



# Environment Protection Licence

Licence - 2863

Licence Details	
Number:	2863
Anniversary Date:	30-March

Licensee
HUNTER WATER CORPORATION
PO BOX 5171
HUNTER REGION MAIL CENTRE NSW 2310

Premises
DUNGOG WATER TREATMENT PLANT
SHORT ST
DUNGOG NSW 2420

Scheduled Activity
N/A

Fee Based Activity	Scale
Miscellaneous licensed discharge to waters (at any time)	> 100-1000 ML maximum annual volume of discharge authorised

Region
North - Hunter
Ground Floor, NSW Govt Offices, 117 Bull Street
NEWCASTLE WEST NSW 2302
Phone: (02) 4908 6800
Fax: (02) 4908 6810
PO Box 488G
NEWCASTLE NSW 2300

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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:

HUNTER WATER CORPORATION
PO BOX 5171
HUNTER REGION MAIL CENTRE NSW 2310

subject to the conditions which follow.

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## 1 Administrative Conditions

### A1 What the licence authorises and regulates

- A1.1 This licence regulates water pollution resulting from the activity/ies specified below carried out at the premises specified in A2.

<u>Fee Based Activity</u>	<u>Scale</u>
Miscellaneous licensed discharge to waters (at any time)	> 100.00-1000.00 ML maximum annual volume of discharge authorised

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

- A2.1 The licence applies to the following premises:

Premises Details
DUNGOG WATER TREATMENT PLANT
SHORT ST
DUNGOG
NSW 2420
LOT 1 DP 711050, LOT 332 DP 722671, LOT 302 DP 772094, LOT 303 DP 772094

### A3 Information supplied to the EPA

- A3.1 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 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

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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 Identification no.	Type of Monitoring Point	Type of Discharge Point	Location Description
1	Discharge to waters	Discharge to waters	Discharge from Sludge Lagoon 1 labelled "Monitoring Point 1" on Hunter Water Drawing No.15792 dated 11 October 2017 (EPA file DOC17/512088).
2	Discharge to waters	Discharge to waters	Discharge from Sludge Lagoon 2 labelled "Monitoring Point 2" on Hunter Water Drawing No.15792 dated 11 October 2017 (EPA file DOC17/512088).
3	Discharge to waters	Discharge to waters	Discharge from the premises boundary at the stormwater culvert on the north side of Wade Street labelled "Monitoring Point 3" on Hunter Water Drawing No.15792 dated 11 October 2017 (EPA file DOC17/512088).

## 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 Concentration limits

L2.1 For each monitoring/discharge point or utilisation area specified in the table\ 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\.

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## L2.4 Water and/or Land Concentration Limits

### POINT 1,2

Pollutant	Units of Measure	50 percentile concentration limit	90 percentile concentration limit	3DGM concentration limit	100 percentile concentration limit
Aluminium	milligrams per litre				TBD
Chlorine	milligrams per litre				TBD
Fluoride	milligrams per litre				TBD
pH	pH				TBD
Total suspended solids	milligrams per litre				TBD

### POINT 3

Pollutant	Units of Measure	50 percentile concentration limit	90 percentile concentration limit	3DGM concentration limit	100 percentile concentration limit
Aluminium	milligrams per litre				TBD
Chlorine	milligrams per litre				TBD
Fluoride	milligrams per litre				1.5
pH	pH				6.5-8.5
Total suspended solids	milligrams per litre				50

Note: Aluminium and chlorine limits in the above tables(s) are referenced as 'TBD' (To Be Determined), as Pollution Reduction Studies 4 & 5 require an investigation to identify representative chlorine and soluble aluminium limits. It is the EPA's intention to include aluminium and chlorine limits upon completion of these studies to the EPA's satisfaction.

Note: Fluoride, pH and total suspend solids limits for Points 1 and 2 in the above table(s) are referenced as 'TBD' (To be Determined) as Pollution Reduction Study 7 requires an investigation of the operation of



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the sludge lagoons. It is the EPA's intention to include fluoride, pH and total suspend solids limits upon completion of this study to the EPA's satisfaction.

## L3 Volume and mass limits

- 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
3	kilolitres per day	2000

Note: The Licensee may exceed the daily volume limit when undertaking maintenance or emergency activities on the Clearwater Tanks or other key infrastructure at the premises. Approval from the EPA must be obtained for planned exceedances prior to the scheduled activity. The EPA is to be notified as soon as practical of exceedances caused by emergency activities. A description of the activity, commencement date, predicted discharge volume and end date should be provided to the EPA in writing. The Licensee is permitted to release raw water in combination with sludge lagoon tailwater to ensure chlorine limits are met as identified in Condition L2.4.

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

### O3 Emergency response

- O3.1 The licensee must maintain, and implement as necessary, a current Pollution Incident Response Management Plan (PIRMP) for the premises. The PIRMP must be developed in accordance with the

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requirements in Part 5.7A of the Protection of the Environment Operations (POEO) Act 1997 and POEO regulations. The licensee must keep the incident response plan on the premises at all times. The incident response plan must document systems and procedures to deal with all types of incidents (e.g. spills, explosions or fire) that may occur at the premises or that may be associated with activities that occur at the premises and which are likely to cause harm to the environment. The PIRMP must be tested at least annually or following a pollution incident.

## O4 Processes and management

- O4.1 All above ground tanks containing material that is likely to cause environmental harm must be bunded or have an alternative spill containment system in place.
- O4.2 Bunds must:
- a) have walls and floors constructed of impervious materials;
  - b) be of sufficient capacity to contain 110% of the volume of the tank (or 110% volume of the largest tank where a group of tanks are installed);
  - c) have floors graded to a collection sump; and
  - d) not have a drain valve incorporated in the bund structure,

or be constructed and operated in a manner that achieves the same environmental outcome.

## 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

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frequency, specified opposite in the other columns:

## M2.2 Water and/ or Land Monitoring Requirements

### POINT 1,2,3

Pollutant	Units of measure	Frequency	Sampling Method
Aluminium	milligrams per litre	Monthly	Grab sample
Chlorine	milligrams per litre	Monthly	Grab sample
Fluoride	milligrams per litre	Monthly	Grab sample
Iron	milligrams per litre	Monthly	Grab sample
Manganese	milligrams per litre	Monthly	Grab sample
pH	pH	Monthly	Grab sample
Total suspended solids	milligrams per litre	Monthly	Grab sample

Note: Monitoring must be undertaken at both Point 1 and Point 2 if discharging, with a minimum of one point sampled per month. The sampling from Point 1 and/or 2 must be undertaken concurrently with sample Point 3.

Note: Aluminium referred to in the above table(s) must be measured as soluble aluminium.

M2.3 In addition to the compliance monitoring in condition M2.2, the licensee must conduct weekly bench monitoring at the same points for the same parameters and keep all records for a minimum of five years. A summary plot of the data must be attached to the Annual Return. The EPA notes the weekly bench testing is conducted in-house and is not conducted to NATA standards.

## 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 Recording of pollution complaints

M4.1 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.

M4.2 The record must include details of the following:

- the date and time of the complaint;
- the method by which the complaint was made;
- any personal details of the complainant which were provided by the complainant or, if no such details

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- 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.

M4.3 The record of a complaint must be kept for at least 4 years after the complaint was made.

M4.4 The record must be produced to any authorised officer of the EPA who asks to see them.

## M5 Telephone complaints line

- M5.1 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.
- M5.2 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.
- M5.3 The preceding two conditions do not apply until 3 months after: the date of the issue of this licence.
- M5.4 The licensee must nominate to the EPA a representative of the company that is available at all times and is capable of providing immediate assistance or response during emergencies or any other incidents at the premises. The name of the nominated representative and their contact details, including their telephone number, must be current at all times. The nomination and contact details must be provided to the EPA's Regional Manager- Hunter at PO Box 488G, Newcastle NSW 2300.  
Note: This condition does not apply until two (2) weeks after the date of issue of the variation notice to include this condition.

## M6 Requirement to monitor volume or mass

- M6.1 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 3

Frequency	Unit of Measure	Sampling Method
Continuous	kilolitres per day	Method approved in writing by the Authority

- M6.2 The Sampling Method provided in the above table is the subject of PRS 6 to validate volume calculation. Prior to the completion of this PRS, the Sampling Method must be in accordance with that proposed by the licensee in the letter "Environmental Protection Licence 2963 Dungog Water Treatment Plant Draft Licence Variation Notice 1529533" dated 20 November 2015 (EPA reference DOC15/414645-01). The

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flow calculation must be undertaken continuously using the site SCADA (or similar) system.

## 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; and
7. a Statement of Compliance - Environmental Management Systems and Practices.

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 via eConnect *EPA* or 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.

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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.

## 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 Other reporting conditions

### R4.1 Provision of Monitoring Results

The licensee must supply, with each Annual Return, all monitoring data in excel format from the licenced discharge points identified in Condition P1. The file must include a trend analysis for each pollutant at each monitoring point and a comparison against any relevant assessment criteria.

## 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 Pollution Reduction Program (PRP) 3 - Bulk Hazardous Chemical Storage System Upgrades

#### U1.1 Background

The EPA and licensee have had on-going negotiations regarding the provision of a Chemical, Wastewater and Stormwater Management Improvement Investigation for the Dungog WTP. The EPA initially provided the licensee with a draft Pollution Reduction Study (PRS) in 2015 to undertake the investigation, and provided a revised draft PRS in 2016 updating the provisions of the investigation. The due date for the investigation report was 30 June 2017. In response to the PRS, on 16 June 2017 the licensee provided the EPA with the document "Bulk Hazardous Chemical Storage System Upgrades - Dungog - Concept Design" dated 15 June 2017, which provided a concept timeline for the tender, awarding the contract and commissioning of the proposed upgrades. Interim capital works and a revised timeline for all works were detailed by the licensee in the letter titled "Environment Protection Licence 2963 Dungog Water Treatment Plant Draft Licence Variation Notice 1529533" dated 29 September 2017. Through this PRP the EPA is formalising the works provided in the above stated documents.

#### Deliverables

The licensee must complete upgrades at the premises in a manner that is consistent with the details provided in the document "Bulk Hazardous Chemical Storage System Upgrades - Dungog - Concept Design" dated 15 June 2017 in accordance with the following timeframes:

- a) Finalise concept and tender document by 31 January 2018.
- b) Commission Interim Capital Works by 31 March 2018.



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- c) Award the tender for delivery of the upgrade by 30 September 2018.
- d) Commission the upgrade by 10 September 2019.

The licensee must provide written confirmation of each stage to the Director Hunter, [hunter.region@epa.nsw.gov.au](mailto:hunter.region@epa.nsw.gov.au) or PO Box 488G, Newcastle NSW 2300 by no later than 3 weeks after the due date for each stage of works.

## U2 Pollution Reduction Study (PRS) 4 - Investigate chlorine test method

### U2.1 Background

During 2014 the licensee had a discharge of chlorinated waters from the premises which highlighted the need to include chlorine limits/monitoring on the licence. EPA research suggests that the current chlorine test method used by the licensee is subject to interference and can generate "false positive" results. The current test method also cannot detect chlorine down to sufficiently low levels.

#### Deliverables

The licensee must undertake investigations into an appropriate test method for chlorine which can be implemented at the premises. The test method must be such that it does not generate "false positives" and can measure concentrations as close as reasonably achievable to the ANZECC (2000) aquatic ecosystem trigger level for the protection of 80% of species of 0.013 mg/L. The investigations must be written into a report that details and justifies the following:

- a) test method to be used at the premises;
- b) the proposed limit of reporting for the method that will not result in false positives; and
- c) the timeframe required to install and assess the application of the method at the premises.

The report must be submitted to the Director - Hunter, at [hunter.region@epa.nsw.gov.au](mailto:hunter.region@epa.nsw.gov.au), by no later than 26 January 2018.

Should the proposed test method and limit of reporting be acceptable to the EPA, a Pollution Reduction Program will be developed to require the installation and commissioning phase of the test method. The objective of the commissioning phase is to allow the EPA to identify an appropriate chlorine limit, based on the commissioning phase data.

## U3 Pollution Reduction Study (PRS) 5 - Investigate aluminium limit

### U3.1 Background

The EPA is aware that there is the potential for levels of soluble aluminium in the receiving waters of the Dungog Water Treatment Plant (WTP) to be elevated above the default trigger level in ANZECC (2000) of 0.15mg/L. If ANZECC default trigger levels are exceeded, these values trigger further investigations to determine whether a real risk to the ecosystem exists or whether it is necessary to adjust the trigger values into site-specific guidelines.

#### Deliverables

The licensee must undertake investigations using water quality data from the Williams River, as a minimum, to identify a soluble aluminium site-specific guideline for the Dungog WTP discharge in



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accordance with the decision frameworks provided in ANZECC (2000).

The report must be submitted to the Director - Hunter, at [hunter.region@epa.nsw.gov.au](mailto:hunter.region@epa.nsw.gov.au), by no later than 26 January 2018.

Note: It is the EPA's intention to include the identified soluble aluminium guideline, should it be acceptable to the EPA, as a concentration limit in the licence.

## **U4 Pollution Reduction Study (PRS) 6 - Validation of volume calculation**

### **U4.1 Background**

The Dungog WTP does not have direct measurement of water volume at the premises water discharge point (Point 3). The licensee advised that direct measurement is not feasible, and that volume calculation using various inputs is preferred. The licensee provided the calculation in the letter "Environmental Protection Licence 2963 Dungog Water Treatment Plant Draft Licence Variation Notice 1529533" dated 20 November 2015 (EPA reference DOC15/414645-01).

#### **Deliverables**

The licensee must undertake investigations, using quantifiable methods, to validate that the proposed calculation will result in a reasonable representation of actual water volumes discharged at licence Point 3.

A report detailing the investigations must be submitted to the Director - Hunter, at [hunter.region@epa.nsw.gov.au](mailto:hunter.region@epa.nsw.gov.au), by no later than 24 November 2017.

## **U5 Pollution Reduction Study (PRS) 7 - Investigate sludge lagoon operations and water quality**

### **U5.1 Background**

The EPA considers it appropriate to set limits for the discharge from each of the sludge lagoons on-site. However no historical water quality data exists for the sludge lagoon "stopboard pits". Accordingly, this PRS is about obtaining representative data that can be used to inform appropriate limits for licence discharge points 1 and 2.

Additionally, the affect of stormwater on monitoring data results at the stormwater culvert on the north side of Wade St (Point 3) is not fully understood. Additional monitoring data is required for discharges from both sludge lagoons.

Note that each of the lagoons is sequentially on-line for approximately 12 months. To obtain a representative data set, data needs to be collected over 2 years to allow for a complete cycle of each lagoon being "on-line".

#### **Deliverables**

The licensee must undertake a monitoring program incorporating monitoring results obtained under licence condition M2, as a minimum, for a period of at least 24 months.

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Two reports are to be produced including analysis of the results of monitoring. An interim report is to be provided to the EPA at the completion of the 12 month monitoring program for the first sludge lagoon monitored, and a final report with details of both lagoon monitoring programs. Microsoft excel data for all results are to be provided with each report.

The licensee must provide the reports to the Director Hunter, [hunter.region@epa.nsw.gov.au](mailto:hunter.region@epa.nsw.gov.au) or PO Box 488G, Newcastle NSW 2300 by no later than 4 weeks after the completion of the monitoring program for each lagoon, with the final report submitted no later than *30 June 2020*. The licensee should propose and justify appropriate and achievable limits for Points 1 and 2 as part of the final report

Note: It is the EPA's intention to include aluminium, chlorine, fluoride, pH and total suspended solids concentration limits to licence points 1 and 2 upon completion of this study.

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## Dictionary

### General Dictionary

<b>3DGM [in relation to a concentration limit]</b>	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
<b>Act</b>	Means the Protection of the Environment Operations Act 1997
<b>activity</b>	Means a scheduled or non-scheduled activity within the meaning of the Protection of the Environment Operations Act 1997
<b>actual load</b>	Has the same meaning as in the Protection of the Environment Operations (General) Regulation 2009
<b>AM</b>	Together with a number, means an ambient air monitoring method of that number prescribed by the <i>Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales</i> .
<b>AMG</b>	Australian Map Grid
<b>anniversary date</b>	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.
<b>annual return</b>	Is defined in R1.1
<b>Approved Methods Publication</b>	Has the same meaning as in the Protection of the Environment Operations (General) Regulation 2009
<b>assessable pollutants</b>	Has the same meaning as in the Protection of the Environment Operations (General) Regulation 2009
<b>BOD</b>	Means biochemical oxygen demand
<b>CEM</b>	Together with a number, means a continuous emission monitoring method of that number prescribed by the <i>Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales</i> .
<b>COD</b>	Means chemical oxygen demand
<b>composite sample</b>	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.
<b>cond.</b>	Means conductivity
<b>environment</b>	Has the same meaning as in the Protection of the Environment Operations Act 1997
<b>environment protection legislation</b>	Has the same meaning as in the Protection of the Environment Administration Act 1991
<b>EPA</b>	Means Environment Protection Authority of New South Wales.
<b>fee-based activity classification</b>	Means the numbered short descriptions in Schedule 1 of the Protection of the Environment Operations (General) Regulation 2009.
<b>general solid waste (non-putrescible)</b>	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997

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<b>flow weighted composite sample</b>	Means a sample whose composites are sized in proportion to the flow at each composites time of collection.
<b>general solid waste (putrescible)</b>	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
<b>grab sample</b>	Means a single sample taken at a point at a single time
<b>hazardous waste</b>	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
<b>licensee</b>	Means the licence holder described at the front of this licence
<b>load calculation protocol</b>	Has the same meaning as in the Protection of the Environment Operations (General) Regulation 2009
<b>local authority</b>	Has the same meaning as in the Protection of the Environment Operations Act 1997
<b>material harm</b>	Has the same meaning as in section 147 Protection of the Environment Operations Act 1997
<b>MBAS</b>	Means methylene blue active substances
<b>Minister</b>	Means the Minister administering the Protection of the Environment Operations Act 1997
<b>mobile plant</b>	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
<b>motor vehicle</b>	Has the same meaning as in the Protection of the Environment Operations Act 1997
<b>O&amp;G</b>	Means oil and grease
<b>percentile [in relation to a concentration limit of a sample]</b>	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.
<b>plant</b>	Includes all plant within the meaning of the Protection of the Environment Operations Act 1997 as well as motor vehicles.
<b>pollution of waters [or water pollution]</b>	Has the same meaning as in the Protection of the Environment Operations Act 1997
<b>premises</b>	Means the premises described in condition A2.1
<b>public authority</b>	Has the same meaning as in the Protection of the Environment Operations Act 1997
<b>regional office</b>	Means the relevant EPA office referred to in the Contacting the EPA document accompanying this licence
<b>reporting period</b>	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.
<b>restricted solid waste</b>	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
<b>scheduled activity</b>	Means an activity listed in Schedule 1 of the Protection of the Environment Operations Act 1997
<b>special waste</b>	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
<b>TM</b>	Together with a number, means a test method of that number prescribed by the <i>Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales</i> .

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

Mr Tim Gilbert

Environment Protection Authority

(By Delegation)

Date of this edition: 26-June-2000

# Environment Protection Licence

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## End Notes

- 1 Licence varied by notice V/M upgrade, issued on 08-Jul-2000, which came into effect on 08-Jul-2000.
- 2 Licence varied by change to Contact details, issued on 02-Apr-2001, which came into effect on 02-Apr-2001.
- 3 Licence varied by notice 1007927, issued on 25-Jun-2001, which came into effect on 05-Jul-2001.
- 4 Licence varied by notice 1013625, issued on 13-Mar-2002, which came into effect on 07-Apr-2002.
- 5 Licence varied by notice 1019643, issued on 18-Sep-2002, which came into effect on 13-Oct-2002.
- 6 Licence varied by notice 1038020, issued on 21-Jun-2004, which came into effect on 16-Jul-2004.
- 7 Licence varied by notice 1090060, issued on 09-Jul-2008, which came into effect on 09-Jul-2008.
- 8 Condition A1.3 Not applicable varied by notice issued on <issue date> which came into effect on <effective date>
- 9 Licence varied by notice 1524746 issued on 07-Nov-2014
- 10 Licence varied by notice 1529533 issued on 24-Oct-2017
- 11 Licence varied by notice 1580272 issued on 04-Jun-2019
- 12 Licence varied by notice 1590860 issued on 28-Jan-2020
- 13 Licence varied by notice 1594279 issued on 28-Apr-2020