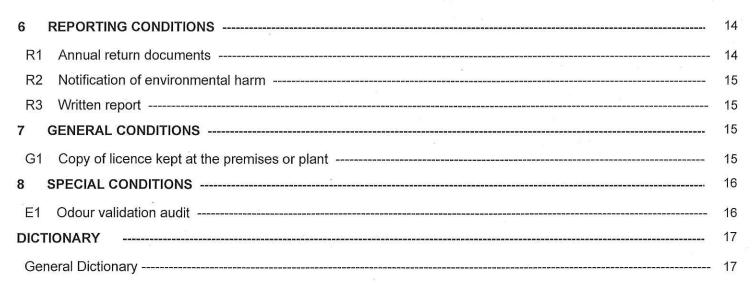
Licence - 20748



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Licence - 20748





Licence - 20748



## Information about this licence

#### Dictionary

A definition of terms used in the licence can be found in the dictionary at the end of this licence.

#### **Responsibilities of licensee**

Separate to the requirements of this licence, general obligations of licensees are set out in the Protection of the Environment Operations Act 1997 ("the Act") and the Regulations made under the Act. These include obligations to:

- ensure persons associated with you comply with this licence, as set out in section 64 of the Act;
- control the pollution of waters and the pollution of air (see for example sections 120 132 of the Act);
- report incidents causing or threatening material environmental harm to the environment, as set out in Part 5.7 of the Act.

#### Variation of licence conditions

The licence holder can apply to vary the conditions of this licence. An application form for this purpose is available from the EPA.

The EPA may also vary the conditions of the licence at any time by written notice without an application being made.

Where a licence has been granted in relation to development which was assessed under the Environmental Planning and Assessment Act 1979 in accordance with the procedures applying to integrated development, the EPA may not impose conditions which are inconsistent with the development consent conditions until the licence is first reviewed under Part 3.6 of the Act.

#### **Duration of licence**

This licence will remain in force until the licence is surrendered by the licence holder or until it is suspended or revoked by the EPA or the Minister. A licence may only be surrendered with the written approval of the EPA.

#### Licence review

The Act requires that the EPA review your licence at least every 5 years after the issue of the licence, as set out in Part 3.6 and Schedule 5 of the Act. You will receive advance notice of the licence review.

#### Fees and annual return to be sent to the EPA

For each licence fee period you must pay:

- an administrative fee; and
- a load-based fee (if applicable).

Licence - 20748



The EPA publication "A Guide to Licensing" contains information about how to calculate your licence fees. The licence requires that an Annual Return, comprising a Statement of Compliance and a summary of any monitoring required by the licence (including the recording of complaints), be submitted to the EPA. The Annual Return must be submitted within 60 days after the end of each reporting period. See condition R1 regarding the Annual Return reporting requirements.

Usually the licence fee period is the same as the reporting period.

#### Transfer of licence

The licence holder can apply to transfer the licence to another person. An application form for this purpose is available from the EPA.

#### Public register and access to monitoring data

Part 9.5 of the Act requires the EPA to keep a public register of details and decisions of the EPA in relation to, for example:

- licence applications;
- licence conditions and variations;
- statements of compliance;
- load based licensing information; and
- load reduction agreements.

Under s320 of the Act application can be made to the EPA for access to monitoring data which has been submitted to the EPA by licensees.

#### This licence is issued to:

PROTEN HOLDINGS PTY LIMITED

PO BOX 1746

NORTH SYDNEY NSW 2060

subject to the conditions which follow.

Licence - 20748



## **1** Administrative Conditions

#### A1 What the licence authorises and regulates

A1.1 This licence authorises the carrying out of the scheduled activities listed below at the premises specified in A2. The activities are listed according to their scheduled activity classification, fee-based activity classification and the scale of the operation.

Unless otherwise further restricted by a condition of this licence, the scale at which the activity is carried out must not exceed the maximum scale specified in this condition.

Scheduled Activity	Fee Based Activity	Scale
Livestock intensive activities	Bird accommodation	> 1000 T
		accommodation capacity

#### A2 Premises or plant to which this licence applies

A2.1 The licence applies to the following premises:

Premises / Details	
NARRANDERA POULTRY PRODUCTION COMPLEX	
STURT HIGHWAY	
UROLY	
NSW 2700	
LOT 1 DP 750898, LOT 41 DP 750898, LOT 42 DP 750898, LOT 44 DP 750898, LOT 45 DP 750898, LOT 54 DP 750898	

#### A3 Other activities

A3.1 This licence applies to all other activities carried on at the premises, including:

Ancillary Activity			
Waste storage			

#### A4 Information supplied to the EPA

A4.1 Works and activities must be carried out in accordance with the proposal contained in the licence application, except as expressly provided by a condition of this licence.

In this condition the reference to "the licence application" includes a reference to:

a) the applications for any licences (including former pollution control approvals) which this licence replaces under the Protection of the Environment Operations (Savings and Transitional) Regulation 1998; and

b) the licence information form provided by the licensee to the EPA to assist the EPA in connection with

Licence - 20748

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the issuing of this licence.

## 2 Discharges to Air and Water and Applications to Land

#### P1 Location of monitoring/discharge points and areas

- P1.1 The following utilisation areas referred to in the table below are identified in this licence for the purposes of the monitoring and/or the setting of limits for any application of solids or liquids to the utilisation area.
- P1.2 The following points referred to in the table are identified in this licence for the purposes of the monitoring and/or the setting of limits for discharges of pollutants to water from the point.

Water and land				
EPA Identi- fication no.	Type of Monitoring Point	Type of Discharge Point	Location Description	
2	Surface water quality monitoring		Sediment dam No 1 at PPU 1 identified in Figures 1 & 2 of the document titled "Narrandera Poultry Production Complex - Water Management Plan" dated March 2016, kept on EPA file EF16/1645 at DOC16/59520	
3	Surface water quality monitoring		Sediment dam No 3 at PPU 2 identified in Figures 1 & 2 of the document titled "Narrandera Poultry Production Complex - Water Management Plan" dated March 2016, kept on EPA file EF16/1645 at DOC16/59520	
4	Surface water quality monitoring		Sediment dam No 1 at PPU 3 identified in Figures 1 & 2 of the document titled "Narrandera Poultry Production Complex - Water Management Plan" dated March 2016, kept on EPA file EF16/1645 at DOC16/59520	
5	Surface water quality monitoring		Sediment dam No 3 at PPU 4 identified in Figures 1 & 2 of the document titled "Narrandera Poultry Production Complex - Water Management Plan" dated March 2016, kept on EPA file EF16/1645 at DOC16/59520	

#### Water and land

# **Environment Protection Licence**

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6	Surface water quality monitoring	Sediment dam No 1 at PPU 5 identified in Figures 1 & 2 of the document titled "Narrandera Poultry Production Complex - Water Management Plan" dated March 2016, kept on EPA file EF16/1645 at DOC16/59520
7	Groundwater quality monitoring	Piezometer labelled 'Piezo 1' identified in Figure 1 of the document titled "Narrandera Poultry Production Complex - Water Management Plan" dated March 2016, kept on EPA file EF16/1645 at DOC16/59520
8	Groundwater quality monitoring	Piezometer labelled 'Piezo 2' identified in Figure 1 of the document titled "Narrandera Poultry Production Complex - Water Management Plan" dated March 2016, kept on EPA file EF16/1645 at DOC16/59520
9	Groundwater quality monitoring	Piezometer labelled 'Piezo 3' identified in Figure 1 of the document titled "Narrandera Poultry Production Complex - Water Management Plan" dated March 2016, kept on EPA file EF16/1645 at DOC16/59520
10	Groundwater quality monitoring	Piezometer labelled 'Piezo 4' identified in Figure 1 of the document titled "Narrandera Poultry Production Complex - Water Management Plan" dated March 2016, kept on EPA file EF16/1645 at DOC16/59520
11	Groundwater quality monitoring	Piezometer labelled 'Piezo 5' identified in Figure 1 of the document titled "Narrandera Poultry Production Complex - Water Management Plan" dated March 2016, kept on EPA file EF16/1645 at DOC16/59520
12	Groundwater quality monitoring	Piezometer labelled 'Piezo 6' identified in Figure 1 of the document titled "Narrandera Poultry Production Complex - Water Management Plan" dated March 2016, kept on EPA file EF16/1645 at DOC16/59520

P1.3 The following points referred to in the table below are identified in this licence for the purposes of weather and/or noise monitoring and/or setting limits for the emission of noise from the premises.

Licence - 20748



EPA identi- fication no.	Type of monitoring point	Location description
1	Meteorological Station	Meteorological Station is identified in Figure 2 of the Operational Environmental Management Plan dated 19 April 2016 prepared for the Narrandera Poultry Production Complex

## 3 Limit Conditions

#### L1 Pollution of waters

L1.1 Except as may be expressly provided in any other condition of this licence, the licensee must comply with section 120 of the Protection of the Environment Operations Act 1997.

#### L2 Waste

- L2.1 The licensee must not cause, permit or allow any waste generated outside the premises to be received at the premises for storage, treatment, processing, reprocessing or disposal or any waste generated at the premises to be disposed of at the premises, except as expressly permitted by the licence.
- L2.2 This condition only applies to the storage, treatment, processing, reprocessing or disposal of waste at the premises if those activities require an environment protection licence.

#### L3 Noise limits

- L3.1 Noise from the premises must not exceed an Leq (15 minute) noise emission criterion of 35dB(A), except as expressly provided by this licence.
- L3.2 Noise from the premises is to be measured at the nearest sensitive receptor not associated with the premises to determine compliance with this condition.
- L3.3 The noise emission limits identified in this licence apply under all meteorological conditions except:a) during rain and wind speeds (at 10m height) greater than 3m/s; andb) under "non-significant weather conditions".
- Note: Field meteorological indicators for non-significant weather conditions are described in the NSW Industrial Noise Policy, Chapter 5 and Appendix E in relation to wind and temperature inversions.

#### L4 Other limit conditions

- L4.1 The total number of birds accommodated at the premises, at any one time, must not exceed 3,920,000.
- L4.2 All waste water treatment, storage and terminal ponds must have a minimum pond base and wall

Licence - 20748



permeability of 1x10-9 metres per second or be artificially lined with an impermeable high density polyethylene liner.

L4.3 All waste water collection ponds must be designed, constructed and maintained to accommodate the stormwater runoff volume generated in a 1 in 20 year, 24 hour rainfall event using a volumetric runoff coefficient of 0.8.

## 4 Operating Conditions

#### O1 Activities must be carried out in a competent manner

- O1.1 Licensed activities must be carried out in a competent manner.
  - This includes:

a) the processing, handling, movement and storage of materials and substances used to carry out the activity; and

b) the treatment, storage, processing, reprocessing, transport and disposal of waste generated by the activity.

#### O2 Maintenance of plant and equipment

O2.1 All plant and equipment installed at the premises or used in connection with the licensed activity:a) must be maintained in a proper and efficient condition; andb) must be operated in a proper and efficient manner.

#### O3 Dust

- O3.1 Activities occurring in or on the premises must be carried out in a manner that will minimise the generation, or emission from the premises, of wind-blown or traffic generated dust.
- O3.2 Trucks entering and leaving the premises that are carrying loads must be covered at all times, except during loading and unloading.

#### O4 Processes and management

O4.1 There must be a minimum of 36 hours between the commencement of broiler accommodation in each Poultry Production Unit.

#### O5 Waste management

O5.1 The premises must:

- a) Have sufficient on site chillers to store all general bird mortalities (~1% of birds on site at any time);
- b) Remove all mortalities found in the sheds immediately to the chillers; and
- c) Ensure that when chillers are in use they are kept at  $\leq$  4 degrees Celsius.

## **Environment Protection Licence**

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- O5.2 Any bird mortalities generated at the premises are not permitted to be buried on site. Bird mortalities must be disposed or processed at a facility that can lawfully receive the waste
- Note: This condition does not apply if the applicant is directed by the NSW Department of Primary Industries to bury the birds on site.
- O5.3 All waste water and contaminated stormwater must be captured in a waste water collection system and be prevented from leaving the premises.
- Note: This condition does not apply in rainfall events which create greater volumes of stormwater than an event with an average recurrence interval of a local 1 in 20 year, 24 hour rain event.

## 5 Monitoring and Recording Conditions

#### M1 Monitoring records

- M1.1 The results of any monitoring required to be conducted by this licence or a load calculation protocol must be recorded and retained as set out in this condition.
- M1.2 All records required to be kept by this licence must be:
  - a) in a legible form, or in a form that can readily be reduced to a legible form;
  - b) kept for at least 4 years after the monitoring or event to which they relate took place; and
  - c) produced in a legible form to any authorised officer of the EPA who asks to see them.
- M1.3 The following records must be kept in respect of any samples required to be collected for the purposes of this licence:
  - a) the date(s) on which the sample was taken;
  - b) the time(s) at which the sample was collected;
  - c) the point at which the sample was taken; and
  - d) the name of the person who collected the sample.

#### M2 Requirement to monitor concentration of pollutants discharged

- M2.1 For each monitoring/discharge point or utilisation area specified below (by a point number), the licensee must monitor (by sampling and obtaining results by analysis) the concentration of each pollutant specified in Column 1. The licensee must use the sampling method, units of measure, and sample at the frequency, specified opposite in the other columns:
- M2.2 Water and/ or Land Monitoring Requirements

#### POINT 2,3,4,5,6

Pollutant	Units of measure	Frequency	Sampling Method
Electrical	microsiemens per	Yearly	Grab sample
conductivity	centimetre		

# **Environment Protection Licence**

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Nitrogen (total)	milligrams per litre	Yearly	Grab sample
pH	pН	Yearly	In situ
Phosphorus (total)	milligrams per litre	Yearly	Grab sample
Total suspended solids	milligrams per litre	Yearly	Grab sample

#### POINT 7,8,9,10,11,12

Pollutant	Units of measure	Frequency	Sampling Method
Ammonia	milligrams per litre	Yearly	Representative sample
Calcium	milligrams per litre	Yearly	Representative sample
Chloride	milligrams per litre	Yearly	Representative sample
Electrical conductivity	microsiemens per centimetre	Yearly	Representative sample
Magnesium	milligrams per litre	Yearly	Representative sample
Nitrate	milligrams per litre	Yearly	Representative sample
pН	рН	Yearly	Representative sample
Phosphorus	milligrams per litre	Yearly	Representative sample
Potassium	milligrams per litre	Yearly	Representative sample
Sodium	milligrams per litre	Yearly	Representative sample
Sulfate	milligrams per litre	Yearly	Representative sample
Total dissolved solids	milligrams per litre	Yearly	Representative sample

#### M3 Testing methods - concentration limits

M3.1 Subject to any express provision to the contrary in this licence, monitoring for the concentration of a pollutant discharged to waters or applied to a utilisation area must be done in accordance with the Approved Methods Publication unless another method has been approved by the EPA in writing before any tests are conducted.

#### M4 Weather monitoring

M4.1 At the point(s) identified below, the licensee must monitor (by sampling and obtaining results by analysis) the parameters specified in Column 1 of the table below, using the corresponding sampling method, units of measure, averaging period and sampling frequency, specified opposite in the Columns 2, 3, 4 and 5 respectively.

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#### POINT 1

Parameter	Sampling method	Units of measure	Averaging period	Frequency
Wind Speed at 10 metres	AM-2 & AM-4	metres per second	15 minutes	Continuous
Wind Direction at 10 metres	AM-2 & AM-4	Degrees	15 minutes	Continuous
Temperature at 10 metres	AM-4	degrees Celsius	15 minutes	Continuous
Temperature at 2 metres	AM-4	degrees Celsius	15 minutes	Continuous
Rainfall	AM-4	millimetres per hour	15 minutes	Continuous

#### M5 Recording of pollution complaints

- M5.1 The licensee must keep a legible record of all complaints made to the licensee or any employee or agent of the licensee in relation to pollution arising from any activity to which this licence applies.
- M5.2 The record must include details of the following:
  - a) the date and time of the complaint;
  - b) the method by which the complaint was made;

c) any personal details of the complainant which were provided by the complainant or, if no such details were provided, a note to that effect;

d) the nature of the complaint;

e) the action taken by the licensee in relation to the complaint, including any follow-up contact with the complainant; and

- f) if no action was taken by the licensee, the reasons why no action was taken.
- M5.3 The record of a complaint must be kept for at least 4 years after the complaint was made.
- M5.4 The record must be produced to any authorised officer of the EPA who asks to see them.

#### M6 Telephone complaints line

- M6.1 The licensee must operate during its operating hours a telephone complaints line for the purpose of receiving any complaints from members of the public in relation to activities conducted at the premises or by the vehicle or mobile plant, unless otherwise specified in the licence.
- M6.2 The licensee must notify the public of the complaints line telephone number and the fact that it is a complaints line so that the impacted community knows how to make a complaint.
- M6.3 The preceding two conditions do not apply until 3 months after the date of the issue of this licence.

# **Environment Protection Licence**

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## 6 Reporting Conditions

#### R1 Annual return documents

- R1.1 The licensee must complete and supply to the EPA an Annual Return in the approved form comprising: 1, a Statement of Compliance,
  - 2. a Monitoring and Complaints Summary,
  - 3. a Statement of Compliance Licence Conditions,
  - 4. a Statement of Compliance Load based Fee,
  - 5. a Statement of Compliance Requirement to Prepare Pollution Incident Response Management Plan,
  - 6. a Statement of Compliance Requirement to Publish Pollution Monitoring Data,
  - 7. a Statement of Compliance Environmental Management Systems and Practices; and
  - 8. a Statement of Compliance Environmental Improvement Works.

At the end of each reporting period, the EPA will provide to the licensee a copy of the form that must be completed and returned to the EPA.

R1.2 An Annual Return must be prepared in respect of each reporting period, except as provided below.

- Note: The term "reporting period" is defined in the dictionary at the end of this licence. Do not complete the Annual Return until after the end of the reporting period.
- R1.3 Where this licence is transferred from the licensee to a new licensee:

a) the transferring licensee must prepare an Annual Return for the period commencing on the first day of the reporting period and ending on the date the application for the transfer of the licence to the new licensee is granted; and

b) the new licensee must prepare an Annual Return for the period commencing on the date the application for the transfer of the licence is granted and ending on the last day of the reporting period.

Note: An application to transfer a licence must be made in the approved form for this purpose.

R1.4 Where this licence is surrendered by the licensee or revoked by the EPA or Minister, the licensee must prepare an Annual Return in respect of the period commencing on the first day of the reporting period and ending on:

a) in relation to the surrender of a licence - the date when notice in writing of approval of the surrender is given; or

b) in relation to the revocation of the licence - the date from which notice revoking the licence operates.

- R1.5 The Annual Return for the reporting period must be supplied to the EPA by registered post not later than 60 days after the end of each reporting period or in the case of a transferring licence not later than 60 days after the date the transfer was granted (the 'due date').
- R1.6 The licensee must retain a copy of the Annual Return supplied to the EPA for a period of at least 4 years after the Annual Return was due to be supplied to the EPA.
- R1.7 Within the Annual Return, the Statements of Compliance must be certified and the Monitoring and Complaints Summary must be signed by:

a) the licence holder; or

b) by a person approved in writing by the EPA to sign on behalf of the licence holder.

# **Environment Protection Licence**

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#### R2 Notification of environmental harm

- R2.1 Notifications must be made by telephoning the Environment Line service on 131 555.
- Note: The licensee or its employees must notify all relevant authorities of incidents causing or threatening material harm to the environment immediately after the person becomes aware of the incident in accordance with the requirements of Part 5.7 of the Act.
- R2.2 The licensee must provide written details of the notification to the EPA within 7 days of the date on which the incident occurred.

#### R3 Written report

R3.1 Where an authorised officer of the EPA suspects on reasonable grounds that:
a) where this licence applies to premises, an event has occurred at the premises; or
b) where this licence applies to vehicles or mobile plant, an event has occurred in connection with the carrying out of the activities authorised by this licence,

and the event has caused, is causing or is likely to cause material harm to the environment (whether the harm occurs on or off premises to which the licence applies), the authorised officer may request a written report of the event.

- R3.2 The licensee must make all reasonable inquiries in relation to the event and supply the report to the EPA within such time as may be specified in the request.
- R3.3 The request may require a report which includes any or all of the following information:

a) the cause, time and duration of the event;

b) the type, volume and concentration of every pollutant discharged as a result of the event;

c) the name, address and business hours telephone number of employees or agents of the licensee, or a specified class of them, who witnessed the event;

d) the name, address and business hours telephone number of every other person (of whom the licensee is aware) who witnessed the event, unless the licensee has been unable to obtain that information after making reasonable effort;

e) action taken by the licensee in relation to the event, including any follow-up contact with any complainants;

f) details of any measure taken or proposed to be taken to prevent or mitigate against a recurrence of such an event; and

g) any other relevant matters.

R3.4 The EPA may make a written request for further details in relation to any of the above matters if it is not satisfied with the report provided by the licensee. The licensee must provide such further details to the EPA within the time specified in the request.

## 7 General Conditions

### G1 Copy of licence kept at the premises or plant

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- G1.1 A copy of this licence must be kept at the premises to which the licence applies.
- G1.2 The licence must be produced to any authorised officer of the EPA who asks to see it.
- G1.3 The licence must be available for inspection by any employee or agent of the licensee working at the premises.

## 8 Special Conditions

#### E1 Odour validation audit

- E1.1 When directed by the EPA, the licensee must submit an Odour Validation Report (OVR) to the EPA. The OVR must:
  - Be completed by a suitably qualified independent expert experienced in the characterisation and treatment of odours from chicken broiler farms;
  - Include a summary of any odour complaints received and actions taken to reduce odour emissions where complaints are verified;
  - Where possible include a field odour survey that characterises the frequency, intensity, duration, offensiveness, location and extent of off-site odours;

 Benchmark the design and management practices at the premises against industry best practice for minimising odour emissions, including investigation of newly developed and emerging control technology;

• Within six (6) weeks after being directed by the EPA, present a report to the EPA that determines compliance with Section 129 of the *Protection of the Environment Operations Act 1997* and recommend if additional mitigation measures are required;

• Consider odour generation associated with stocking densities, rates and PPU population practices outlined in condition A6 of the development consent;

• Where additional odour control measures are recommended, or odour issues are identified as being from stocking density, rates or PPU population practices, appropriate mitigation measures or management practices must be nominated to ensure that odour is minimised as far as practicable; and

Any odour mitigation measures nominated must include a timetable for implementation.

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## Dictionary

#### General Dictionary

Means the three day geometric mean, which is calculated by multiplying the results of the analysis of three samples collected on consecutive days and then taking the cubed root of that amount. Where one or more of the samples is zero or below the detection limit for the analysis, then 1 or the detection limit respectively should be used in place of those samples
Means the Protection of the Environment Operations Act 1997
Means a scheduled or non-scheduled activity within the meaning of the Protection of the Environment Operations Act 1997
Has the same meaning as in the Protection of the Environment Operations (General) Regulation 2009
Together with a number, means an ambient air monitoring method of that number prescribed by the Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales.
Australian Map Grid
The anniversary date is the anniversary each year of the date of issue of the licence. In the case of a licence continued in force by the Protection of the Environment Operations Act 1997, the date of issue of the licence is the first anniversary of the date of issue or last renewal of the licence following the commencement of the Act.
Is defined in R1.1
Has the same meaning as in the Protection of the Environment Operations (General) Regulation 2009
Has the same meaning as in the Protection of the Environment Operations (General) Regulation 2009
Means biochemical oxygen demand
Together with a number, means a continuous emission monitoring method of that number prescribed by the Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales.
Means chemical oxygen demand
Unless otherwise specifically approved in writing by the EPA, a sample consisting of 24 individual samples collected at hourly intervals and each having an equivalent volume.
Means conductivity
Has the same meaning as in the Protection of the Environment Operations Act 1997
Has the same meaning as in the Protection of the Environment Administration Act 1991
Means Environment Protection Authority of New South Wales.
Means the numbered short descriptions in Schedule 1 of the Protection of the Environment Operations (General) Regulation 2009.
Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997

Licence - 20748



flow weighted composite sample	Means a sample whose composites are sized in proportion to the flow at each composites time of collection.
general solid waste (putrescible)	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environmen t Operations Act 1997
grab sample	Means a single sample taken at a point at a single time
hazardous waste	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
licensee	Means the licence holder described at the front of this licence
load calculation protocol	Has the same meaning as in the Protection of the Environment Operations (General) Regulation 2009
local authority	Has the same meaning as in the Protection of the Environment Operations Act 1997
material harm	Has the same meaning as in section 147 Protection of the Environment Operations Act 1997
MBAS	Means methylene blue active substances
Minister	Means the Minister administering the Protection of the Environment Operations Act 1997
mobile plant	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
motor vehicle	Has the same meaning as in the Protection of the Environment Operations Act 1997
O&G	Means oil and grease
percentile [in relation to a concentration limit of a sample]	Means that percentage [eg.50%] of the number of samples taken that must meet the concentration limit specified in the licence for that pollutant over a specified period of time. In this licence, the specified period of time is the Reporting Period unless otherwise stated in this licence.
plant	Includes all plant within the meaning of the Protection of the Environment Operations Act 1997 as well as motor vehicles.
pollution of waters [or water pollution]	Has the same meaning as in the Protection of the Environment Operations Act 1997
premises	Means the premises described in condition A2.1
public authority	Has the same meaning as in the Protection of the Environment Operations Act 1997
regional office	Means the relevant EPA office referred to in the Contacting the EPA document accompanying this licence
reporting period	For the purposes of this licence, the reporting period means the period of 12 months after the issue of the licence, and each subsequent period of 12 months. In the case of a licence continued in force by the Protection of the Environment Operations Act 1997, the date of issue of the licence is the first anniversary of the date of issue or last renewal of the licence following the commencement of the Act.
restricted solid waste	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
scheduled activity	Means an activity listed in Schedule 1 of the Protection of the Environment Operations Act 1997
special waste	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
тм	Together with a number, means a test method of that number prescribed by the Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales.
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# **Environment Protection Licence**

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TSP	Means total suspended particles
TSS	Means total suspended solids
Type 1 substance	Means the elements antimony, arsenic, cadmium, lead or mercury or any compound containing one or more of those elements
Type 2 substance	Means the elements beryllium, chromium, cobalt, manganese, nickel, selenium, tin or vanadium or any compound containing one or more of those elements
utilisation area	Means any area shown as a utilisation area on a map submitted with the application for this licence
waste	Has the same meaning as in the Protection of the Environment Operations Act 1997
waste type	Means liquid, restricted solid waste, general solid waste (putrescible), general solid waste (non - putrescible), special waste or hazardous waste

Mr Jason Price

**Environment Protection Authority** 

(By Delegation) Date of this edition: 22-April-2016

#### **End Notes**

# APPENDIX C



PROTEN HOLDINGS PTY LIMITED PO BOX 1746 NORTH SYDNEY NSW 2060

23-Apr-2017

#### LICENCE 20748 - ANNIVERSARY NOTICE

I refer to Environment Protection Licence No. 20748, issued to PROTEN HOLDINGS PTY LIMITED by the Environment Protection Authority (EPA), under the *Protection of the Environment Operations Act 1997* (the POEO Act).

This letter is to remind you of the annual licensing obligations, in particular the requirement to submit an Annual Return and annual licence fees.

#### Annual Return

Condition R1.5 of your licence requires that you complete and submit an Annual Return within 60 days of the end of each reporting period.

You can complete and submit your Annual Return online via eConnect EPA - the EPA's licensing portal at: www.epa.nsw.gov.au/licensing/econnectepa.htm. Your environment protection licence Annual Return is due to the EPA by: 20-Jun-2017 If you do not submit the Annual Return by the due date you may receive a fine of up to \$3000.

If you are unable to submit your Annual Return online, you must complete the attached Annual Return and send it to the EPA by <u>Registered Post</u> to the following address:

Regulatory and Compliance Support Unit Environment Protection Authority PO Box A290 SYDNEY SOUTH NSW 1232

> PO Box A290 Sydney South NSW 1232 59-61 Goulburn St Sydney NSW 2000 Tel (02) 9995 5700 Fax (02) 9995 5922 TTY (02) 9211 4723 ABN 43 692 285 758 www.epa.nsw.gov.au

#### Licence Fees

Once your Annual Return is received by the EPA, the information provided will inform the EPA's determination of your environmental management category which the EPA will use to calculate the annual licence administrative fee. Once the EPA has determined your annual fee a Tax Invoice/Statement will be sent to you.

If the licensed activities are subject to Load-Based Licensing (LBL), payment of a load-based fee may also be required. The EPA will calculate the load based fee using the data you provide in the Annual Return. If the payment of a load based fee is required a separate Tax Invoice/Statement will be sent to you.

The licence fees will need to be paid to the EPA by 19-Aug-2017.

For information on risk-based licensing please refer to the EPA's website at: <a href="http://www.epa.nsw.gov.au/licensing/licencereg.htm">www.epa.nsw.gov.au/licensing/licencereg.htm</a>.

As of 1 July 2016 the EPA will not consider environmental improvement works in the calculation of the environmental management category. For further information regarding this change please refer to <a href="https://www.epa.nsw.gov.au/licensing/EMCP.htm">www.epa.nsw.gov.au/licensing/EMCP.htm</a>.

The EPA is committed to assisting the licensed community to meet its obligations under the POEO Act. Please refer to: <u>www.epa.nsw.gov.au/licensing</u> for guidance on completing annual returns. If you have any questions relating to the submission of the Annual Return or payment of the licence fee, please contact the EPA on 02 9995 5700.

Yours sincerely

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CHRISTOPHER KELLY Head Regulatory and Compliance Support Unit Environment Protection Authority

PROTEN HOLDINGS PTY LIMITED



## ANNUAL RETURN

LICENCE NO	20748
LICENCE HOLDER	PROTEN HOLDINGS PTY LIMITED
REPORTING PERIOD	22-Apr-2016 to 21-Apr-2017

If your licence has been transferred, suspended, surrendered or revoked by the EPA during this reporting period, cross out the dates above and specify the new dates to which this Annual Return relates below:

REVISED REPORTING PERIOD \_\_\_\_\_ / \_\_\_\_ to \_\_\_\_\_ / \_\_\_\_\_ to \_\_\_\_\_ / \_\_\_\_\_

(Note: the revised reporting period also needs to be entered in Section H)

THIS ANNUAL RETURN MUST BE RECEIVED BY THE EPA BEFORE 21-Jun-2017

Your Annual Return must be completed, including certification in Section H, and submitted to the EPA no later than 60 Days after the end of the reporting period for your licence.

Failure to submit this Annual Return within 60 days after the reporting period ends may result in:

the issue of a Penalty Notice for \$1500 (individuals) or \$3000 (corporations);

OR

prosecution.

Please send your completed Annual Return by Registered Post to:

Regulatory and Compliance Support Unit Environment Protection Authority PO Box A290 SYDNEY SOUTH NSW 1232

It is an offence to supply any information in this form to the EPA that is false or misleading in a material respect, or to certify a statement that is false or misleading in a material respect.

THERE IS A MAXIMUM PENALTY OF \$250,000 FOR A CORPORATION OR \$120,000 FOR AN INDIVIDUAL.

Details provided in this Annual Return will be available on the EPA's Public Register in accordance with section 308 of the Protection of the Environment Operations Act 1997.

PROTEN HOLDINGS PTY LIMITED



Use the checklist below to ensure that you have completed your Annual Return correctly. (  $\checkmark$  the boxes)

	CHECKLIST			
Section A:	All licence details are correct			
Section B1:	You have entered the correct number in the complaints table			
Section B2 – B3:	If there are tables, you have provided the required details			
Section C:	You have answered question 1, and 2 if applicable			
Section D:	If applicable, you have completed all load calculation worksheets			
Section E:	You have answered question 1, 2, 3, 4, 5 and 6 if applicable			
Section F:	You have answered question 1, 2 and 3 if applicable			
Section G:	You have answered question 1 and question 2, 3 and 4 or question 5 through to 11 if applicable			
Section H:	The Annual Return has been signed by appropriate person(s) and, if applicable, the revised reporting period entered			
Make a copy of the completed Annual Return and keep it with your licence records				

Please send your completed Annual Return by Registered Post to:

Regulatory and Compliance Support Unit Environment Protection Authority PO Box A290 SYDNEY SOUTH NSW 1232

PROTEN HOLDINGS PTY LIMITED



## A Statement of Compliance - Licence Details

ALL licence holders must check that the licence details in Section A are correct

If there are changes to any of these detailsyou must advise the EPA and apply as soon as possible for a variation to your licence or for a licence transfer.

Licence variation and transfer application forms are available on the EPA website at: <u>http://www.epa.nsw.gov.au/licensing</u>, or from regional offices of the EPA, or by contacting us on telephone 02 9995 5700.

If you are applying to vary or transfer your licence you must still complete this Annual Return.

#### A1 Licence Holder

Licence Number	20748
Licence Holder	PROTEN HOLDINGS PTY LIMITED
Trading Name (if applicable)	
ABN	98 437 402 706

#### A2 Premises to which Licence Applies (if applicable)

Common Name (if any)	Narrandera Poultry Production Complex
Premises	STURT HIGHWAY UROLY NSW 2700

#### A3 Activities to which Licence Applies

Livestock intensive activities

#### A4 Other Activities (if applicable)

Waste storage

#### A5 Fee-Based Activity Classifications

Note that the fee based activity classification is used to calculate the administrative fee.

Fee-based activity	Activity scale	Unit of measure
Bird accommodation	> 1,000.00	T accommodation capacity

#### A6 Assessable Pollutants (Not Applicable)

PROTEN HOLDINGS PTY LIMITED



#### Monitoring and Complaints Summary B

#### **B1** Number of Pollution Complaints

Number of complaints recorded by the licensee during the reporting period. ()If no complaints were received enter nil in the attached box, otherwise complete the table below.

Pollution Complaint Category	Number of Complaints
Air	where
Water	NUT,
Noise	1.400 March 1.100
Waste	-
Other	reality.

#### B2 Concentration Monitoring Summary

For each monitoring point identified in your licence complete all the details for each pollutant listed in the tables provided below.

If concentration monitoring is not required by your licence, no tables will appear below. Note that this does not exclude the need to conduct appropriate concentration monitoring of assessable pollutants as required by load-based licensing (if applicable).

Monitoring Point 2 - Construction not completed

during reporting

Surface water quality monitoring, Sediment dam No 1 at PPU 1 identified in Figures 1 & 2 of the document titled "Narrandera Poultry Production Complex - Water Management Plan" dated March 2016, kept on EPA file EF16/1645 at DOC16/59520

Pollutant	Unit of measure	samples	No. of samples you collected and analysed	Lowest sample value	Mean of sample	Highest sample value
Electrical conductivity	microsiemen s per centimetre					

PROTEN HOLDINGS PTY LIMITED



Nitrogen (total)	milligrams per litre				
рН	Ηα				
Phosphorus (total)	milligrams per litre				
Total suspended solids	milligrams per litre				
	2	1	1	 1	١.

Monitoring Point 3 - Construction not completed during reporting Surface water quality monitoring, Sediment dam No 3 at PPU 2 identified in Figures 1 & 2 of the document period titled "Narrandera Poultry Production Complex - Water Management Plan" dated March 2016, kept on EPA file EF16/1645 at DOC16/59520

Pollutant	Unit of measure	No. of samples required by licence	No. of samples you collected and analysed	Lowest sample value	Mean of sample	Highest sample value
Electrical conductivity	microsiemen s per centimetre					
Nitrogen (total)	milligrams per litre					
рН	рН					
Phosphorus (total)	milligrams per litre					
Total suspended solids	milligrams per litre					

Monitoring Point 4 - Construction not completed during reporting

Surface water quality monitoring, Sediment dam No 1 at PPU 3 identified in Figures 1 & 2 of the document titled "Narrandera Poultry Production Complex - Water Management Plan" dated March 2016, kept on EPA file EF16/1645 at DOC16/59520

Pollutant Unit of measure	No. of samples required by licence	No. of samples you collected and analysed	Lowest sample value	Mean of sample	Highest sample value
---------------------------	---------------------------------------------	----------------------------------------------------	------------------------	-------------------	-------------------------





Electrical conductivity	microsiemen s per centimetre			
Nitrogen (total)	milligrams per litre			
рН	Η			
Phosphorus (total)	milligrams per litre			
Total suspended solids	milligrams per litre			

#### Monitoring Point 5

Surface water quality monitoring, Sediment dam No 3 at PPU 4 identified in Figures 1 & 2 of the document titled "Narrandera Poultry Production Complex - Water Management Plan" dated March 2016, kept on EPA file EF16/1645 at DOC16/59520

Pollutant	Unit of measure	No. of samples required by licence	No. of samples you collected and analysed	Lowest sample value	Mean of sample	Highest sample value
Electrical conductivity	microsiemen s per centimetre	)	4	137	162.75	213
Nitrogen (total)	milligrams per litre		4	2	3.5	5
Ηq	рН	)	4	7.5	7.6	7.7
Phosphorus (total)	milligrams per litre		4	0.53	0.66	0.8
Total suspended solids	milligrams per litre		4	604	1,022.5	1,360

#### **Monitoring Point 6**

Surface water quality monitoring, Sediment dam No 1 at PPU 5 identified in Figures 1 & 2 of the document titled "Narrandera Poultry Production Complex - Water Management Plan" dated March 2016, kept on EPA file EF16/1645 at DOC16/59520



PROTEN HOLDINGS PTY LIMITED

Pollutant	Unit of measure	No. of samples required by licence	No. of samples you collected and analysed	Lowest sample value	Mean of sample	Highest sample value
Electrical conductivity	microsiemen s per centimetre	Alexandre	4	140	186.25	275
Nitrogen (total)	milligrams per litre		4	<2	4.5	7
рН	рН	)	4	7.4	7.58	7.8
Phosphorus (total)	milligrams per litre	)	4	0.2	0.49	0.89
Total suspended solids	milligrams per litre		4	89	484	1,330

#### **Monitoring Point 7**

Groundwater quality monitoring, Piezometer labelled 'Piezo 1' identified in Figure 1 of the document titled "Narrandera Poultry Production Complex - Water Management Plan" dated March 2016, kept on EPA file EF16/1645 at DOC16/59520

Pollutant	Unit of measure	No. of samples required by licence	No. of samples you collected and analysed	Lowest sample value	Mean of sample	Highest sample value
Ammonia	milligrams per litre		2	20.1	(0.)	20.1
Calcium	milligrams per litre		2	4.43	4.63	4.82
Chloride	milligrams per litre	)	2	13.3	14.45	15.6
Electrical conductivity	microsiemen s per centimetre		2	190	190	190
Magnesium	milligrams per litre		2	3.2	3.44	3.68
Nitrate	milligrams per litre		2	< 0.1	0.55	<)

#### PROTEN HOLDINGS PTY LIMITED

Н	рН	١	2	7.1	7:15	7.2
Phosphorus	milligrams per litre	)	2	0.04	0.1	0.16
Potassium	milligrams per litre	1	2	] - [	1.7	2.3
Sodium	milligrams per litre	)	2	31.6	32.45	33.3
Sulfate	milligrams per litre		2	4.6	4.8	5
Total dissolved solids	milligrams per litre	)	2	135	141.5	148

#### Monitoring Point 8

Groundwater quality monitoring, Piezometer labelled 'Piezo 2' identified in Figure 1 of the document titled "Narrandera Poultry Production Complex - Water Management Plan" dated March 2016, kept on EPA file EF16/1645 at DOC16/59520

Pollutant	Unit of measure	No. of samples required by licence	No. of samples you collected and analysed	Lowest sample value	Mean of sample	Highest sample value
Ammonia	milligrams per litre	)	2	20.1	$\langle 0 \cdot  $	$\langle 0 \cdot  $
Calcium	milligrams per litre	1		5.95	5.95	5.95
Chloride	milligrams per litre	)	2	19.2	44.15	69.1
Electrical conductivity	microsiemen s per centimetre		2	179	227.5	276
Magnesium	milligrams per litre	١	2	3.52	4.04	4.56
Nitrate	milligrams per litre		2	20.1	0.55	< 1
рН	рН		2	6.9	7.05	7.2



MS N E P A

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Phosphorus	milligrams per litre		2	0.02	0.05	0.08
Potassium	milligrams per litre	)	2	1.1	1-2	1.3
Sodium	milligrams per litre		2	17.2	32.95	48.7
Sulfate	milligrams per litre		)	5.5	5.5	5.5
Total dissolved solids	milligrams per litre		2	141	156.5	172

#### **Monitoring Point 9**

Groundwater quality monitoring, Piezometer labelled 'Piezo 3' identified in Figure 1 of the document titled "Narrandera Poultry Production Complex - Water Management Plan" dated March 2016, kept on EPA file EF16/1645 at DOC16/59520

Pollutant	Unit of measure	No. of samples required by licence	No. of samples you collected and analysed	Lowest sample value	Mean of sample	Highest sample value
Ammonia	milligrams per litre	1	2	<0.1	20.1	20.1
Calcium	milligrams per litre		2	5.71	6.49	7.26
Chloride	milligrams per litre		2	14	17.55	21.1
Electrical conductivity	microsiemen s per centimetre		2	182	203	224
Magnesium	milligrams per litre		2	4.57	5.06	5.55
Nitrate	milligrams per litre	)	2	<0·1	0.55	<1.
рН	рН	)	1	6-8	6.8	6.8
Phosphorus	milligrams per litre	)	2	0.03	0.06	0.09

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Potassium	milligrams per litre		2	1.2	2	2.8
Sodium	milligrams per litre	)	2	27.2	29.2	31.2
Sulfate	milligrams per litre	)	2	3.4	6.2	9
Total dissolved solids	milligrams per litre			154	154	154

#### Monitoring Point 10

Groundwater quality monitoring, Piezometer labelled 'Piezo 4' identified in Figure 1 of the document titled "Narrandera Poultry Production Complex - Water Management Plan" dated March 2016, kept on EPA file EF16/1645 at DOC16/59520

Pollutant	Unit of measure	No. of samples required by licence	No. of samples you collected and analysed	Lowest sample value	Mean of sample	Highest sample value
Ammonia	milligrams per litre		2	<0.1	0.3	0.5
Calcium	milligrams per litre		)	17.6	17.6	17.6
Chloride	milligrams per litre		2	13	35.3	57.6
Electrical conductivity	microsiemen s per centimetre		2	250	408	566
Magnesium	milligrams per litre	)	2	5.88	10.69	15.5
Nitrate	milligrams per litre		2	20.1	0.55	<1
рН	рH		2	6.7	6.85	7
Phosphorus	milligrams per litre		2	0.07	0.96	1.85
Potassium	milligrams per litre		2	2	5.25	8.5



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Sodium	milligrams per litre	)	2	24.6	60.3	96
Sulfate	milligrams per litre	)		10.2	10.2	10.2
Total dissolved solids	milligrams per litre	1	2	188	280	372

#### **Monitoring Point 11**

Groundwater quality monitoring, Piezometer labelled 'Piezo 5' identified in Figure 1 of the document titled "Narrandera Poultry Production Complex - Water Management Plan" dated March 2016, kept on EPA file EF16/1645 at DOC16/59520

Pollutant	Unit of measure	No. of samples required by licence	No. of samples you collected and analysed	Lowest sample value	Mean of sample	Highest sample value
Ammonia	milligrams per litre	)	2	20.1	(0.1	20.1
Calcium	milligrams per litre			9.34	9.34	9.34
Chloride	milligrams per litre	)	2	13.7	14:45	15.2
Electrical conductivity	microsiemen s per centimetre	)	2	178	212	246
Magnesium	milligrams per litre	)	2	3.66	5.36	7.05
Nitrate	milligrams per litre	)	2	0.1	0.55	21
рH	рН		2	6.7	6.8	6.9
Phosphorus	milligrams per litre		2	0.07	0.075	0.08
Potassium	milligrams per litre		2	1.2	1.5	1.8
Sodium	milligrams per litre		2	17.7	28.2	38.7

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Sulfate	milligrams per litre	1	5.4	5.4	5.4
Total dissolved solids	milligrams per litre	2	139	156.5	174

#### Monitoring Point 12

Groundwater quality monitoring, Piezometer labelled 'Piezo 6' identified in Figure 1 of the document titled "Narrandera Poultry Production Complex - Water Management Plan" dated March 2016, kept on EPA file EF16/1645 at DOC16/59520

Pollutant	Unit of measure	No. of samples required by licence	No. of samples you collected and analysed	Lowest sample value	Mean of sample	Highest sample value
Ammonia	milligrams per litre	)	2	20.1	0.15	0.2
Calcium	milligrams per litre		1	13	13	13
Chloride	milligrams per litre		2	12.6	24.35	36.1
Electrical conductivity	microsiemen s per centimetre		2	252	299.5	347
Magnesium	milligrams per litre	1	2	6.06	7.64	9.21
Nitrate	milligrams per litre		2	0-2	0.6	$\langle  $
рН	рН		2	6-6	6.7	6.8
Phosphorus	milligrams per litre		2	0.08	0.085	0.09
Potassium	milligrams per litre		2	2	2.15	2.3
Sodium	milligrams per litre		2	24.8	37.7	50.6
Sulfate	milligrams per litre		1	6	6	6

PROTEN HOLDINGS PTY LIMITED

	milligrams per litre	)		179	179	179
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**Monitoring Point 1** 

Meteorological Station, Narrandera Poultry Production Complex, Meteorological Station is identified in Figure 2 of the Operational Environmental Management Plan dated 19 April 2016 prepared for the Narrandera Poultry Production Complex

Parameter	Units of measure	Number of samples required by Licence	Number of samples collected and analysed	Lowest sample value	Mean of sample	Highest sample value
Wind Speed at 10 metres	metres per second	35,040	47,629	Ô	3.4	23.22
Wind Direction at 10 metres	Degrees	35,040	47,629	0	182.05	360
Temperatur e at 10 metres	degrees Celsius	35,040	47,629	0.2	17.99	44.8
Temperatur e at 2 metres	degrees Celsius	35,040	33,247	0.8	19.94	45.6
Rainfall	millimetres per hour	35;040	47,629	O	0.013	12.6

#### B3 Volume or Mass Monitoring Summary

For each monitoring point identified in your licence complete the details of the volume or mass monitoring indicated in the tables provided below.

If volume or mass monitoring is not required by your licence, no tables will appear below.

Note that this does not exclude the need to conduct appropriate concentration monitoring of assessable pollutants as required by load-based licensing (if applicable).

EPA

**NSN** 

PROTEN HOLDINGS PTY LIMITED



NO NO

## **C** Statement of Compliance - Licence Conditions

#### C1 Compliance with Licence Conditions

( I the boxes)

1 Were all conditions of the licence complied with (including monitoring and reporting requirements)? □ Yes

(✓ a box)

2	If you answered 'No' to question 1, please supply the following details for each non format, or similar format , provided on the following page.	-compliance in the
	initial format, provided of the following page.	

Please use a separate page for each licence condition that has not been complied with.

- a) What was the specific licence condition that was not complied with?
- b) What were the particulars of the non -compliance?
- c) What were the date(s) when the non -compliance occurred, if applicable?
- d) If relevant, what was the precise location where the non -compliance occurred?

Attach a map or diagram to the Statement to show the precise location.

- e) What were the registrati on numbers of any vehicles or the chassis number of any mobile plant involved in the non-compliance?
- f) What was the cause of the non-compliance?
- g) What action has been, or will be, taken to mitigate any adverse effects of the non -compliance?
- h) What action has been, or will be, taken to prevent a recurrence of the non -compliance?

3. How many pages have you attached?

Each attached page must be initialled by the person(s) who signs Section G of this Annual Return

PROTEN HOLDINGS PTY LIMITED



#### C2 Details of Non-Compliance with Licence

Licence condition number not complied with M4.1 Summary of particulars of the non-compliance (NO MORE THAN 50 WORDS) Temperature at 2 metres was not velorded between 22 April 2016 and 1 September 2016 due to If required, further details on particulars of non-compliance Date(s) when the non-compliance occurred, if applicable April 2016 - 1 September 2016 22 If relevant, precise location where the non-compliance occurred (attach a map or diagram) If applicable, registration numbers of any vehicles or the chassis number of any mobile plant involved in the non-compliance Cause of non-compliance error with meteorological station Technical Action taken or that will be taken to mitigate any adverse effects of the non-compliance Contractor was hired to resolve I fix issue Action taken or that will be taken to prevent a recurrence of the non-compliance Continual monitoring to ensure data is being recorded

PROTEN HOLDINGS PTY LIMITED



## D Statement of Compliance - Load-Based Fee Calculation Worksheets

If you are not required to monitor assessable pollutants by your licence, no worksheets will appear below. Please go to Section E.

If assessable pollutants have been identified on your licence (see licence condition L2), complete the following worksheets for each assessable pollutant to determine your load-based fee for the licence fee period to which this Annual Return relates.

Loads of assessable pollutants must be calculated using any of the methods provided in the EPA's Load Calculation Protocol for the relevant activity. A Load Calculation Protocol would have been sent to you with your licence. If you require additional copies you can download the Protocol from the EPA's website or you can contact us on telephone 02 9995 5700.

You are required to keep all records used to calculate licence fees for four years after the licence fee was paid or became payable, whichever is the later date.

PENALTIES APPLY FOR SUPPLYING FALSE OR MISLEADING INFORMATION

D1 - D8 (Not Applicable)

PROTEN HOLDINGS PTY LIMITED



### E Statement of Compliance - Requirement to Prepare Pollution Incident Response Management Plan (PIRMP) Under Section 153A of the POEO Act 1997

1 Have you prepared a PIRMP a Act 1997?	as required under s153A of the Protection of t		t Operations
(✓ a box)		Yes	□No
If you answered 'Yes' to question '	I, please tick the appropriate box to indicate th	ne following:	
2 Is the PIRMP available at the	premises?	,	
(✓ a box)		Yes	□No
3 Is the PIRMP available in a pr	ominent position on a publicly accessible web	site?	
(✓ a box)		Yes	□No
If the PIRMP is available on a publ web site where the PIRMP can be	icly accessible web site please indicate clearl accessed:	y below the add	dress of the
Web site Address	WW. proten. com. 2	U	
4 Has the PIRMP been tested i		,	
(✓ a box)		Yes	□No
If you answered 'Yes' to question 4	4 please indicate clearly below the date that th	e PIRMP was	last tested:
The PIRMP was last tested on	01/09/2016		
5 Has the PIRMP been updated	d?		
(✓ a box)		Yes	□No
If you answered 'Yes' to question !	5 please indicate clearly below the date that th	ne PIRMP was	last updated:
The PIRMP was last updated on	01/10/2016		
6 How many times has the PIR	MP been activated in this reporting period?		0
If the PIRMP has been activated, r	please indicate clearly below the date/s when	the PIRMP wa	s activated:
The PIRMP was activated on	//		
The EPA's guidelines for preparat	ion of pollution incident response managemer	nt plans are ava	ailable at
http://www.epa.nsw.gov.au/legisl	ation/20120227egpreppirmp.htm		

PROTEN HOLDINGS PTY LIMITED



#### F Statement of Compliance - Requirement to Publish Pollution Monitoring Data Under Section 66(6) of the POEO Act 1997

1	Are there any conditions attached to your licence that require pollution monitor	oring to be underta	aken?
	(✓ a box)	Yes	□No
lf y	ou answered 'Yes' to question 1, please tick the appropriate box to indicate the	following:	
2	Do you operate a web site?		
	(✓ a box)	Yes	□No
3	Is the pollution monitoring data published on your web site in accordance with requirements for publishing pollution monitoring data?	the EPA's written	
	(✓ a box)	□ Yes	No
	ou publish pollution monitoring data on a web site please indicate clearly below ere the pollution monitoring data can be accessed:	the address of th	e web site
We	b site address		
	EPA's written requirements for publishing pollution monitoring data are availab p://www.epa.nsw.gov.au/legislation/20120263reqpubpmdata.htm	ble at	

**Note** - if you do not maintain a web site, you must provide a copy of any monitoring data that relates to pollution, to any person requests a copy of the data at no charge to the person requesting the data.

*	Pollution	monitoring	data	Can	be	made
	available	upon requ	est			

PROTEN HOLDINGS PTY LIMITED



## **G** Statement of Compliance - Environmental Management **Systems and Practices**

1	Do you have an environmental management system (EMS) certified to ISO 14 demonstrated equivalent system <sup>1</sup> ? (see note below on demonstrated equivaler	001 or any other nt)	1
	(✓ a box)	□ Yes	No
	our answer to question 1 is 'No', please proceed to question 5. If your answer to ceed to question 2.	question 1 is 'Y	es', please
2	When was the last check of the EMS <sup>2</sup> completed (see note below on check of	EMS)?	_//
3	Were there any non-conformances related to environmental issues identified i	n the last check	of the EMS?
	(✓ a box)	□ Yes	□No
4	If there were non-conformances identified, were these non-conformances rect	ified?	
	(✓ a box)	□ Yes	□No
ple	ou answered 'No' to question 1, please answer questions 5 - 11. If you answer ase proceed to section H. Questions 5-11 relate to any documented environme stems in place. Refer to http://www.epa.nsw.gov.au/licensing/EMCP.htm for gui estions 5 to 11. If unsure of the answer, tick No.	ntal practices, p dance on how to	rocedures and complete
5	Have you conducted an assessment of your activities and operations to identify potential to cause environmental impacts and implemented operational control	y the aspects the s to address the	at have a se aspects?
	(✓ a box)	I Yes	□No
6	Have you established and implemented an operational maintenance program, maintenance?	1	ntative
	(✓ a box)	T Yes	□No
7	Do you keep records of regular inspections and maintenance of plant and equi	pment?	
	(✓ a box)	Yes	□No
8	Do you conduct regular site audits to assess compliance with environmental le assess conformance to the requirements of any documented environmental pr systems in place?	actices, procedu	ts and ires and
	(✓ a box)	Yes	□No
9	Are the audits of documented environmental practices, procedures and syster party?	1	y a third
	(✓ a box)	Yes	□No
10	Have you established and implemented an environmental improvement or mar	agement plan?	
	(✓ a box)	Yes	□No
11	Do you train staff in environmental issues that may arise from your activities ar of this	nd operations an	d keep records
	(✓ a box)	Yes	□No
	executed again the traction of the second system that the EPA of	onsiders is equiva	lent to the

Demonstrated equivalent refers to an environment accountability, procedures, documentation and record keeping requirements of an ISO 14001 system. For further information go to:

http://www.epa.nsw.gov.au/resources/licensing/150402-environmental-management-systems-guidelines.pdf <sup>2</sup> Undertaking a 'check of an EMS' refers to the ISO 14001 requirements that an organisation demonstrates conformity to the requirements of its EMS and to the standard, these checks require third-party certification that requirements have been met.

PROTEN HOLDINGS PTY LIMITED



#### H Signature and Certification

This Annual Return may only be signed by a person(s) with legal authority to sign it as set out in the categories below. Please tick ( $\checkmark$ ) the box next to the category that describes how this Annual Return is being signed.

If you are uncertain about who is entitled to sign or which category to tick, please contact us on telephone 02 9995 5700.

If the licence holder is: ti	e Annual Return must be signed and certified by one of the following:
an individual	the individual licence holder, or
	a person acting on behalf of the individual licence holder in accordance with a power of
	attorney for the individual. A copy of the power of attorney must be submitted with the Annual Return.
a company	by two directors, or
	by a director and a company secretary, or
	if a proprietary company that has a sole director who is also the sole company
	secretary - by that director, or
	by a person delegated to sign a copy of the Annual Return on the company's behalf in
	accordance with the Corporations Act 2001. Delegation of authority must be submitted
	with the Annual Return, or.
	by affixing the common seal, in accordance with the Corporations Act 2001
a public authority other	by the Chief Executive Officer of the public authority, or
than a Council	by a person delegated to sign on the public authority's behalf in accordance with its
	legislation.
a local Council	by the General Manager in accordance with s377 of the Local Government Act 1993,
	or
1	by affixing the seal of the Council in a manner authorised under the Local Government
	Act 1993.

It is an offence to supply any information in this form that is false or misleading in a material respect, or to certify a statement that is false or misleading in a material respect. There is a maximum penalty of \$250,000 for a corporation or \$120,000 for an individual.

I/We

- declare that the information in the Monitoring and Complaints Summary in section B of this Annual Return is correct and not false or misleading in a material respect, and
- certify that the information in the Statement of Compliance in sections A, C, D, E, F and G and any
  pages attached to Section C is correct and not false or misleading in a material respect.

reporting period, cross out the dates below a	, surrendered or revoked by the EPA during this nd specify the new dates to which this Annual
Return relates below:	
For the reporting period 22-Apr-2016 to 21-Apr-201	7 orto
SIGNATURE:	SIGNATURE: ST. Word
NAME: (printed) Daniel Keith Bryant	NAME: SIMON THOMAS WARD
POSITION: Aveedor	POSITION: Company Secretary
DATE: 4, 6, 17-	DATE: 14, 6, 17

SEAL(if signing under seal)

## PLEASE ENSURE THAT ALL APPROPRIATE BOXES HAVE BEEN COMPLETED AND THAT THE CHECKLIST ON PAGE 2 OF THE ANNUAL RETURN HAS BEEN COMPLETED

# APPENDIX D

Department of Primary Indust	ries Statement of Conditions as at Wednesday, 8 April 2015 Issued under Water Management Act 2000
WAL number	11788
Reference number	40AL403630
	Contact for service of documents
Name	PROTEN HOLDINGS PTY LTD
Address	PO Box 1746 North Sydney NSW 2060
	All holders
Name(s)	PROTEN HOLDINGS PTY LTD
and the second	
	Licence details
Water source	LOWER MURRUMBIDGEE DEEP GROUNDWATER SOURCE
Water sharing plan	LOWER MURRUMBIDGEE GROUNDWATER SOURCES
Management zone	
Category	AQUIFER
Share component	488 units
Tenure type	Continuing

This statement printed on 08/04/2015

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Siles	Conditions
	The water access licence with DWE Reference No 40AL403630 is subject to the following conditions:
	Plan conditions
Water sharing plan	Lower Murrumbidgee Groundwater Sources
	Take of water
MW0812-00001	This licence entitles its holder to the specified shares in the available water from the specified water source as described in this licence.
MW0697-00001	Where the licence holder is a member of a registered group formed under the plan, the licence holder must not cause or allow the combined restricted extraction calculated to apply to the group in any one year, to be exceeded.
MW0814-00001	The licence holder must only take water under this licence using the water supply work nominated by this licence, unless otherwise allowed by the Act or the plan.
MW0815-00001	The licence holder must comply with the terms of the extraction component specified on this licence, including the times, rates or circumstances in which, and the areas or locations from which, water may be taken under this licence, subject to any extraction restrictions in local impact areas.
MW0822-00001	The licence holder must not take water under this licence if the resulting debit from the water allocation account for this licence will exceed the volume of water in the account.
MW0820-00001	The licence holder must comply with all restrictions and reductions of extraction rates declared or ordered by the Minister to apply in a local impact area.
MW0818-00001	The licence holder must comply with all applicable available water determination(s).
MW0821-00001	The licence holder must comply with the water allocation account management rules established by the plan.
MW0824-00001	The licence holder must not take water through a water supply work located in areas where the extraction is likely to cause an adverse local impact on water levels, water quality, aquifer integrity or on groundwater dependent ecosystems.
MW0819-00001	The licence holder must not take more water than is allowed pursuant to an applicable AWD unless the taking is pursuant to a lawful transfer or assignment under Chapter 3 Part 2 of the Act.
	Use of water

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MW0686-00001 The licence holder must not take water for any purpose other than domestic consumption and stock watering purposes or other than in exercising native title rights, through a water supply work nominated on this licence, if the water supply work is within 1,000 m of any high priority groundwater dependent ecosystem listed in Schedule 4 of the plan, or within 1,000 m of any creek or river, unless the water supply work : (A) only draws water from an aquifer at depths approved by the Minister, and complies with all specifications of the Minister under clause 38 of the plan, or was authorised by licence under the Water Act 1912. (B) Water management works The water supply work nominated by this licence is the water MW0813-00001 supply work authorised by a works approval nominated by this licence. Monitoring and recording MW0636-00001 The licence holder must produce the logbook to the Minister for inspection, when requested. Additional conditions MW0698-00001 The licence holder must comply with the access licence dealing principles as gazetted under section 71Z of the Act and all other access licence dealing rules established by the plan. MW0823-00001 The licence holder must pay any charge imposed by the Minister under section 114 of the Act or regulations, for the cost of activities or works under the plan. Other conditions No other conditions applicable

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Glossary

**available water determination** - An Available water determination (AWD) is a water allocation which specifies the amount of water that can be taken during the water year. AWDs are made for each access licence category in each water source. AWDs are defined under the Water Management Act 2000, s. 59.

cease to take - Cease to take conditions means any condition on this approval, or on the access licence under which water is proposed to be taken, that prohibits the taking of water in a particular circumstance.

domestic consumption - Domestic consumption is the use of water for normal household purposes in domestic premises situated on the land.

high priority groundwater dependent ecosystem - High priority groundwater dependent ecosystems have their species composition and natural ecological processes wholly or partially determined by groundwater and are considered high priority for protection or restoration.

**logbook** - A logbook is a document, electronic or hard copy, that records specific required information.

share component - The share component is the specified shares in the available water within a particular water management area.

**stock watering** - Stock watering is the use of water for stock animals being raised on the land. It does not include the use of water for the raising of stock animals on an intensive commercial basis (kept in feedlots or buildings for all, or a substantial part, of the period during which the stock animals are being raised).

#### **General Notes**

All conditions on a water access licence require compliance. An appeal to the Land and Environment Court against a decision to impose certain conditions on an approval can be made within 28 days after the date the decision is made. Conditions identified with the first letter "D" are those that can be appealed during the appeal period.

Certain dealings and other matters relating to this water access licence or a holding in this water access licence must be registered in the Access Register in accordance with section 71A of the Water Management Act 2000. For information about the Access Register, contact Land and Property Information (http://www.lpi.nsw.gov.au).

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