Licence - 883

Licence Details Number: Anniversary Date:

883 30-April

Licensee

SHOALHAVEN STARCHES PTY LTD

PO BOX 123

NOWRA NSW 2541

Premises

SHOALHAVEN STARCHES PTY LTD 160 BOLONG ROAD

BOMADERRY NSW 2541

Scheduled Activity

Agricultural Processing

Chemical Production

Chemical Storage

Fee Based Activity

Dangerous goods production

General agricultural processing

General chemicals storage

Region

South East - Queanbeyan 11 Farrer Place QUEANBEYAN NSW 2620 Phone: (02) 6229 7002 Fax: (02) 6229 7006

PO Box 622 QUEANBEYAN

NSW 2620

EPA

<u>Scale</u>	
> 25000 T produced	
> 250000 T processed	
0-5000 kL stored	

Section 55 Protection of the Environment Operations Act 1997

Environment Protection Licence



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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).

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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:

SHOALHAVEN STARCHES PTY LTD

PO BOX 123

NOWRA NSW 2541

subject to the conditions which follow.

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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
Chemical Production	Dangerous goods production	> 25000 T produced
Agricultural Processing	General agricultural processing	> 250000 T processed
Chemical Storage	General chemicals storage	0 - 5000 kL stored

A2 Premises or plant to which this licence applies

A2.1 The licence applies to the following premises:

Premises Details	
SHOALHAVEN STARCHES PTY LTD	
160 BOLONG ROAD	
BOMADERRY	
NSW 2541	
SEE LOCALITY PLAN TITLED "MANILDRA GROUP - LANDHOLDING - BOMADERRY" (REFERENCE NO. 23134B) PREPARED BY ALLEN PRICE & ASSOCIATES DATED 23 JULY 2013 FOR FULL LIST OF DEPOSITED PLANS AND LOT DETAILS - EPA FILE REFERENCE DOC14/133146.	

A3 Other activities

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

Ancillary Activity

Non-scheduled activity -Meat processing at 220 Bolong Rd, Bomaderry, Lot143 DP1069758 as per DA14/1327 issued by SCC 9/7/14

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.

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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 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 points referred to in the table below are identified in this licence for the purposes of monitoring and/or the setting of limits for the emission of pollutants to the air from the point.

Air					
EPA identi- fication no.	Type of Monitoring Point	Type of Discharge Point	Location Description		
8	Air emissions monitoring / Discharge to air	Air emissions monitoring / Discharge to air	No. 1 gluten dryer baghouse emission point labelled "8" on map titled "Monitoring & Discharge Points Factory Area" dated 25 November 2015 (DOC15/509478).		
9	Air emissions monitoring / Discharge to air	Air emissions monitoring / Discharge to air	No. 2 gluten dryer/starch dryer baghouse emissions point labelled "9" on map titled "Monitoring & Discharge Points Factory Area" dated 25 November 2015 (DOC15/509478).		
10	Air emissions monitoring / Discharge to air	Air emissions monitoring / Discharge to air	No 3. gluten dryer baghouse emissions point labelled "10" on map titled "Monitoring & Discharge Points Factory Area" dated 25 November 2015 (DOC15/509478).		
11	Air emissions monitoring / Discharge to air	Air emissions monitoring / Discharge to air	No. 4 gluten dryer baghouse emissions point labelled "11" on map titled "Monitoring & Discharge Points Factory Area" dated 25 November 2015 (DOC15/509478).		
12	Air emissions monitoring / Discharge to air	Air emissions monitoring / Discharge to air	No. 1 Starch dryer scrubber discharge point labelled "12" on map titled "Monitoring & Discharge Points Factory Area" dated 25 November 2015 (DOC15/509478).		
13	Air emissions monitoring / Discharge to air	Air emissions monitoring / Discharge to air	No. 3 Starch dryer scrubber discharge point labelled "13" on map titled "Monitoring & Discharge Points Factory Area" dated 25 November 2015 (DOC15/509478).		
14	Air emissions monitoring / Discharge to air	Air emissions monitoring / Discharge to air	No. 4 Starch dryer scrubber discharge point labelled "14" on map titled "Monitoring & Discharge Points Factory Area" dated 25 November 2015 (DOC15/509478).		



16	Air emissions monitoring / Discharge to air	Air emissions monitoring / Discharge to air	Carbon dioxide scrubber discharge point labelled "16" on map titled "Monitoring & Discharge Points Factory Area" dated 25 November 2015 (DOC15/509478).
19	Air emissions monitoring		Treated effluent storage dam 1 labelled "19" on map titled "Manildra Group - Landholding - Bomaderry, Monitoring and Discharge Points" dated 23 July 2013 (DOC13/75672).
20	Air emissions monitoring		Treated effluent storage dam 2 labelled "20" on map titled "Manildra Group - Landholding - Bomaderry, Monitoring and Discharge Points" dated 23 July 2013 (DOC13/75672).
21	Air emissions monitoring		Treated effluent storage dam 3 labelled "21" on map titled "Manildra Group - Landholding - Bomaderry, Monitoring and Discharge Points" dated 23 July 2013 (DOC13/75672).
23	Air emissions monitoring		Treated effluent storage dam 5 labelled "23" on map titled "Manildra Group - Landholding - Bomaderry, Monitoring and Discharge Points" dated 23 July 2013 (DOC13/75672).
24	Air emissions monitoring		Treated effluent storage dam 6 labelled "24" on map titled "Manildra Group - Landholding - Bomaderry, Monitoring and Discharge Points" dated 23 July 2013 (DOC13/75672).
25	Air emission monitoring		Sulphur oxidisation pond labelled "25" on map titled "Manildra Group - Landholding - Bomaderry, Monitoring and Discharge Points" dated 23 July 2013 (DOC13/75672).
33	Meteorological monitoring		Weather monitoring station located within the utilisation area labelled "33" on map titled "Manildra Group - Landholding - Bomaderry, Monitoring and Discharge Points" 23 July 2013 (DOC13/75672).
35	Air emissions monitoring / Discharge to air	Air emissions monitoring / Discharge to air	Combined boiler stack for number 5 and 6 boilers labelled "35" on map titled "Monitoring & Discharge Points Factory Area" dated 25 November 2015 (DOC15/509478).
39	Air emissions monitoring		Inlet pipe to biofilters A and B labelled "39" on map titled "Monitoring & Discharge Points Factory Area" dated 25 November 2015 (DOC15/509478).
40	Air emissions monitoring		Outlet of biofilter A labelled "40" on map titled "Monitoring & Discharge Points Factory Area" dated 25 November 2015 (DOC15/509478).
41	Air emissions monitoring		Outlet of biofilter B labelled "41" on map titled "Monitoring & Discharge Points Factory Area" dated 25 November 2015 (DOC15/509478).
42	Air emissions monitoring / Discharge to air	Air emissions monitoring / Discharge to air	Boiler number 4 discharge point labelled "42" on map titled "Monitoring & Discharge Points Factory Area" dated 25 November 2015 (DOC15/509478).



44	Air emissions monitoring / Discharge to air	Air emissions monitoring / Discharge to air	Air emissions point of fermenter labelled "44" on map titled "Monitoring & Discharge Points Factory Area"dated 25 November 2015 (DOC15/509478).
45	Air emissions monitoring / Discharge to air	Air emissions monitoring / Discharge to air	Boiler number 2 discharge point labelled "45" on map titled "Monitoring & Discharge Points Factory Area" dated 25 November 2015 (DOC15/509478).
46	Air emissions monitoring / Discharge to air	Air emissions monitoring / Discharge to air	DDG pellet plant stack emission point labelled "46" on map titled "Monitoring & Discharge Points Factory Area" dated 25 November 2015 (DOC15/509478).

- P1.2 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.
- P1.3 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		
1	Discharge to waters / Discharge quality and volume monitoring	Discharge to waters / Discharge quality and volume monitoring	The 50 centimetre diameter metal pipe discharging at the end of the salt water jetty labelled "1" on map titled "Monitoring & Discharge Points Factory Area" dated 25 November 2015 (DOC15/509478).		
2	Effluent quality and volume monitoring.		Irrigation water monitoring point as labelled "2" on map titled "Manildra Group - Landholding - Bomaderry, Monitoring and Discharge Points" dated 23 July 2013 (DOC13/75672).		
3	Discharge to waters / Discharge quality and volume monitoring	Discharge to waters / Discharge quality and volume monitoring	The 50 centimetre diameter pipe discharging onto gabion spillway labelled "3" on map titled "Monitoring & Discharge Points Factory Area" dated 25 November 2015 (DOC15/509478).		
36	Ambient water monitoring		Cooling water intake 50cm diameter pipe at the end of the salt water jetty labelled as "36" on map titled "Monitoring & Discharge Points Factory Area" dated 25 November 2015 (DOC15/509478).		
43	Discharge to utilisation area / Soil Monitoring	Discharge to utilisation area / Soil Monitoring	Soil monitoring point from within the approved irrigation area as labelled "43" on map titled "Manildra Group - Landholding - Bomaderry, Monitoring and Discharge Points" 23 July 2013 (DOC13/75672).		

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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.
- L1.2 Only:
 - a) river water passed through the boiler condensers and the primary side of the heat exchangers;
 - b) boiler water treatment plant regeneration waters; and
 - e) pH adjusted glucose plant ion exchange unit regeneration waters;

is permitted to be discharged from Points 1 & 3.

L2 Concentration limits

- L2.1 For each monitoring/discharge point or utilisation area specified in the table\s below (by a point number), the concentration of a pollutant discharged at that point, or applied to that area, must not exceed the concentration limits specified for that pollutant in the table.
- L2.2 Where a pH quality limit is specified in the table, the specified percentage of samples must be within the specified ranges.
- L2.3 To avoid any doubt, this condition does not authorise the pollution of waters by any pollutant other than those specified in the table\s.
- L2.4 Air Concentration Limits

POINT 35

Pollutant	Units of measure	100 percentile concentration limit	Reference conditions	Oxygen correction	Averaging period
Opacity	percent	20	As per note below		6 minutes rolling
Total Solid Particles	milligrams per cubic metre	50	Dry, 273 K, 101.3 kPa	7%	1 hour
Sulphur dioxide	milligrams per cubic metre	1200	Dry, 273 K, 101.3 kPa	7%	1 hour block
Nitrogen dioxide	milligrams per cubic metre	500	Dry, 273 K, 101.3 kPa	7%	1 hour block
Oxygen (O2)	percent	>5			

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v	/olatile	milligrams per cubic	40	Dry, 273 K,	7%	1 hour rolling
C	organic	metre		101.3 kPa		
c	compounds					
a	as n-propane					
e	equivalent					

POINT 45

Pollutant	Units of measure	100 percentile concentration limit	Reference conditions	Oxygen correction	Averaging period
Total Solid Particles	milligrams per cubic metre	100	Dry, 273 K, 101.3 kPa	7%	1 hour
Nitrogen dioxide	milligrams per cubic metre	500	Dry, 273 K, 101.3 kPa	7%	1 hour block
Sulfuric acid mist and sulfur trioxide (as SO3)	milligrams per cubic metre	100	Dry, 273 K, 101.3 kPa	7%	1 hour
Type 1 and Type 2 substances in aggregate	milligrams per cubic metre	1	Dry, 273 K, 101.3 kPa	7%	1 hour
Opacity	percent	20	As per note below		6 minutes rolling

Note: For the purpose of the above table, reference conditions for Opacity being gas stream temperature above dew point. Path length corrected to stack exit diameter as per CEM-1.

L2.5 Water and/or Land Concentration Limits

POINT 1

	Pollutant	Units of Measure	90 percentile in any 24 hour period	Averaging period	50 percentile	100 percentile concentration limit
	Temperature	degrees Celsius				32
POINT	3					

Pollutant	Units of Measure	90 percentile in any 24 hour period	Averaging period	50 percentile	100 percentile concentration limit
Temperature	degrees Celsius				32

L3 Volume and mass limits

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L3.1 For each discharge point or utilisation area specified below (by a point number), the volume/mass of: a) liquids discharged to water; or;

b) solids or liquids applied to the area;

must not exceed the volume/mass limit specified for that discharge point or area.

Point	Unit of Measure	Volume/Mass Limit
1	megalitres per day	100
3	megalitres per day	100

Note: Notwithstanding the volume limits specified in condition L3.1, the combined volume discharged from Point(s) 1 and 3 must not exceed 100 megalitres per day.

L4 Waste

L4.1 The licensee must not cause, permit or allow any waste to be received at the premises, except the wastes expressly referred to in the column titled "Waste" and meeting the definition, if any, in the column titled "Description" in the table below.

Any waste received at the premises must only be used for the activities referred to in relation to that waste in the column titled "Activity" in the table below.

Any waste received at the premises is subject to those limits or conditions, if any, referred to in relation to that waste contained in the column titled "Other Limits" in the table below.

This condition does not limit any other conditions in this licence.

Code	Waste	Description	Activity	Other Limits
NA	Food waste	 a) Non-liquid sugar products, solely for use in fermentation b) Biomass material sourced from the production and/or processing of food grade materials, solely for use in the Bulk Volume Fermentation unit. 	-	NA
NA	Waste	Any waste received on site that is below licensing thresholds in Schedule 1 of the Protection of the Environment Operations Act 1997, as in force from time to time	-	NA
NA	General or Specific exempted waste	Waste that meets all the conditions of a resource recovery exemption under Clause 51A of the	As specified in each particular resource recovery exemption	NA

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Protection of the Environment Operations (Waste) Regulation 2005

L5 Noise limits

- L5.1 The LA10(15 MIN) sound pressure level contribution generated from the premises must not exceed the following levels when measured at or near the boundary of any residential premises:
 - a) 38 dB(A) at locations in Terrara on the south side of the Shoalhaven River;
 - b) 38 dB(A) at locations in Nowra on the south side of the Shoalhaven River;
 - c) 42 dB(A) at locations in Meroo Street, Bomaderry;
 - d) 40 dB(A) at other residential locations in Bomaderry.

L6 Potentially offensive odour

- L6.1 The licensee must not cause or permit the emission of offensive odour beyond the boundary of the premises.
- Note: Section 129 of the Protection of the Environment Operations Act 1997, provides that the licensee must not cause or permit the emission of any offensive odour from the premises but provides a defence if the emission is identified in the relevant environment protection licence as a potentially offensive odour and the odour was emitted in accordance with the conditions of a licence directed at minimising odour.
- L6.2 No condition of this licence identifies a potentially offensive odour for the purposes of Section 129 of the Protection of the Environment Operations Act 1997.

L7 Other limit conditions

L7.1 Sulfur content of boiler coal must not exceed 1% by weight (air dried basis).

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.

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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; and
 - b) must be operated in a proper and efficient manner.

O3 Dust

O3.1 All operations and activities occurring at the premises must be carried out in a manner that will minimise dust at the boundary of the premises.

O4 Other operating conditions

- O4.1 Effluent Storage Dams 1, 2, 3, 5 and 6 must only be used to store effluent from the activities undertaken at the licensed premises:
 - (a) that has been treated through the bulk volume fermenter and sulphur oxidisation pond; or
 - (b) that comprises retentate from the reverse osmosis water treatment plant.
- O4.2 Untreated effluent may only be stored within Effluent Storage Dam 4 and must be treated through the bulk volume fermenter and sulphur oxidisation pond prior to any discharge to Effluent Storage Dams 1, 2, 3, 5 and 6 or direct to the irrigation area.

Note: For the purposes of conditions O4.1 and O4.2, Effluent Storage Dams 1,2,3,4,5 and 6 are as defined in condition P1.1 as points 19,20,21,22,23 and 24 respectively and the "irrigation area" is as defined in condition P1.3 as point 43.

O4.3 A suitably designed and constructed cover over Effluent Storage Dam 4 must be maintained in a proper and efficient condition at all times.

Explanatory Note: The cover over Effluent Storage Dam 4 is designed to assist in the containment of odours which can be generated from the storage of untreated effluent within that dam.

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:

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- 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.

M1.4 A log book must be kept at the boiler house control room on the premises which records:

a) the time, date and duration of any failure to meet the emission standards specified in the relevant clauses of the *Protection of the Environment Operations (Clean Air) Regulation 2010*; and

b) the reason for the failure to meet the standard; and

c) any consequent action taken to prevent or minimise the emission of air impurities from the boiler house stacks.

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 Air Monitoring Requirements

POINT 8,9,10,11,12,13,14,16

Pollutant	Units of measure	Frequency	Sampling Method
Dry gas density	kilograms per cubic metre	Quarterly	TM-23
Flow	cubic metres per second	Quarterly	TM-2
Moisture	percent	Quarterly	TM-22
Molecular weight of stack gases	grams per gram mole	Quarterly	TM-23
Odour	odour units	Quarterly	OM-7
Oxygen (O2)	percent	Quarterly	TM-25
Temperature	degrees Celsius	Quarterly	TM-2
Velocity	metres per second	Quarterly	TM-2

POINT 19,20,21,23,24,25

Pollutant	Units of measure	Frequency	Sampling Method
Odour	odour units	Yearly	OM-7

POINT 35

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Pollutant	Units of measure	Frequency	Sampling Method
Fine Particulates	milligrams per cubic metre	Quarterly	OM-5
Flow	cubic metres per second	Quarterly	TM-2
Moisture	percent	Quarterly	TM-22
Nitrogen Oxides	milligrams per cubic metre	Quarterly	TM-11
Odour	odour units	Quarterly	OM-7
Opacity	percent	Continuous	CEM-1
Oxygen (O2)	percent	Quarterly	TM-25
Sulphur dioxide	milligrams per cubic metre	Yearly	TM-4
Temperature	degrees Celsius	Quarterly	In situ
Total Solid Particles	milligrams per cubic metre	Quarterly	TM-15
volatile organic compounds as n-propane equivalent	milligrams per cubic metre	Quarterly	TM-34

POINT 39,40,41,42,44,46

Pollutant	Units of measure	Frequency	Sampling Method
Odour	odour units	Quarterly	OM-7

POINT 45

Pollutant	Units of measure	Frequency	Sampling Method
Flow	cubic metres per second	Yearly	TM-2
Moisture	percent	Yearly	TM-22
Nitrogen dioxide	milligrams per cubic metre	Yearly	TM-11
Opacity	percent	Yearly	CEM-1
Oxygen (O2)	percent	Yearly	TM-25
Sulfuric acid mist and sulfur trioxide (as SO3)	milligrams per cubic metre	Yearly	TM-3
Temperature	degrees Celsius	Yearly	TM-2
Total Solid Particles	milligrams per cubic metre	Yearly	TM-15
Type 1 and Type 2 substances in aggregate	milligrams per cubic metre	Yearly	TM-12, TM-13 & TM-14

M2.3 Water and/ or Land Monitoring Requirements

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POINT 1

Pollutant	Units of measure	Frequency	Sampling Method
рН	рН	Continuous	In line instrumentation
Temperature	degrees Celsius	Continuous	In line instrumentation

POINT 2

Pollutant	Units of measure	Frequency	Sampling Method
BOD	milligrams per litre	Quarterly	Grab sample
Conductivity	deciSiemens per metre	Quarterly	Grab sample
Nitrogen (total)	milligrams per litre	Quarterly	Grab sample
pН	рН	Quarterly	Grab sample
Phosphorus (total)	milligrams per litre	Quarterly	Grab sample

POINT 3

Pollutant	Units of measure	Frequency	Sampling Method
pН	рН	Continuous	In line instrumentation
Temperature	degrees Celsius	Continuous	In line instrumentation

POINT 36

Pollutant	Units of measure	Frequency	Sampling Method
рН	рН	Continuous	In line instrumentation
Temperature	degrees Celsius	Continuous	In line instrumentation

POINT 43

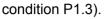
Pollutant	Units of measure	Frequency	Sampling Method
Cation Exchange Capacity	centimoles of positive charge per kilogram of soil	Special Frequency 1	Composite sample
Electrical conductivity	deciSiemens per metre	Special Frequency 1	Composite sample
Exchangeable sodium percentage	percent	Special Frequency 1	Composite sample
Nitrate	milligrams per kilogram	Special Frequency 1	Composite sample
Nitrogen (total)	milligrams per kilogram	Special Frequency 1	Composite sample
Organic carbon	milligrams per kilogram	Special Frequency 1	Composite sample
рН	рН	Special Frequency 1	Composite sample
Phosphorus (total)	milligrams per kilogram	Special Frequency 1	Composite sample

M2.4 For the purposes of the above table, Special Frequency 1 means:

a) annual sampling of the topsoil profile (from a depth up to 300mm); and

c) all soil samples being taken from representative locations within the utilisation area (as defined in

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Note: The monitoring requirments at point 46 do not take effect until the DDG pellet plant becomes operational.

M3 Testing methods - concentration limits

M3.1 Monitoring for the concentration of a pollutant emitted to the air required to be conducted by this licence must be done in accordance with:

a) any methodology which is required by or under the Act to be used for the testing of the concentration of the pollutant; or

b) if no such requirement is imposed by or under the Act, any methodology which a condition of this licence requires to be used for that testing; or

c) if no such requirement is imposed by or under the Act or by a condition of this licence, any methodology approved in writing by the EPA for the purposes of that testing prior to the testing taking place.

- M3.2 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.
- Note: The *Protection of the Environment Operations (Clean Air) Regulation 2010* requires testing for certain purposes to be conducted in accordance with test methods contained in the publication "Approved Methods for the Sampling and Analysis of Air Pollutants in NSW".

M4 Weather monitoring

M4.1 The licensee must at Point 33 (as defined in condition P1.1) monitor (by sampling and obtaining results for analysis) each weather parameter specified in column 1 of the below table. The licensee must use the sampling method, units of measure, and sampling frequency, specified opposite in the the other columns of the below table.

Parameter	Units of measure	Frequency	Sampling Method
Rainfall	millimetres	Daily	Instrumentation
Wind speed	metres per second	Continuous	Instrumentation
Wind direction	degrees	Continuous	Instrumentation

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;



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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.

M7 Requirement to monitor volume or mass

- M7.1 For each discharge point or utilisation area specified below, the licensee must monitor:
 - a) the volume of liquids discharged to water or applied to the area;
 - b) the mass of solids applied to the area;
 - c) the mass of pollutants emitted to the air;
 - at the frequency and using the method and units of measure, specified below.

POINT 1		
Frequency Continuous	Unit of Measure megalitres per day	Sampling Method Magnetic flow meter
POINT 2		
Frequency	Unit of Measure	Sampling Method
Monthly	megalitres per day	Estimate
Monthly POINT 3	megalitres per day	Estimate
	megalitres per day Unit of Measure	Estimate Sampling Method

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M8 Other monitoring and recording conditions

M8.1 Noise levels emitted from the plant must be monitored at representative receiver locations in Bomaderry, Terara and Nowra at or around July and January each year. This noise monitoring must be conducted according to recognized protocols (including the NSW, Industrial Noise Policy) and by persons/organisations who hold membership with the Association of Australian Acoustical Consultants or a person with other appropriate professional qualifications.

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: a) a Statement of Compliance; and
 - b) a Monitoring and Complaints Summary.

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.
- 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.

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 Statement 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.
- 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.

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

R2 Notification of environmental harm

- R2.1 Notifications must be made by telephoning the Environment Line service on 131 555.
- 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.
- 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.

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.

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R4 Annual system performance report

- R4.1 The licensee must supply to the EPA an Annual System Performance Report not later than 60 days after the end of each reporting period.
- R4.2 The report is to supplement the Annual Return and must include but need not be limited to:
 a) all monitoring data required by this licence for the reporting period for each pollutant which has corresponding concentration limits specified in this licence;
 b) prophical representations of the monitoring data or provided hyperpendent of the monitoring data and the monitoring data and

b) graphical representations of the monitoring data as required by paragraph a) above including the corresponding limit specified for each pollutant;

c) the results including analysis, interpretation and odour dispersion modelling from the monitoring data for the reporting period for the pollutant Odour as required to be monitored by condition M2.1 for points 8, 9, 10, 11, 12, 13, 14, 16, 19, 20, 21, 23, 24, 25, 35, 39, 40, 41, 42, 44 and 46;

d) the results including analysis, interpretation and graphical representations from the soil monitoring data for the reporting period for each pollutant required to be monitored by condition M2.1 for point 43;
e) graphical representations of the volume of treated effluent stored in Effluent Storage Dams 1, 2, 3, 5 and 6, and effluent stored in Effluent Storage Dam 4 for each month of the reporting period; and f) graphical representation of the levels of sulfur content of the coal used at the premises including the corresponding limit specified in condition L7.1.

7 General Conditions

G1 Copy of licence kept at the premises or plant

- 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 Pollution Studies and Reduction Programs

U1 Noise assessment

- U1.1 The licensee must prepare a written report that details a methodology for the undertaking of a noise assessment for the purpose of determining noise limits in accordance with the NSW Industrial Noise Policy (EPA 2000) for the premises ("the noise assessment methodology report"). The noise assessment methodology report". The noise assessment methodology report must provide specific details of how the provisions of the NSW Industrial Noise Policy have been considered and are to be applied in the undertaking of the noise assessment.
- U1.2 By 30 April 2014 the licensee must submit a copy of the noise assessment methodology report to the EPA's South East Region office.

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- U1.3 Within 12 months of the EPA giving the licensee its written approval of the noise assessment methodology report, the licensee must undertake the noise assessment and determine noise limits in accordance with the NSW Industrial Noise Policy for the premises.
- U1.4 Within 1 month of undertaking the noise assessment as required by condition number U2.3, the licensee must submit a written report to the EPA's South East Region office that includes (but need not be limited to):

a) the results of the noise assessment that was undertaken in accordance with condition number U2.3; and

b) proposed updated noise limits as derived in accordance with the NSW Industrial Noise Policy to be implemented in the licence.

U2 Stormwater improvement works

U2.1 In accordance with the table below, the licensee must within each of the stormwater sub-catchment areas of the premises identified in Column 1, implement each of the stormwater improvement works described in Column 2 by the date specified in Column 3.

Stormwater Sub-Catchment Area	Improvement Works To Be Implemented	Date To Be Completed By
2	Retrofit a baffle system into the existing sediment pond within the stormwater drainage network to improve the capture and collection of sediments prior to discharge to the environment	31 December 2016
2	Retrofit an oil/water interceptor and/or filtration system at an appropriate location within the stormwater drainage network	31 December 2016
6	Automate the first-flush pit pump to the waste water treatment plant	31 December 2016

- Note: For the purposes of the above table, the stormwater sub-catchment areas identified in Column 1 are as described in Table 2 of the report titled "Manildra Stormwater PRP Stormwater Management Investigation Report" dated 30 October 2014, prepared by SLR Consulting Australia Pty Ltd and received by the EPA on 4 November 2014 (DOC14/260570).
- U2.2 By 28 February 2017, the licensee must submit a report to the EPA on the stormwater improvement works implemented at the premises as required by condition number U2.1 ("the stormwater improvement works report").
- U2.3 The stormwater improvement works report must include (but need not be limited to):
 - a) a description of each of the stormwater improvements works implemented at the premises;
 - b) details of the location of each of the oil/water interceptor and/or filtration systems installed within the stormwater drainage network at the premises;
 - c) an updated surface water management plan of the premises that indicates the location of each of the oil/water interceptor and/or filtration systems installed within the stormwater drainage network; and
 - c) photographs of each of the stormwater improvement works implemented at the premises.

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Dictionary

General Dictionary

3DGM [in relation Means the three da	y geometric mean, which is calculated by multiplying the results of the analysis of
to a concentration limit] three samples colle or more of the sam	icted on consecutive days and then taking the cubed root of that amount. Where one ples is zero or below the detection limit for the analysis, then 1 or the detection limit be used in place of those samples
Act Means the Protecti	on of the Environment Operations Act 1997
activity Means a scheduled Operations Act 199	l or non-scheduled activity within the meaning of the Protection of the Environment 7
actual load Has the same mea	ning as in the Protection of the Environment Operations (General) Regulation 2009
	nber, means an ambient air monitoring method of that number prescribed by the for the Sampling and Analysis of Air Pollutants in New South Wales.
AMG Australian Map Griv	1
licence continued in	te is the anniversary each year of the date of issue of the licence. In the case of a n force by the Protection of the Environment Operations Act 1997, the date of issue of st anniversary of the date of issue or last renewal of the licence following the the Act.
annual return Is defined in R1.1	
Approved Methods Has the same mea Publication	ning as in the Protection of the Environment Operations (General) Regulation 2009
assessable Has the same mea pollutants	ning as in the Protection of the Environment Operations (General) Regulation 2009
BOD Means biochemica	oxygen demand
	nber, means a continuous emission monitoring method of that number prescribed by ods for the Sampling and Analysis of Air Pollutants in New South Wales.
COD Means chemical ox	ygen demand
	pecifically approved in writing by the EPA, a sample consisting of 24 individual samples ntervals and each having an equivalent volume.
cond. Means conductivity	
environment Has the same mea	ning as in the Protection of the Environment Operations Act 1997
environment Has the same mea protection legislation	ning as in the Protection of the Environment Administration Act 1991
EPA Means Environmer	t Protection Authority of New South Wales.
fee-based activity classification Means the number (General) Regulation	ed short descriptions in Schedule 1 of the Protection of the Environment Operations on 2009.
general solid waste (non-putrescible)Has the same mea 1997	ning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act



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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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

Ms Debbie Maddison

Environment Protection Authority

(By Delegation)

Date of this edition: 24-October-2000

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End Notes



1 Licence varied by notice 1004267, issued on 05-Apr-2001, which came into effect on 30-Apr-2001. 2 Licence varied by notice 1007313, issued on 11-May-2001, which came into effect on 05-Jun-2001. 3 Licence varied by notice 1015342, issued on 26-Feb-2002, which came into effect on 23-Mar-2002. 4 Licence varied by notice 1019838, issued on 15-Aug-2002, which came into effect on 09-Sep-2002. 5 Licence varied by notice 1024268, issued on 11-Feb-2003, which came into effect on 11-Feb-2003. 6 Licence varied by notice 1026281, issued on 17-Apr-2003, which came into effect on 17-Apr-2003. 7 Licence varied by notice 1027489, issued on 27-Nov-2003, which came into effect on 22-Dec-2003. 8 Licence varied by notice 1033645, issued on 01-Mar-2004, which came into effect on 26-Mar-2004. 9 Licence varied by notice 1036799, issued on 29-Jun-2004, which came into effect on 01-Jul-2004. 10 Licence varied by notice 1039275, issued on 20-May-2005, which came into effect on 14-Jun-2005. 11 Licence varied by notice 1048817, issued on 29-Jul-2005, which came into effect on 23-Aug-2005. 12 Licence varied by notice 1051704, issued on 02-Nov-2005, which came into effect on 09-Nov-2005. 13 Licence varied by notice 1054751, issued on 24-Feb-2006, which came into effect on 02-Mar-2006. 14 Licence varied by chnage to DEC Region allocation, issued on 03-Mar-2006, which came into effect on 03-Mar-2006. 15 Licence varied by updating references to the Clean Air Reg, issued on 25-Jul-2006, which came into effect on 25-Jul-2006. 16 Licence varied by correction to DEC File number, issued on 07-Mar-2007, which came into effect on 07-Mar-2007. 17 Licence varied by notice 1080589, issued on 31-Mar-2008, which came into effect on 31-Mar-2008.

18 Condition A1.3 Not applicable varied by notice issued on <issue date> which came into effect on <effective date>



19	Licence varied by notice 10 28-Nov-2008.	093973, issued on 28-Nov-2008, which came into effect on
20	Licence varied by notice 10 10-Feb-2009.	097588, issued on 10-Feb-2009, which came into effect on
21	Licence varied by notice 10 09-Apr-2009.	098548, issued on 09-Apr-2009, which came into effect on
22	Licence varied by notice 1 14-Aug-2009.	104957, issued on 14-Aug-2009, which came into effect on
23	Licence varied by correction into effect on 22-Dec-2010	on to scheduled activity name, issued on 22-Dec-2010, which came
24	Licence varied by notice	1500684 issued on 04-Aug-2011
25	Licence varied by notice	1501899 issued on 30-Sep-2011
26	Licence varied by notice	1505439 issued on 08-Nov-2013
27	Licence varied by notice	1521553 issued on 28-Apr-2014
28	Licence varied by notice	1522954 issued on 27-Jun-2014
29	Licence varied by notice	1523522 issued on 30-Jul-2014
30	Licence varied by notice	1525338 issued on 08-Oct-2014
31	Licence varied by notice	1530188 issued on 23-Jul-2015
32	Licence varied by notice	1536447 issued on 18-Dec-2015