Licence - 358

Licence Details Number: Anniversary Date:

358 01-July

Licensee

HUNTER WATER CORPORATION

PO BOX 5171

HUNTER REGION MAIL CENTRE NSW 2310

Premises

BOULDER BAY WASTEWATER TREATMENT WORKS

OFF BOULDER BAY ROAD

FINGAL BAY NSW 2315

Scheduled Activity

Sewage treatment

Fee Based Activity

Sewage treatment processing by small plants

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

<u>Scale</u>

> 1000-5000 ML annual maximum volume of discharge

Environment Protection Authority - NSW Licence version date: 30-Nov-2016



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:

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 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
Sewage treatment	Sewage treatment processing by small plants	> 1000 - 5000 ML annual maximum volume of discharge

A1.2 The objectives of this licence are to:

a) require practical measures to be taken to protect the environment and public health;

b) require proper and efficient design, construction and management of the sewage treatment system to minimise harm to public health and the environment; and

c) minimise the frequency and volume of overflows from the reticulation system and sewage treatment plant.

A1.3 This licence is to be construed in a manner that will promote the objectives referred to in the condition above.

A2 Premises or plant to which this licence applies

A2.1 The licence applies to the following premises:

Premises Details
BOULDER BAY WASTEWATER TREATMENT WORKS
OFF BOULDER BAY ROAD
FINGAL BAY
NSW 2315
LOT 1 DP 1096746 AS SHOWN BORDERED YELLOW ON PLAN TITLED "LOCATION OF DISCHARGE & MONITORING POINTS (1, 2 & 3) AT BOULDER BAY WWTW" EPA DOCUMENT DOC16/588006

A2.2 The premises also includes the reticulation system owned and operated by the licensee that is associated with the sewage treatment plant(s) identified in condition A2.1.

A3 Information supplied to the EPA

A3.1 Works and activities must be carried out in accordance with the proposal contained in the licence

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

		Water and land	
EPA Identi- fication no.	Type of Monitoring Point	Type of Discharge Point	Location Description
1	Ocean Outfall (diffusers 750 metres off shore)	Ocean Outfall (diffusers 750 metres off shore)	Outfall distribution chamber. Labelled monitoring point 1 on plan titled "Location of Discharge Monitoring Points (1, 2, 3) at Boulder Bar WWTW" dated 1/10/2016, filed as part of EPA document DOC 16/588006
2	Treated Volume - Secondary treatment flow		Inlet Channel between screening and grit removal systems and the flow splitter. Labelled monitoring point 2 on plan titled "Location of Discharge Monitoring Points (1, 2, 3) at Boulder Bar WWTW" dated 1/10/2016 filed as part of EPA document DOC 16/588006
3	Bypassed Volume - Bypasses of secondary treatment		Bypass Channel between screening and grit removal systems and the flow splitter. Labelled monitoring point 3 on plan titled "Location of Discharge Monitoring Points (1, 2, 3) at Boulder Bar WWTW" dated 1/10/2016 filed as part of EPA document DOC 16/588006

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5	Environmental monitoring	In the waters of One Mile Beach labelled as monitoring point 5 on plan titled "Location of Discharge & Monitoring Points (5,6) at Boulder Bay WWTW dated 3/11/2016", which has been filed as EPA document DOC16/588006
6	Environmental monitoring	In the waters of Fingal Beach labelled as monitoring point 6 on plan titled "Location of Discharge & Monitoring Points (5,6) at Boulder Bay WWTW", dated 3/11/2016, which has been filed as part of EPA document DOC16/588006

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 The licensee may only discharge untreated or partially treated sewage from the sewage treatment plant and/or the reticulation system subject to the conditions of this licence, including O1 and O2.

L2 Load limits

- L2.1 The actual load of an assessable pollutant discharged from the premises during the reporting period must not exceed the load limit specified for the assessable pollutant in the table below.
- L2.2 The actual load of an assessable pollutant must be calculated in accordance with the relevant load calculation protocol.

Assessable Pollutant	Load limit (kg)
BOD (Coastal Water)	
Nitrogen (total) (Coastal Water)	34030.00
Oil and Grease (Coastal Water)	4082.00
Phosphorus (total) (Coastal Water)	
Total suspended solids (Coastal Water)	27812.00

Note: An assessable pollutant is a pollutant which affects the licence fee payable for the licence.

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L3 Concentration limits

- L3.1 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.
- L3.2 Where a pH quality limit is specified in the table, the specified percentage of samples must be within the specified ranges.
- L3.3 To avoid any doubt, this condition does not authorise the pollution of waters by any pollutant other than those specified in the table\s.
- L3.4 Water and/or Land Concentration Limits

POINT 1

Pollutant	Units of Measure	50 percentile concentration limit	90 percentile concentration limit	3DGM concentration limit	100 percentile concentration limit
Oil and Grease	milligrams per litre	5	10	15	-
Total suspended solids	milligrams per litre	35	50	60	-

L4 Volume and mass limits

L4.1 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	kilolitres per day	80000

L5 Waste

- L5.1 The licensee must not cause, permit or allow any waste generated outside the premises to be received at the premises for storage, treatment, processing, reprocessing or disposal or any waste generated at the premises to be disposed of at the premises, except as expressly permitted by the licence.
- L5.2 This condition only applies to the storage, treatment, processing, reprocessing or disposal of waste at the premises if those activities require an environment protection licence.



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- L5.3 The licensee may receive and/or transfer sewage and liquid waste generated outside the premises for treatment, processing or reprocessing at the premises. The licensee must take reasonable steps to ensure that sewage and liquid waste received at the premises has been lawfully discharged in accordance with a trade waste agreement or customer contract (as applicable) in force between the licensee and the generator of the waste. The licensee must treat, process or reprocess the sewage and liquid waste in accordance with this licence prior to discharge from the premises.
- L5.4 The licensee may receive, store, treat, process or reprocess and/or transfer at the premises sewage products generated or stored outside the premises by the licensee's other sewage treatment systems. Sewage products must be received, treated, processed or reprocessed in accordance with this licence.
- L5.5 Any grit or screenings generated on the premises that the licensee disposes of within the boundary of the premises' sewage treatment plant(s) is to be managed and disposed of in an appropriate manner that prevents as far as practicable harm to the environment.

L6 Potentially offensive odour

- L6.1 No condition in this licence identifies a potentially offensive odour for the purposes of section 129 of the Protection of the Environment Operations Act 1997.
- 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.

L7 Other limit conditions

- L7.1 After 1 April 2005 the licensee must not permit discharges in dry weather from any sewage pumping stations or directed overflow structures within the premises.
- L7.2 The requirements of condition L7.1 do not apply to sewage pumping station(s) Anna Bay No. 4; Boat Harbour No. 1; Boat Harbour No. 3; Dutchmans Bay No. 1; Dutchmans Bay No. 2; Dutchmans Bay No. 3; Dutchmans Bay No. 4; Dutchmans Bay No. 5; Nelson Bay No. 1; Nelson Bay No. 2; Salamander Bay No. 1 and Shoal Bay No. 6.
- L7.3 The requirements of condition M7.2 applies to these sewage pumping stations.

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

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

- Note: The requirements of O1.1 apply to the whole of the premises, including the reticulation system.
- O1.2 Biosolids at the premises must be stored, treated, processed, classified, transported and disposed in accordance with Biosolids Guidelines, or as otherwise approved in writing by the EPA.

O2 Maintenance of plant and equipment

- O2.1 All plant and equipment installed at the premises or used in connection with the licensed activity:a) must be maintained in a proper and efficient condition; andb) must be operated in a proper and efficient manner.
- Note: The requirements of O2.1 apply to the whole of the premises, including the reticulation system.

O3 Emergency response

- O3.1 In the event of an overflow or bypass that harms or is likely to harm the environment, the licensee must use all practicable measures to minimise the impact of the overflow or bypass on the environment and public health. These measures are to be implemented as soon as practical after the licensee or one of the licensee's employees or agents becomes aware of the overflow or bypass.
- O3.2 The licensee must maintain, and implement as necessary, a current Pollution Incident Response Management Plan (PIRMP) for the premises. 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.

The licensee must develop the Pollution Incident Response Management Plan in accordance with the requirements in Part 5.7A of the Protection of the Environment Operations (POEO) Act 1997 and POEO regulations.

O4 Processes and management

O4.1 Additional directed overflow structures must not be constructed within the sewage treatment system unless the directed overflow structure is essential for the proper and efficient operation of the system.

Before constructing an additional directed overflow structure, the licensee must prepare a written report assessing the following issues for the purposes of this condition:

a) risk of harm to public health, environment or property if the proposed directed overflow structure is not constructed;

b) risk of harm to public health and the receiving environment if an overflow from the directed overflow structure occurred;

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c) systems to be used to monitor overflows, power failures or mechanical failures of pumping or electrical equipment relating to or affecting the proposed directed overflow structure; andd) ability of the licensee to respond to overflows from the proposed directed overflow structure and to minimise the impact on the environment and public health.

O4.2 The report must be:

a) kept for at least 4 years after the report is made or the directed overflow structure is constructed, whichever is later; and

b) produced in a legible form to any authorised officer of the EPA who asks to see it.

- O4.3 Sewage or effluent must not be discharged from point(s) 1 unless it has been treated in accordance with this condition.
- O4.4 The portion of sewage inflows to the sewage treatment plant less than 437L/s must receive screening, degritting, biological treatment and clarification prior to discharge to point(s) 1
- O4.5 The portion of the sewage treatment inflows to the sewage treatment plant that is 437 L/s or more must receive screening and degritting.
- O4.6 The licensee must ensure that any extension to the reticulation system is planned, designed, constructed and installed to prevent as far as practicable discharges of sewage or partially treated sewage from the premises.
- Note: "The premises" includes both the new and the previously existing parts of the reticulation system.

O5 Other operating conditions

O5.1 Prohibition on acceptance of pesticides

The licensee must not consent to any discharge of organophosphate pesticides (including chlorpyrifos, diazinon, malathion) or organochlorine pesticides (including dieldrin, heptachlor and chlordane) into the sewage treatment system.

O5.2 Discharges in dry weather from any sewage pumping station(s) installed within the sewage treatment system after 1 April 2005 are not permitted.

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.

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- M1.3 The following records must be kept in respect of any samples required to be collected for the purposes of this licence:
 - a) the date(s) on which the sample was taken;
 - b) the time(s) at which the sample was collected;
 - c) the point at which the sample was taken; and
 - d) the name of the person who collected the sample.

M2 Requirement to monitor concentration of pollutants discharged

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

POINT 1

Pollutant	Units of measure	Frequency	Sampling Method
Aldrin	micrograms per litre	2 Times a year	Grab sample
alpha-BHC	micrograms per litre	2 Times a year	Grab sample
Arsenic	micrograms per litre	2 Times a year	Grab sample
beta-BHC	micrograms per litre	2 Times a year	Grab sample
Biochemical oxygen demand	milligrams per litre	Every 12 days exactly	Composite sample
Cadmium	micrograms per litre	2 Times a year	Grab sample
Chlordane, total	micrograms per litre	2 Times a year	Grab sample
Chromium	micrograms per litre	2 Times a year	Grab sample
Copper	micrograms per litre	2 Times a year	Grab sample
Dieldrin	micrograms per litre	2 Times a year	Grab sample
Endosulfan	micrograms per litre	2 Times a year	Grab sample
Endrin	micrograms per litre	2 Times a year	Grab sample
gamma-BHC (Lindane)	micrograms per litre	2 Times a year	Grab sample
Heptachlor	micrograms per litre	2 Times a year	Grab sample
Heptachlor epoxide	micrograms per litre	2 Times a year	Grab sample
Hexachlorobenzene	micrograms per litre	2 Times a year	Grab sample
Lead	micrograms per litre	2 Times a year	Grab sample
Mercury	micrograms per litre	2 Times a year	Grab sample
Methoxychlor	micrograms per litre	2 Times a year	Grab sample
Nickel	micrograms per litre	2 Times a year	Grab sample
Oil and Grease	milligrams per litre	Every 12 days exactly	Composite sample
p,p-DDD	micrograms per litre	2 Times a year	Grab sample
p,p-DDE	micrograms per litre	2 Times a year	Grab sample
p,p-DDT	micrograms per litre	2 Times a year	Grab sample

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PCBs	micrograms per litre	2 Times a year	Grab sample
Selenium	micrograms per litre	2 Times a year	Grab sample
Silver	micrograms per litre	2 Times a year	Grab sample
Total suspended solids	milligrams per litre	Every 12 days exactly	Composite sample
Zinc	micrograms per litre	2 Times a year	Grab sample

POINT 5

Pollutant	Units of measure	Frequency	Sampling Method
Enterococci	colony forming units per 100 millilitres	Every 6 days	Grab sample

POINT 6

Pollutant	Units of measure	Frequency	Sampling Method
Enterococci	colony forming units per 100 millilitres	Every 6 days	Grab sample

- Note: '2 Times a Year' means twice yearly with at least five months between samples.
- M2.3 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 and sample at the frequency specified opposite in the other columns:

Water and Land

Point 1

Pollutant	Units of measure	Frequency	Sampling Method
Oil and Grease	mg/L	On both of the two days immediately following the samples collected whenever the result of any sampling required by this licence indicates a result higher than the 90 percent limit for any parameter	Composite sample
Total Suspended Solids	mg/L	On both of the two days immediately following the samples collected whenever the result of any sampling required by this licence indicates a result higher than the 90 percent limit for any parameter	Composite Sample

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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 Testing methods - load limits

Note: Division 3 of the *Protection of the Environment Operations (General) Regulation 2009* requires that monitoring of actual loads of assessable pollutants listed in L2.2 must be carried out in accordance with the relevant load calculation protocol set out for the fee-based activity classification listed in the Administrative Conditions of this licence.

M5 Recording of pollution complaints

- M5.1 The licensee must keep a legible record of all complaints made to the licensee or any employee or agent of the licensee in relation to pollution arising from any activity to which this licence applies.
- M5.2 The record must include details of the following:
 - a) the date and time of the complaint;
 - b) the method by which the complaint was made;
 - c) any personal details of the complainant which were provided by the complainant or, if no such details were provided, a note to that effect;
 - d) the nature of the complaint;
 - e) the action taken by the licensee in relation to the complaint, including any follow-up contact with the complainant; and
 - f) if no action was taken by the licensee, the reasons why no action was taken.
- M5.3 The record of a complaint must be kept for at least 4 years after the complaint was made.
- M5.4 The record must be produced to any authorised officer of the EPA who asks to see them.

M6 Telephone complaints line

- M6.1 The licensee must operate during its operating hours a telephone complaints line for the purpose of receiving any complaints from members of the public in relation to activities conducted at the premises or by the vehicle or mobile plant, unless otherwise specified in the licence.
- M6.2 The licensee must notify the public of the complaints line telephone number and the fact that it is a complaints line so that the impacted community knows how to make a complaint.
- M6.3 The preceding two conditions do not apply until 3 months after: the date of the issue of this licence.
- M6.4 For the purpose of this condition, operating hours are defined as twenty four hours a day, seven days a

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week.

M6.5 The public notification referred to in condition M5.2 must include specific reference to the fact that the complaints line may be used by the community for the reporting of overflows.

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	Unit of Measure	Sampling Method
Daily	kilolitres per day	Special Method 1
POINT 2		
Frequency	Unit of Measure	Sampling Method
Continuous	kilolitres per day	Electronic level sensor and continuous logger
POINT 3		
Frequency	Unit of Measure	Sampling Method
Continuous	kilolitres per day	Electronic level sensor and continuous logger

Note: Special Method 1 means "By addition of flowmeter readings from points 2 and 3".

- M7.2 Equipment used to monitor the volume must provide data that is within 5 percent of the actual volume over the likely full range of flow required to be measured by the equipment.
- M7.3 In the event that the licensee cannot comply with a volume monitoring method as required by this licence solely due to the failure or malfunction of essential monitoring equipment, volume may be calculated using another agreed method approved in writing by the EPA. This provision only applies for the duration of the failure or malfunction and the licensee is to rectify the failure or malfunction as soon as practical.
- M7.4 For the purposes of the condition above the alternative method approved by the EPA is as follows:

Monitoring Point	Frequency	Method
Contributing pump stations: Fingal Bay No. 1 Pump Station Regional Pumping station R4.	In the event of a failure of the treated volume flow meter or the bypass flow meter.	Calculate total volume multiplying pump hours run by calibrated flow rate for the pump.

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2	In the event of a failure of the treated volume flow meter	Calculate by subtracting the flow recorded by the bypass flow meter from the total volume pumped from Fingal Bay No. 1 Pump Station and Regional Pumping Station R4.
3	In the event of a failure of the bypass volume flow meter	Calculate by subtracting the flow recorded by the treated flow meter from the total volume pumped from Fingal Bay No. 1 Pump Station and Regional Pumping Station R4.

M8 Requirement to record bypass incidents from sewage treatment plants

- M8.1 The licensee must record the following details in respect of each bypass of any of the appropriate treatment processes required by condition O4 which may adversely affect the quality of the final effluent: a) the EPA point identification number through which the bypass discharged;
 - b) the estimated start time, date and duration of the bypass;
 - c) the estimated volume of the bypass;
 - d) the level of treatment at the sewage treatment plant prior to discharge; and
 - e) the most likely cause of the bypass.
- M8.2 Sewage treatment plant overflows

The licensee must record the following details in relation to each overflow from the sewage treatment plant:

- a) the EPA point identification number through which the overflow discharged;
- b) the date, estimated start time and estimated duration of the overflow;
- c) the estimated volume of the overflow;
- d) the level of treatment at the sewage treatment plant prior to discharge; and
- e) the most likely cause of the overflow.
- M8.3 Overflows from the reticulation system

From 1 July 2005 the licensee must record the following details in relation to each observed or reported overflow from the reticulation system:

- a) the location of the overflow;
- b) the date, estimated start time, and estimated duration of the overflow;
- c) the estimated volume of the overflow;
- d) the most likely cause of the overflow; and
- e) actions taken to prevent the overflow happening again.

M9 Other monitoring and recording conditions

M9.1 The licensee must monitor biosolids that are produced at the premises in accordance with the Biosolids Guideline. However, the licensee is not required to comply with the monitoring conditions in the Biosolids Guideline that relate to the reuse or disposal of biosolids at the locations other than the premises.

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6 Reporting Conditions

R1 Annual return documents

- R1.1 The licensee must complete and supply to the EPA an Annual Return in the approved form comprising: 1. a Statement of Compliance,
 - 2. a Monitoring and Complaints Summary,
 - 3. a Statement of Compliance Licence Conditions,
 - 4. a Statement of Compliance Load based Fee,
 - 5. a Statement of Compliance Requirement to Prepare Pollution Incident Response Management Plan,
 - 6. a Statement of Compliance Requirement to Publish Pollution Monitoring Data; 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 Where the licensee is unable to complete a part of the Annual Return by the due date because the licensee was unable to calculate the actual load of a pollutant due to circumstances beyond the licensee's control, the licensee must notify the EPA in writing as soon as practicable, and in any event not later than the due date. The notification must specify:

a) the assessable pollutants for which the actual load could not be calculated; and

- b) the relevant circumstances that were beyond the control of the licensee.
- R1.7 The licensee must retain a copy of the Annual Return supplied to the EPA for a period of at least 4 years

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after the Annual Return was due to be supplied to the EPA.

- R1.8 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 notifications

R4.1 Where either:

a) sewage or partially treated sewage is discharged from the premises as a result of a bypass of the sewage treatment plant, or

b) an observed or reported overflow has occurred from the reticulation system, and the overflow or bypass may result in a significant risk to public health, the licensee is to promptly give appropriate notification to any parties that are likely to be affected, such as:

i) the EPA's Pollution Line service on 131 555,

- ii) the NSW Department of Public Health; and
- iii) local council(s) where relevant.
- R4.2 Within 3 months from 1 January 2005 the licensee must develop and implement an incident notification protocol. The incident notification protocol must include procedures for notification of, but not limited to, the following groups or organisations:

a) notification of the EPA's Pollution Line service on 131 555 where an overflow has occurred from either the treatment plant or the reticulation system that has discharged to a waterway or could reasonably be expected to discharge to a waterway;

b) notification of the NSW Department of Public Health for incidents of public health significance; and c) notification of local council(s) where relevant.

For the purposes of this condition, "overflow" does not include leakage.

- R4.3 Notifications required by condition R4 must include the following information:
 - a) the nature of the incident that led to the bypass or overflow;
 - b) any testing or inspections of the discharge or receiving waters that have been carried out;
 - c) any testing or inspections currently occurring and when results are anticipated; and
 - d) any other available information regarding harm or potential harm to the environment.
- R4.4 The notification is to be given as soon as practicable after the licensee or one of the licensee's employees or agents becomes aware of the incident.

The notification could detail incidents in more than one location or sewage treatment system operated by the licensee.

- Note: These reporting requirements do not affect any obligations of the licensee to report under Part 5.7 of the Act incidents which cause or threaten harm to the environment.
- R4.5 The Licensee must notify the NSW Food Authority of incidents of significance to shellfish production. This notification is to be given as soon as practicable after the licensee or one of the licensee's employees or agents becomes aware that the incident may be of significance to shellfish production.

R5 Annual system performance report

R5.1 The licensee must supply to the EPA an Annual System Performance Report not later than 60 days after the end of each reporting period.



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R5.2 The Report is to supplement the Annual Return and must include but need not be limited to:
a) the 50 percentile, 90 percentile, 100 percentile and 3DGM values calculated from the monitoring data for each pollutant which has corresponding concentration limits specified in this licence;
b) a diagram showing the major process elements, discharge points and monitoring points at the premises' sewage treatment plant(s), where there has been any significant change since the previous reporting period or this information has not been provided previously to the EPA;
c) the number of dry and wet weather bypasses recorded over the reporting period (recorded in accordance with condition M7);

d) a summary of observed, reported or recorded sewage treatment plant bypasses and overflows. These data are to be for the current reporting period and for the previous twelve-month periods, up to a maximum of four, for which data has been required to be collected. Any significant actions taken to address bypasses or overflows are to be noted;

e) the amount of rainfall measured at a rain gauge at the STP, or at the rain gauge closest to the centre of the catchment of the sewage treatment system, for each month of the reporting period;

f) a progress report on the implementation over the reporting period of actions specified in the PRP's; and

g) any additional structures constructed in accordance with condition O4.1.

R5.3 The Annual System Performance Report must be presented in a format approved in writing by the EPA.

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.

G2 Contact number for incidents and responsible employees

- G2.1 The licensee must operate 24-hour telephone contact lines for the purpose of enabling the EPA to directly contact one or more representatives of the licensee who can:
 - a) respond at all times to incidents relating to the premises; and
 - b) contact the licensee's senior employees or agents authorised at all times to:
 - i) speak on behalf of the licensee; and
 - ii) provide any information or document required under this licence.
- G2.2 The licensee must nominate to the EPA a representative of the licensee 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 at <u>hunter.region@epa.nsw.gov.au</u>

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G3 Signage

G3.1 Each monitoring and discharge point must be clearly marked by a sign that indicates the EPA point identification number.

G4 Other general conditions

Completed Pollution Studies and Reduction Programs (PRPs)

PRP	Description	Completed Date
PRP 100 - Sewer Investigation Report	Identify overflows from reticulation system that pose a significant risk of harm and identify management priorities to reduce duscharge of untreated sewage into sensitive environments.	30/06/2008
PRP 102 - Reticulation System Operation and Maintenance Plan	Develop an Operation and Maintenance Plan which covers operation strategies, preventative and breakdown maintenance procedures, training program and review processes.	28/04/2006
PRP 103 - Evaluation Protocol	Develop a hydraulic sewer system model using established indicators and apply it using acceptable performance criteria to predict overflow volumes from STS.	1/07/2005
PRP 103 - Environmental Monitoring Plan	Report on current impact of overflows, develop monitoring proposal for collecting data from sewer gauges for ongoing verification of the hydraulic model and monitoring programs for assessing environment and health impacts of sewer overflows.	30/06/2008
PRP 5 - Investigations and works to reduce wastewater overflow occurances from the Anna May No. 4 Sewer Pump Station	Investigation and implelentation of auto shutdown of upstream wastewater pumping stations and installation of low level alarm.	30/11/2012
PRP 7 - Upgrade PLC, UPS and telemetry equipment at Anna Bay Sewer Pump Station (SPS) 4	Undertake a number of upgrade works to the telemetry system at SPS 4 to improve reliability of the control system	31/03/2015

8 Pollution Studies and Reduction Programs

U1 PRP 6 - Anna Bay Regional 4 Sewer Pump Station Emergency Storage Upgrade

U1.1 Background

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There have been a number of overflow events at Anna Bay No. 4 Sewer Pump Station (SPS) over recent years. The licensee has undertaken a 'root cause' investigation to identify the factors leading to these incidents. This investigation has confirmed that a lack of emergency storage was a contributing factor to these overflow events.

The licensee is now proposing to install additional emergency storage at the pumping station to reduce the risk of future overflows.

U1.2 Deliverables

The licensee must upgrade Anna Bay Regional 4 SPS to provide adequate emergency storage.

A report detailing the completed works must be provided to the Regional Manager - Hunter via hunter.region@epa.nsw.gov.au (or PO Box 488G, Newcastle 2300), by no later than 16 December 2016.

U2 PRS 8 - Odour Investigation

U2.1 Background

In 2015, the Licensee developed the Tomaree and Tilligerry Peninsulas Effluent Management Strategy which investigated long term management options for Boulder Bay and Tanilba Bay WWTW. This strategy recognised that odour management at the plant may need improvement. This pollution reduction study formalises the licensee's intent to undertake an odour study for the premises.

U2.2 Deliverables

The Licensee must undertake an odour study which should include an odour modelling assessment for the premise to determine the requirement for odour management in the future.

A report detailing the completed study and any recommended future works including timelines must be provided to the Regional Manager - Hunter via hunter.region@epa.nsw.gov.au (or PO Box 488G, Newcastle 2300), by no later than 30 June 2017.

U3 PRP 9 - Upgrades to Bunds for Loading and Unloading Hazardous Chemicals

U3.1 The licensee must design and construct bunds around the hazardous chemical loading and unloading areas at Dutchmans Bay Sewer Pump Station 1 and Shoal Bay Sewer Pump Station 3. The upgrades must be designed and undertaken to ensure compliance with the *Protection of the Environment Operations Act 1997, AS 3780:2008 The storage and handling of corrosive substances, and NSW WorkCover Code of Practice 2005 for Storage and Handling of Dangerous Goods.*

The upgrades must be completed by 30 April 2017. Written confirmation of the upgrades, including relevant evidence of their completion, must be submitted to the EPA's Hunter Regional Manager at hunter.region@epa.nsw.gov.au by 30 May 2017.

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U4 PRS 10 - Network Hazardous Chemical Dosing Unit Upgrades - Concept Design

U4.1 The licensee must complete concept designs for improvements to secondary containment for all Network Dosing Units, loading and unloading bunds, double containment pipework and pumps and sealing containment at discharge pits. The designs must be undertaken to ensure compliance with the *Protection of the Environment Operations Act 1997, AS 3780:2008 The storage and handling of corrosive substances*, and *NSW WorkCover Code of Practice 2005 for Storage and Handling of Dangerous Goods*.

Completed concept designs must be submitted to the EPA's Hunter Regional Manager at hunter.region@epa.nsw.gov.au by 1 May 2017.

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Dictionary

General Dictionary

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

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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

Mr Grahame Clarke

Environment Protection Authority

(By Delegation)

Date of this edition: 29-September-1999

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End Notes

- 1 Licence varied by notice V/M upgrade, issued on 06-Jul-2000, which came into effect on 06-Jul-2000.
- 2 Licence varied by notice 1002199, issued on 23-Oct-2000, which came into effect on 17-Nov-2000.
- 3 Licence varied by notice 1013723, issued on 25-Jun-2002, which came into effect on 20-Jul-2002.
- 4 Licence varied by notice 1038447, issued on 27-Jan-2005, which came into effect on 21-Feb-2005.
- 5 Licence varied by notice 1049167, issued on 27-Jul-2005, which came into effect on 21-Aug-2005.
- 6 Licence varied by notice 1051133, issued on 06-Sep-2005, which came into effect on 01-Oct-2005.
- 7 Licence varied by notice 1053907, issued on 24-Nov-2005, which came into effect on 19-Dec-2005.
- 8 Licence varied by notice 1061806, issued on 29-Aug-2006, which came into effect on 29-Aug-2006.
- 9 Licence varied by notice 1068639, issued on 25-May-2007, which came into effect on 25-May-2007.
- 10 Licence varied by correction to DECC file number record, issued on 12-Jul-2007, which came into effect on 12-Jul-2007.
- 11 Licence varied by notice 1090218, issued on 26-Aug-2008, which came into effect on 26-Aug-2008.
- 12 Condition A1.3 Not applicable varied by notice issued on <issue date> which came into effect on <effective date>
- 13 Licence varied by Admin. corrections to Annual Return, issued on 01-Jul-2009, which came into effect on 01-Jul-2009.
- 14 Licence varied by notice 1123933, issued on 20-Jan-2011, which came into effect on 20-Jan-2011.
- 15 Licence varied by notice 1506201 issued on 28-May-2012
- 16 Licence varied by notice 1507074 issued on 11-Sep-2012
- 17 Licence varied by notice 1525145 issued on 07-Jan-2015
- 18 Licence varied by notice 1541846 issued on 30-Nov-2016