Licence - 3232



| Licence Details | |
|-------------------|----------|
| Number: | 3232 |
| Anniversary Date: | 01-April |

Licensee HUNTER WATER CORPORATION

PO BOX 5171

HUNTER REGION MAIL CENTRE NSW 2310

Premises KEARSLEY WASTEWATER TREATMENT WORKS OFF NEATH ROAD KEARSLEY NSW 2325

Sewage treatment

| Fee Based Activity | <u>Scale</u> |
|---|---|
| Sewage treatment processing by small plants | > 100-219 ML annual maximum volume of discharge |

| 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 |



Licence - 3232

| NFC | PRMATION ABOUT THIS LICENCE | 4 |
|------|---|----|
| Dict | tionary | 4 |
| Res | sponsibilities of licensee | 4 |
| Var | iation of licence conditions | 4 |
| Dur | ation of licence | 4 |
| Lice | ence review | 4 |
| Fee | es and annual return to be sent to the EPA | 4 |
| Tra | nsfer of licence | 5 |
| Pub | olic register and access to monitoring data | 5 |
| ı | ADMINISTRATIVE CONDITIONS | 6 |
| A1 | What the licence authorises and regulates | 6 |
| A2 | Premises or plant to which this licence applies | 6 |
| А3 | Information supplied to the EPA | 7 |
| 2 | DISCHARGES TO AIR AND WATER AND APPLICATIONS TO LAND | 7 |
| P1 | Location of monitoring/discharge points and areas | 7 |
| 3 | LIMIT CONDITIONS | 7 |
| L1 | Pollution of waters | 7 |
| L2 | Concentration limits | 7 |
| L3 | Volume and mass limits | 8 |
| L4 | Waste | 8 |
| L5 | Potentially offensive odour | g |
| L6 | Other limit conditions | g |
| 1 | OPERATING CONDITIONS | g |
| 01 | Activities must be carried out in a competent manner | 9 |
| O2 | Maintenance of plant and equipment | 10 |
| О3 | Emergency response | 10 |
| O4 | Processes and management | 10 |
| O5 | Other operating conditions | 11 |
| 5 | MONITORING AND RECORDING CONDITIONS | 11 |
| M1 | Monitoring records | 11 |
| M2 | Requirement to monitor concentration of pollutants discharged | 11 |
| МЗ | Testing methods - concentration limits | 12 |
| M4 | Recording of pollution complaints | 12 |
| M5 | Telephone complaints line | 13 |



Licence - 3232

| Requirement to monitor volume or mass | 13 |
|---|---|
| Requirement to record bypass incidents from sewage treatment plants | 14 |
| Other monitoring and recording conditions | 14 |
| REPORTING CONDITIONS | 15 |
| Annual return documents | 15 |
| Notification of environmental harm | 16 |
| Written report | 16 |
| Other notifications | 17 |
| Annual system performance report | 17 |
| GENERAL CONDITIONS | 18 |
| Copy of licence kept at the premises or plant | 18 |
| Contact number for incidents and responsible employees | 18 |
| Signage | 19 |
| POLLUTION STUDIES AND REDUCTION PROGRAMS | 19 |
| Water Quality and Groundwater Impact Assessment | 19 |
| SPECIAL CONDITIONS | 20 |
| Special Dictionary | 20 |
| IONARY | 23 |
| neral Dictionary | 23 |
| | Requirement to record bypass incidents from sewage treatment plants Other monitoring and recording conditions REPORTING CONDITIONS Annual return documents Notification of environmental harm Written report Other notifications Annual system performance report GENERAL CONDITIONS Copy of licence kept at the premises or plant Contact number for incidents and responsible employees Signage POLLUTION STUDIES AND REDUCTION PROGRAMS Water Quality and Groundwater Impact Assessment SPECIAL CONDITIONS Special Dictionary IONARY |

Licence - 3232



Information about this licence

Dictionary

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

Responsibilities of licensee

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

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

Variation of licence conditions

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

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

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

Duration of licence

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

Licence review

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

Fees and annual return to be sent to the EPA

For each licence fee period you must pay:

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

Licence - 3232



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.

Licence - 3232



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 | > 100 - 219 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 |
|--|
| KEARSLEY WASTEWATER TREATMENT WORKS |
| OFF NEATH ROAD |
| KEARSLEY |
| NSW 2325 |
| LOT 1 DP 791531 |
| PLAN OF PREMISES DEFINED BY PLAN TITLED "PLAN SHOWING MONITORING POINT LOCATION AT KEARSLEY WWTW DRAWING NO. 15236 DATED 22/03/2016 EPA REFERENCE DOC16/232509 |

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.

Licence - 3232



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 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 the No. 2 oxidation pond defined as monitoring point 1 on plan titled "Plan showing monitoring point location at Kearsley WWTW Drawing No. 15236 dated 22/03/2016 EPA Reference DOC16/232509 |

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 Concentration limits

Licence - 3232



- L2.1 For each monitoring/discharge point or utilisation area specified in the table\s below (by a point number), the concentration of a pollutant discharged at that point, or applied to that area, must not exceed the concentration limits specified for that pollutant in the table.
- L2.2 Where a pH quality limit is specified in the table, the specified percentage of samples must be within the specified ranges.
- L2.3 To avoid any doubt, this condition does not authorise the pollution of waters by any pollutant other than those specified in the table\s.
- L2.4 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 |
|------------------------------|----------------------|-----------------------------------|-----------------------------------|--------------------------------|--|
| BOD | milligrams per litre | 30 | 50 | - | 60 |
| рН | рН | - | 6.5-8.5 | - | - |
| Total suspended solids | milligrams per litre | 50 | 55 | - | 70 |

L2.5 The licensee is not taken to have exceeded a quality limit specified in this licence for pH, BOD or TSS if monitoring by the licensee shows that the level of chlorophyll-a in the oxidation ponds during any exceedance was 100 ug/L or more (showing that the exceedance was caused by excessive algal growth).

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 |
|-------|--------------------|-------------------|
| 1 | kilolitres per day | 2500 |

L4 Waste

Licence - 3232



- L4.1 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.
- L4.2 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.
- L4.3 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.
- L4.4 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.

L5 Potentially offensive odour

- L5.1 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.

L6 Other limit conditions

- L6.1 The licensee must not permit discharges in dry weather from any sewage pumping stations or directed overflow structures within the premises.
- L6.2 The requirements of condition L6.1 do not apply to sewage pumping station(s) Kearsley No.1; Neath Pump Station.

Note: The requirements of condition M7.3 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:

Licence - 3232



- 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.
- O1.2 Biosolids at the premises must be stored, treated, processed, classified, transported and disposed in accordance with the Biosolids Guidelines, or as otherwise approved in writing by the EPA.

Note: The requirements of O1.1 apply to the whole of the premises, including the reticulation system.

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.

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.

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;
- 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; and
- d) 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.

Licence - 3232



- O4.3 Sewage or effluent discharged must not be discharged from Point(s) 1 unless it has been treated in accordance with condition O4.4.
- O4.4 All liquid waste inflow must receive oxidation ponding.
- O4.5 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.
- 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

Licence - 3232



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 |
|------------------------|----------------------|-----------|-----------------|
| BOD | milligrams per litre | Weekly | Grab sample |
| Chlorophyll a | micrograms per litre | Weekly | Grab sample |
| Nitrogen (ammonia) | milligrams per litre | Monthly | Grab sample |
| Nitrogen (total) | milligrams per litre | Monthly | Grab sample |
| Oil and Grease | milligrams per litre | Monthly | Grab sample |
| рН | рН | Weekly | Grab sample |
| Phosphorus (total) | milligrams per litre | Monthly | Grab sample |
| Total suspended solids | milligrams per litre | Weekly | Grab sample |

Note: Weekly sampling means samples taken weekly at a minimum of 5 day intervals.

Monthly sampling means samples taken monthly at a minimum of 20 day intervals.

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:
 - 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

Licence - 3232



- 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 For the purpose of this condition, operating hours are defined as twenty four hours a day, seven days a week.
- M5.5 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.

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 1

| Frequency | Unit of Measure | Sampling Method |
|------------|--------------------|---|
| Continuous | kilolitres per day | By Calculation (volume flow rate or pump capacity multiplied by operating time) |

- M6.2 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.
- M6.3 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.
- M6.4 For the purpose of condition M6.3, the alternative method approved by the EPA is as follows:

Licence - 3232



| Parameter | Frequency | Method |
|--------------|---|---|
| Total volume | In the event of a failure of the discharge flow meter | Pump hours run (Contributing pump stations: Neath and Kearsley) |

M7 Requirement to record bypass incidents from sewage treatment plants

- M7.1 The licensee must record the following details in respect of each bypass of any of the appropriate treatment processes required by condition O4.4 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.

M7.2 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.

M7.3 Overflows from the reticulation system

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.

M8 Other monitoring and recording conditions

M8.1 Biosolids at the premises must be recorded, monitored and classified in accordance with the Biosolids Guidelines, to the extent that those Guidelines are applicable, or as otherwise approved in writing by the EPA.

Note: This condition does not apply to the reuse or disposal of biosolids by the licensee at locations other than the premises.

Licence - 3232



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.
- R1.7 Within the Annual Return, the Statements of Compliance must be certified and the Monitoring and

Licence - 3232



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

- Note: The licensee or its employees must notify all relevant authorities of incidents causing or threatening material harm to the environment immediately after the person becomes aware of the incident in accordance with the requirements of Part 5.7 of the Act.
- R2.1 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.

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.

Licence - 3232



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 SafeFood NSW 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.

Licence - 3232



- R5.2 The Annual System Performance Report must be presented in a format approved in writing by the EPA.
- R5.3 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.

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 is to inform the EPA in writing of the representative or representatives and their telephone number(s) by 28 February 2005. The EPA must be notified of the telephone number(s) on commencement of its/their operation.
- G2.3 The licensee is to inform the EPA in writing of the appointment of any subsequent contact persons, or changes to the person's contact details as soon as practicable and in any event within fourteen days of

Licence - 3232



the appointment or change.

G3 Signage

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

8 Pollution Studies and Reduction Programs

U1 Water Quality and Groundwater Impact Assessment

U1.1 By 5pm on 31 December 2019, the licensee must implement, undertake and complete a surface and ground water quality monitoring program at the Kearsley WWTW to be undertaken by an appropriately qualified and experienced person.

The surface water monitoring program must include but need not be limited to:

- a) an assessment of up gradient and down gradient water quality in Swamp Creek, via collection of 24 surface water samples (twelve instances across two locations), where available, with sampling events targeting the three environmental conditions listed below and tested according to the analyte list nominated below
 - i) Dry weather effluent discharge from tailings dam,
 - ii) Wet weather effluent discharge from tailing dam,
 - iii) No effluent discharge from tailings dam.
- b) an assessment of water quality in the oxidation ponds and tailings dam. Regular sample collection from the oxidation pond effluent and tailings dam effluent must be tested for the following analytes: pH, Total Suspended Solids (NRF), Biochemical Oxygen Demand (BOD), Cholorophyll 'a', Total Oxidisable Nitorgen (TON), Total Kjeldahl Nitrogen, Total Phosphorous, Filterable Reactive Phosphorous, Ammonia, Total Oil and Grease, Faecal Coliforms (FC), E Coli and Enterococci.

The groundwater monitoring program must include but need not be limited to:

- a) an assessment of up gradient and down gradient groundwater quality;
- b) identification of the general gradient of groundwater movement;
- c) identification of the depth to groundwater source(s);
- d) quarterly groundwater sampling for duration of the effluent investigation; and
- e) Groundwater sample testing of the following analytes; Bicaronate, Calcium, Carbonate, Chloride, Magnesium, Potassium, Sodium, Sulfate, Total Nitrogen, Total Oxidisable Nitorgen (TON), Ammonia, Total Kjeldah Nitrogen (TKN), Total Phosphorus, Filterable Reactive Phosphorus, Arsenic (total and dissolved), Aluminium (total and dissolved), Chromium (total and dissolved), Copper (total and dissolved), Lead (total and dissolved), Mercury (total and dissolved), Zinc (total and dissolved), pH, Faecal Coliforms (FC), E Coli and Enterococci.
- U1.2 By 5pm on 28 February 2020, the licensee must provide the EPA's Director Hunter with a report prepared by an appropriately qualified and experienced person that addresses, but need not be limited to, the following:
 - a) a description of the study area;

Licence - 3232



- b) a description of the monitoring program;
- c) a description of downstream water users (surface and groundwater);
- d) results of surface and groundwater quality and the groundwater gradient;
- e) analysis of the surface and groundwater quality;
- f) assessment of the impact on downstream water users and the environment;
- g) assessment against relevant water quality guidelines for the downstream uses; and
- h) any recommendations based on the analysis and assessments made.

9 Special Conditions

E1 Special Dictionary

E1.1

| Term | Definition |
|-----------------------------|--|
| ug/L | Means micrograms per litre. |
| access chamber | a structure constructed to provide physical access to sewer pipes. Also known as a manhole. |
| approved | Means approved in writing by the EPA. The EPA's approval may be given unconditionally, or subject to conditions. |
| Biosolids | Has the same meaning as in Schedule 1, Part 3 of the Protection of the Environment Operations Act 1997. |
| Biosolids Guidelines | Means the "Environmental Guidelines: Use and disposal of biosolids products" published by the EPA in October 1997, or any subsequently updated guidelines which replace this publication. |
| bypass | Means circumstances where sewage has been received at the sewage treatment plant but is discharged from the plant without it being treated, processed or reprocessed by means of any or all of the designed treatment processes of the plant. A new bypass event is defined as a bypass that commences at least 24 hours after the end of the previous bypass. |
| cfu | Means colony forming units |
| choke | Means a full or partial blockage in a sewer pipe that results in sewage being discharged to the environment. A choke may be caused by structural collapse of the sewer pipes, tree roots, debris or siltation. |
| condition | Means a condition of this licence. |
| directed overflow structure | Means a designed structure (excluding access chambers) in the reticulation system which operates as a relief to allow sewage to discharge at a planned location or a sewage pumping station, but does not include a bypass from a sewage treatment plant. |
| directed overflow | Means an overflow from a directed overflow structure. |
| discharge | Has the same meaning as in Schedule 1, classification [71] of the Protection of the Environment Operations (General) Regulation 1998. |

Environment Protection Authority - NSW Licence version date: 15-Mar-2018

Licence - 3232



| dry weather | Except for the purpose of compliance with condition L6.1, dry weather occurs when less than 10 millimetres of rainfall has been measured at a rain gauge in the catchment of the sewage treatment system during a 24 hour period (where there is no rain gauge in the catchment, at the rain gauge closest to the centre of the catchment). |
|----------------------|---|
| | For the purpose of compliance with condition L6.1, dry weather means the greater of: (i) the recorded flow into the sewage pumping station is less than or equal to the design wet weather flow, where this flow is determined in accordance with the Public Works Department Sewer Design Guide; or (ii) less than 10mm rainfall has been measured at a rain gauge in the catchment of the SPS during a 24 hour period (where there is no rain gauge in the catchment at the rain gauge closest to the SPS). |
| dry weather overflow | Means an overflow in the reticulation system not caused by wet weather. |
| effluent | Means sewage that has received all of the designed treatment processes at the sewage treatment plant. |
| event | In respect to directed overflows an event is an overflow occurrence at one or more overflow locations in the reticulation system which continues until all overflows have ceased discharging for more than 24 hours. |
| fc | Means faecal coliforms expressed in colony forming units per 100mL. |
| harm | Has the same meaning as in the Protection of the Environment Operations Act 1997. |
| infiltration | Means the process by which groundwater enters the reticulation system through faults, such as cracks, in sewer pipes. |
| ISO | Means International Standards Organisation. |
| kL | Means kilolitre. |
| L/s | Means litres per second. |
| leakage | Overflows caused by the leakage of sewage from faults, such as cracks, in sewer pipes to the surrounding environment. |
| metal-A | Means the following metals: arsenic, cadmium, chromium, copper, lead, mercury, nickel, selenium, silver and zinc. |
| mL | Means millilitres. |
| ML | Means megalitres. |
| offensive odour | Has the same meaning as in the Protection of the Environment Operations Act 1997. |
| overflow | Is a discharge of untreated or partially treated sewage from the sewage treatment system. |
| reticulation system | Means that part of the sewage treatment system owned and operated by the licensee which collects and transports sewage to the sewage treatment plant and includes all sewer pipes (whether greater or less than 300mm diameter), sewer rising mains, access chambers, vent shafts, designed overflow structures, sewage ejection units and sewage pumping stations, but does not include the sewage treatment plant. |
| sensitive areas | Means sites or components of the environment which are of particular importance because of their ecological, conservation, cultural heritage, recreational, social or commercial values. Areas may be sensitive in terms of human health and/or the biophysical environment. |
| sewage | Means untreated liquid waste received in the reticulation system. |

Licence - 3232



| sewage ejection unit | Is a pump intended to control the transport of sewage from premises normally occupied by no more than 10 persons, or of an average daily flow of sewage not exceeding 2,000 litres through the sewer pipes, where steep hills and other variations in the land topography can prevent or limit the gravity flow of sewage to the sewage treatment plant. |
|------------------------------|--|
| sewage products | Means any by-product of the treatment processes and includes biosolids, raw sludge, liquid sludge, thickened sludge, digested sludge, screenings and grit. |
| sewage pumping station (SPS) | Is a structure which controls the transport of sewage through the sewer pipes, where steep hills and other variations in the land topography can prevent or limit the gravity flow of sewage to the sewage treatment plant, but does not include a sewage ejection unit. |
| sewage treatment plant (STP) | Is a facility at which sewage is stored and treated following delivery from the reticulation system prior to discharge, and includes discharge structures and STP bypass points. |
| sewage treatment system | Means the reticulation system and the sewage treatment plant used for the transport, treatment and discharge of effluent and sewage. |
| Trade waste agreements | Means agreements reached between the licensee and industrial and commercial customers to restrict the amount of toxic and other potentially harmful substances discharged to the reticulation system. |
| TRC | Means total residual chlorine. |
| uncontrolled overflow | Means an overflow from any part of the reticulation system that is not a directed overflow. Leakage or overflows from access chambers are examples of uncontrolled overflows. |
| waters | Has the same meaning as in the Protection of the Environment Operations Act 1997. |
| waterway | Means the whole or any part of any river, stream, lake, lagoon, swamp, wetlands, unconfined surface water, natural or artificial watercourse, dam or tidal waters (including the sea), or any water stored in artificial works. Artificial watercourses that are dry, water in underground pipes or channels used or designed to receive or pass rainwater, or any gutter used or designed to receive or pass rainwater are not included in this definition of "waterway". |
| wet weather | Wet weather occurs when 10 millimetres or more of rainfall has been measured at a rain gauge in the catchment of the sewage treatment system during a 24 hour period (where there is no rain gauge in the catchment, at the rain gauge closest to the centre of the catchment). |
| | , |

Licence - 3232



Dictionary

General 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 |
| AM | 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. |

Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act

general solid waste (non-putrescible)

Licence - 3232



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.

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]

plant

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

TM

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

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.

Licence - 3232



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.

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 Mitchell Bennett

Environment Protection Authority

(By Delegation)

Date of this edition: 18-May-2000

12 Licence varied by notice 1547040 issued on 15-Mar-2018





| End | Notes |
|-----|--|
| 1 | Licence varied by notice 1001273, issued on 16-Aug-2000, which came into effect on 06-Sep-2000. |
| 2 | Licence varied by notice 1012083, issued on 29-May-2002, which came into effect on 23-Jun-2002. |
| 3 | Licence varied by notice 1038450, issued on 27-Jan-2005, which came into effect on 21-Feb-2005. |
| 4 | Licence varied by notice 1049163, issued on 27-Jul-2005, which came into effect on 21-Aug-2005. |
| 5 | Licence varied by notice 1051067, issued on 28-Sep-2005, which came into effect on 23-Oct-2005. |
| 6 | Licence varied by notice 1053388, issued on 16-Feb-2006, which came into effect on 13-Mar-2006. |
| 7 | Licence varied by notice 1061993, issued on 24-Aug-2006, which came into effect on 24-Aug-2006. |
| 8 | Licence varied by notice 1068643, issued on 25-May-2007, which came into effect on 25-May-2007. |
| 9 | Licence varied by notice 1087262, issued on 23-May-2008, which came into effect on 23-May-2008. |
| 10 | Condition A1.3 Not applicable varied by notice issued on <issue date=""> which came into effect on <effective date=""></effective></issue> |
| 11 | Licence varied by notice 1510433 issued on 28-Nov-2012 |