

Licence Variation

Section 58(5) Protection of the Environment Operations Act 1997



SYDNEY WATER CORPORATION,
Trading as SYDNEY WATER,
ABN 49 776 225 038,
PO BOX A53,
SYDNEY SOUTH NSW 1232

Attention: Mr. LIONEL HARRIS

Notice Number 1047036
File Number 302041
Date 29-Jun-2006

NOTICE OF VARIATION OF LICENCE NO. 10555

BACKGROUND

- A. SYDNEY WATER CORPORATION t/as SYDNEY WATER ("the licensee") is the holder of Environment Protection Licence No. 10555 ("the licence") issued under the *Protection of the Environment Operations Act 1997* ("the Act"). The licence authorises the carrying out of Scheduled Activity - Premises Based at REMEMBRANCE DRIVE, PICTON, NSW.
- B. On 06-Apr-2005 the EPA received an application for the variation of the licence to change the Premises Details for the activity.
- C. The licensee and the Department of Environment and Conservation (DEC) have negotiated a protocol for advising the DEC of overflows from the licensee's reticulation network, and bypasses and overflows from the licensee's sewage treatment plants, in both wet and dry weather conditions.
- D. The *Protection of the Environment Operations Amendment Act 2005* ("the POEO Amendment Act") commenced on 1 May 2006. The POEO Amendment Act repealed the Classified Waters Scheme, which was created through *Clean Waters Regulations 1972*.
- E. Condition L1.5 of the licence prohibits the pollution of water at any time during dry weather from any pumping station, effective from 1 July 2006.
- F. As a consequence of the matters outlined in B to E above, the DEC considers that variations to the following licence conditions are necessary to give effect to these matters:
 - Condition A2: amended to correct the premises details;
 - Condition R4: reworded, as negotiated with the licensee, to reflect the new bypass and overflow notification protocol requirements;
 - Condition L1: reworded to remove the reference to class S and P waters; and
 - Condition P1: points referring to wet weather discharges from individual pumping stations removed.

Licence Variation

Section 58(5) Protection of the Environment Operations Act 1997

- G. This notice varies the licence accordingly.
- H. This notice also adds a number of definitions to the General Dictionary in the licence, makes a minor administrative amendment to the EPA Region details on the licence cover page and makes minor administrative amendments resulting from recent legislative changes, where applicable.
- I. The variations to the licence specified in this notice begin to operate on 1 July 2006.

VARIATION OF LICENCE NO. 10555

1. By this notice the EPA varies licence No. 10555 as set out in the Appendix. The Appendix contains a copy of the licence marked with the variations that are made to it by this notice.
 2. The variations to the licence are indicated in the following way:
 - if a strike through mark appears through any word or other text (eg. ~~Solids or~~) this indicates that the word or other text is deleted from the licence by this notice; and
 - if a double underline appears under any word or other text (eg. must be treated) this indicates that the word or other text is added to the licence by this notice.
- Note: Variations referred to in H. above may not be indicated.
3. Once the variation is in effect the licensee should download an updated copy of the environment protection licence and annual return from <http://www.environment.nsw.gov.au/poeo/index.asp>.

.....
Mr Neale Philip
Principal Officer
Metropolitan Infrastructure Section
(by Delegation)

INFORMATION ABOUT THIS NOTICE

- This notice is issued under 58(5) of the Act.
- Details provided in this notice will be available on the EPA's Public Register in accordance with section 308 of the Act.

When this notice begins to operate

- The variations to the licence specified in this notice begin to operate immediately from the date of this notice, unless another date is specified in this notice.

Appeals against this decision

- You can appeal to the Land and Environment Court against this decision. The deadline for lodging the appeal is 21 days after you were given notice of this decision.

Licence Variation

Section 58(5) Protection of the Environment Operations Act 1997



- If an appeal is made against this decision and the Land and Environment Court directs that the decision is stayed the decision will not operate until the stay ceases to have effect or the Land and Environment Court confirms the decision or the appeal is withdrawn (whichever occurs first).

Environment Protection Authority

Environment Protection Licence

Section 55 Protection of the Environment Operations Act 1997

- ♦ Licence number: 10555
- ♦ File number: 302041
- ♦ Licence Anniversary Date: 01-July
- ♦ Review date not later than 28-May-2007-2009

Licence Type

Premises

Licensee

SYDNEY WATER CORPORATION
 PO BOX A53
 SYDNEY SOUTH NSW 1232

Licensed Premises

PICTON SEWAGE TREATMENT SYSTEM including STP at
 REMEMBRANCE DRIVE
 PICTON NSW 2571

Fee Based Activity

Sewage Treatment - processing by small plants (<
 10000 ML per year) (71[a])

Scale

> 1000 - 5000 ML discharged

EPA Region

Sydney Region Metropolitan

Level 7, 79 George Street, NSW Govt Offices, 84 Crown

PARRAMATTA NSW 2150 WOLLONGONG NSW 2500

Phone: 02 9995 5000 4224 4100

Fax: 02 9995 6900 4224 4110

PO Box 668 PARRAMATTA PO Box 513 WOLLONGONG EAST
 NSW 2124 2520

INFORMATION ABOUT THIS LICENCE	4
Dictionary	4
Responsibilities of licensee	4
Transfer of licence	4
Variation of licence conditions	4
Duration of licence	4
Licence review	4
Fees and annual return to be sent to the EPA	5
Public register and access to monitoring data	5
1 ADMINISTRATIVE CONDITIONS	6
A1 What the licence authorises and regulates	6
A2 Premises to which this licence applies	6
A3 Other activities	7
A4 Information supplied to the EPA	7
A5 Objectives of this licence	7
2 DISCHARGES TO AIR AND WATER AND APPLICATIONS TO LAND	8
P1 Location of monitoring/discharge points and areas	8
3 LIMIT CONDITIONS	9
L1 Pollution of waters	9
L2 Load limits	9
L3 Concentration limits	10
L4 Volume and mass limits	11
L5 Waste	12
L6 Noise Limits	13
L7 Frequency Limits	13
L8 Utilisation Areas	13
4 OPERATING CONDITIONS	13
O1 Activities must be carried out in a competent manner	13
O2 Maintenance of plant and equipment	14
O3 Appropriate treatment processes	14
O4 Prohibition on acceptance of pesticides	14
O5 Level of reticulation system management, operations and maintenance activities	14
O6 Wet Weather Sewage Treatment Plant Overflows	15
O7 Additional Sewage Pumping Stations	15
O8 Management of utilisation area	15
O9 Effluent application	15
5 MONITORING AND RECORDING CONDITIONS	16
M1 Monitoring records	16
M2 Requirement to monitor concentration of pollutants discharged	16
M3 Testing methods - concentration limits	17

M4	Recording of pollution complaints	17
M5	Telephone complaints line	18
M6	Requirement to monitor volume or mass	18
M7	Requirement to record wet and dry weather sewage treatment plant bypasses	19
M8	Registers	19
M9	Continuation of Monitoring Programs	19
M10	Environmental monitoring	20
M11	Biosolids monitoring	20
6	REPORTING CONDITIONS	20
R1	Annual return documents	20
R2	Notification of environmental harm	21
R3	Written report	22
R4	Notification of bypass or overflow incidents	22
R5	Notification of New Sewage Pumping Station Connections	24
R6	Annual System Performance Report	24
	GENERAL CONDITIONS.....	24
G1	Copy of licence kept at the premises	24
G2	Signage	25
G3	Contact number for incidents and responsible employees	25
G4	Clean-up (Emergency Response).....	25
	POLLUTION STUDIES AND REDUCTION PROGRAMS	25
102.2	Development of load calculation method and trial calculation	25
	SPECIAL CONDITIONS	26
	DICTIONARY	26
	General Dictionary	26
	Special Dictionary	28

Information about this licence

Dictionary

The licence contains a dictionary, which defines terms used in the licence. It is found at the end of the 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.

Transfer of licence

Transfer of the licence to another person may be requested by the licensee using the form for this purpose available from the EPA.

Variation of licence conditions

Variations to the conditions of this licence may be requested by the licensee using the form for this purpose available from the EPA. The EPA may also vary a 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  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. **For licences held immediately before 1 July 1999, the first review will take place before 1 July 2002.**

Fees and annual return to be sent to the EPA

The licence requires you to forward to the EPA an Annual Return, comprising a Statement of Compliance and a summary of any monitoring required by the licence (including the recording of complaints).

The Annual Return must be submitted within 60 days after the end of each reporting period. Where a licence is transferred, surrendered or revoked, a special reporting period applies.

For each licence fee period you must pay:

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

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

See condition R1 and the accompanying form regarding the Annual Return requirements.

The EPA publication "A Guide to Licensing" contains information about how to calculate your licence fees.

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**
- **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.

Licence anniversary date

01-July

This licence is issued to

SYDNEY WATER CORPORATION
PO BOX A53
SYDNEY SOUTH NSW 1232

subject to the conditions which follow:

1 Administrative conditions

A1 What the licence authorises and regulates

A1.1 Not applicable.

A1.2 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
Sewage Treatment Systems

Fee Based Activity	Scale
Sewage Treatment - processing by small plants (< 10000 ML per year) (71[a])	> 1000 - 5000 ML discharged

A1.3 Not applicable.

A2 Premises to which this licence applies

A2.1 The licence applies to the following premises:

Premises Details
PICTON SEWAGE TREATMENT SYSTEM including STP at REMEMBRANCE DRIVE PICTON NSW 2571

Premises Details
LOTS 1 AND 3 DP818863; LOT 2 DP1042285

- 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 Other activities

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

Chemical Storage Facilities
Composting and Related Reprocessing or Treatment

A4 Information supplied to the EPA

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

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

- (a) the applications for any licences (including former pollution control approvals) which this licence replaces under the Protection of the Environment Operations (Savings and Transitional) Regulation 1998; and
- (b) the licence information form provided by the licensee to the EPA to assist the EPA in connection with the issuing of this licence.

A5 Objectives of this licence

- A5.1 The objectives of this licence are to:

- (a) require practical measures to be taken to protect the environment and public health from sewage treatment plant effluent and sewer overflows;
- (b) require proper and efficient management of the sewage treatment system to minimise harm to the environment and public health;
- (c) not applicable;
- (d) minimise the frequency and volume of overflows and sewage treatment plant bypasses.

- A5.2 This licence is to be construed in a manner that will promote the objectives referred to in A5.1.

2 Discharges to air and water and applications to land

P1 Location of monitoring/discharge points and areas

P1.1 Not applicable.

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.

P1.3 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.

Water and land

EPA identification no.	Type of monitoring point	Type of discharge point	Description of location
1	precautionary discharge quantity and quality	precautionary discharge quantity and quality	outlet of the Effluent Buffer Tank at the Western Dam
2		wet weather discharge	SPS914, located at Argyle Street, Picton, and identified on the system map
3		wet weather discharge	SPS915, located at Menangle Street, Picton, and identified on the system map
4		wet weather discharge	SPS916, located at Stonequarry Place, Picton, and identified on the system map
5		wet weather discharge	SPS918, located at Picton Avenue, Picton, and identified on the system map
6		wet weather discharge	SPS919, located at Bronzewing Street, Tahmoor, and identified on the system map
7		wet weather discharge	SPS920, located at River Road, Tahmoor, and identified on the system map
8		wet weather discharge	SPS922, located at Albert Avenue, Thirlmere, and identified on the system map
9		wet weather discharge	SPS1045, located at Castlereagh Street, Tahmoor, and identified on the system map
10	creek flow quantity		SWC site 911 in Stonequarry Creek
11	volume monitoring / discharge to utilisation area	volume monitoring / discharge to utilisation area	outlet of the effluent irrigation dam
12		utilisation area	the areas labelled as P1, P2, B1, B2, B3 and B4 in the document entitled "Figure 2 - Picton Effluent Reuse Scheme Layout" attached to the application for this licence
13		wet weather discharge	SPS776, located at Kyeema Street, Picton, and identified on the system map

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 ~~This licence does not permit the pollution of waters classified as Class S or Class P under the Clean Waters Regulations 1972.~~ Not applicable.

L1.3 Subject to the conditions of this licence, sewage or effluent must not be discharged from the components of the reticulation system except from those components identified on the system map.

L1.4 Notwithstanding the provisions of the condition L1.3 above, this licence does not permit the pollution of waters at any time during dry weather from:

- (a) (i) uncontrolled overflows, or
- (ii) directed overflows other than from sewage pumping stations,

if a cause of the pollution is failure to:

- (iii) operate any part of the reticulation system in a proper and efficient manner; or
- (iv) maintain any part of the reticulation system in a proper and efficient condition, or

(b) sewage pumping stations listed in the table referenced in condition P1.2.

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.

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

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 (Enclosed Waters)	730
Nitrogen (total) (Enclosed Waters)	1460
Oil and Grease (Enclosed Waters)	292
Phosphorus (total) (Enclosed Waters)	73
Total suspended solids (Enclosed Waters)	730

Note: For the purposes of condition L2.1 only, *premises* means the sewage treatment plant referred to in condition A2.1 of this licence.

Note: For the purposes of condition L2.2 and M1.1, the relevant load calculation protocol is the methodology titled *Development of Load Calculation Method and Trial Calculation (June 2003)* approved by the EPA in August 2003 and any subsequent amendments approved by the EPA in writing.

L3 Concentration limits

- L3.1 For each monitoring/discharge point or utilisation area specified in the table\> below (by a point number), the concentration of a pollutant discharged at that point, or applied to that area, must not exceed the concentration limits specified for that pollutant in the table.
- 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\>.

Water and Land

POINT 1

Pollutant	Units of Measure	50 percentile concentration limit	90 percentile concentration limit	3DGM concentration limit	100 percentile Concentration Limit
Faecal Coliforms	cfu/100mL	-	200*	-	-
BOD	mg/L	7	10	-	-
TN	mg/L	6	10	-	-
NH3-N	mg/L	0.5	1	-	-
TP	mg/L	0.2	0.4	-	-
TSS	mg/L	7	15	-	-

POINT 11

Pollutant	Units of Measure	50 percentile concentration limit	90 percentile concentration limit	3DGM concentration limit	100 percentile Concentration Limit
pH	pH	-	6.5-9.5	-	-
Faecal Coliforms	cfu/100mL	2000	10000	-	-
BOD	mg/L	10	15	-	-
TN	mg/L	10	15	-	-
NH3-N	mg/L	2	5	-	-
TP	mg/L	8	9	-	-
TSS	mg/L	15	60	-	-

Note:

The faecal coliform concentration limit at Point 1 marked by an asterisk in the above table is to be interpreted as an 80 percentile concentration limit, for the purpose of assessing compliance with this condition.

- L3.4 When a wet weather sewage treatment plant overflow is occurring, exceedences of the 3DGM and the 100 percentile concentration limits in condition L3.3 are permitted at the following points for the duration of the overflow where the overflow was the sole cause of the exceedence:

Point 1

- L3.5 Not applicable.

- L3.6 In the case of a pollutant which is subject to a 3DGM limit, only the samples collected on the first day of the 3DGM sampling are to be used for the calculation of the percentile.

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	kL/day	14000
2	kL/day	0
3	kL/day	0
4	kL/day	0
5	kL/day	0
6	kL/day	0
7	kL/day	0
8	kL/day	0
9	kL/day	0
11	kL/day	5900
13	kL/day	0

L4.2 Notwithstanding the volume limits specified in condition L4.1, the combined volume discharged from point Points 1 and 11 shall not exceed 14000kL/day.

L4.3 ~~The volume/mass limits for point(s) 2, 3, 4, 5, 6, 7, 8, 9 and 13 specified in condition L4.1 apply for dry weather conditions only.~~

~~L4.4~~ In addition to the volume/mass limit imposed at Point 1 by condition L4.1, the following volume/mass limits apply at Point 1:

- (a) 0, when creek flow at Point 10 is less than or equal to 8,000 kL/day;
- (b) 25% of creek flow at Point 10, when creek flow at Point 10 is greater than 8,000 kL/day.

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.

- L5.3 The licensee may receive and/or transfer sewage generated outside the premises for treatment, processing or reprocessing at the premises. The licensee must take reasonable steps to ensure that sewage 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 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.

L6 Noise Limits

- L6.1 Noise from the premises must not exceed:
- (a) an L_{A10} (15 minute) noise emission criterion of 45 dB(A) (7am to 6pm); and
 - (b) at all other times, an L_{A10} (15 minutes) noise emission criterion of 35 dB(A), except as expressly provided by this licence.
- L6.2 Noise from the premises is to be measured at the nearest residence to determine compliance with this condition.
- L6.3 For the purposes of this condition, the premises referred to comprise the Picton Sewage Treatment Plant, being the premises at Lot 1, 2 and 3 DP 818863.

L7 Frequency Limits

- L7.1 No discharges in dry weather are permitted from sewage pumping stations listed in P1.2.

L8 Utilisation Areas

- L8.1 Liquids must only be applied to liquids utilisation areas for which a discharge point or area has been identified in section 2 of this licence.
- L8.2 Spray from liquids application must not drift beyond the boundary of the utilisation area to which it is applied.
- L8.3 Biosolids must only be applied to biosolids utilisation areas for which a discharge point or area has been identified in section 2 of this licence.

4 Operating conditions

O1 Activities must be carried out in a competent manner

O1.1 Licensed activities must be carried out in a competent manner.

This includes:

- (a) the processing, handling, movement and storage of materials and substances used to carry out the activity; and
- (b) the treatment, storage, processing, reprocessing, transport and disposal of waste generated by the activity.

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.

O1.3 The licensee must not cause or permit the emission of any offensive odour from the premises. This condition does not apply if the only person(s) affected by the odour were person(s) engaged in the management or operation of the premises.

O2 Maintenance of plant and equipment

O2.1 All plant and equipment installed at the premises or used in connection with the licensed activity:

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

O3 Appropriate treatment processes

O3.1 Sewage or effluent must not be discharged from points Points 1 and 11 unless it has been treated in accordance with this condition.

O3.2 The portion of sewage inflows to the sewage treatment plant less than 35 L/s must receive full tertiary treatment if it is directed to the Western storage dam.

O3.3 The portion of sewage inflows to the sewage treatment plant that is directed to the Eastern storage dam must receive treatment that produces effluent suitable for irrigation purposes.

O3.4 Effluent that is discharged from Point 1 must receive full tertiary treatment and must have come from the Western storage dam or from the STP.

O4 Prohibition on acceptance of pesticides

O4.1 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 Level of reticulation system management, operations and maintenance activities

O5.1 Not applicable.

O6 Wet Weather Sewage Treatment Plant Overflows

O6.1 Not applicable.

O7 Additional Sewage Pumping Stations

O7.1 All sewage pumping stations which are installed within the sewage treatment system after May 2000 must be designed and constructed in such a way that there will be no discharge from the sewage pumping station in dry weather.

O8 Management of utilisation area

O8.1 The quantity of effluent/solids applied to the utilisation area must not exceed the capacity of the area to effectively utilise the effluent/solids.

For the purpose of this condition, 'effectively utilise' includes the use of the effluent/solids for pasture or crop production, as well as the ability of the soil to absorb the nutrient, salt, hydraulic load and organic material.

O9 Effluent application

O9.1 Effluent application must not occur in a manner that causes surface runoff.

O9.2 Spray from effluent application must not drift beyond the boundary of the premises.

O9.3 Livestock access to any effluent application area must be denied during effluent application and until the applied effluent area has dried.

O9.4 All effluent application operations and activities occurring at the premises must be carried out in a manner that will minimise dust at the boundary of the utilisation area.

O9.5 The licensee must not cease to use the utilisation area (point 12 in this licence) without the prior written approval of the EPA to an alternative means of disposal of the effluent.

Note: Any such written approval is intended to be effected for the purposes of this condition by variation of this licence.

O9.6 Not applicable.

O9.7 Effluent liquid waste pipelines and fittings must be clearly identified. Standard watertaps, hoses and valves must not be fitted to the pipelines of the effluent system. The effluent system must not be connected to other pipelines. Lockable valves or removable handles must be used where there is public access to the effluent.

O9.8 Public access to any effluent utilisation area must be denied during effluent application and until the effluent application area has dried.

- O9.9 Adequate notices, warning the public not to drink or otherwise use the treated effluent, must be erected on the site. These notices must be legible English and in any other languages as may be necessary, and must indicate at least that the water in use is "Reclaimed Water - Unfit for Drinking".
- O9.10 Pasture or fodder crops must not be harvested before the effluent utilisation area has dried.

5 Monitoring and recording conditions

M1 Monitoring records

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

M2 Requirement to monitor concentration of pollutants discharged

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

Water and Land

POINT 1

Pollutant	Units of measure	Frequency	Sampling Method
BOD	mg/L	Special Frequency 1	Grab sample
Faecal Coliforms	cfu/100mL	Special Frequency 1	Grab sample
NH3-N	mg/L	Special Frequency 1	Grab sample
Nitrate + nitrite (oxidised nitrogen)	mg/L	Special Frequency 1	Grab sample
TKN-N	mg/L	Special Frequency 1	Grab sample
TP	mg/L	Special Frequency 1	Grab sample
TSS	mg/L	Special Frequency 1	Grab sample

POINT 11

Pollutant	Units of measure	Frequency	Sampling Method
BOD	mg/L	Special Frequency 2	Grab sample
Faecal Coliforms	cfu/100mL	Special Frequency 2	Grab sample
NH3-N	mg/L	Special Frequency 2	Grab sample
TN	mg/L	Special Frequency 2	Grab sample
TP	mg/L	Special Frequency 2	Grab sample
TSS	mg/L	Special Frequency 2	Grab sample
pH	pH	Special Frequency 2	Grab sample

For the purposes of condition M2.1:

Special frequency 1 means daily during the occurrence of any discharge longer than 2 hours during normal plant operations.

Special frequency 2 means every 6 days when the irrigation system is operating at the time of sampling.

M3 Testing methods - concentration limits

M3.1 Not applicable.

M3.2 Subject to any express provision to the contrary in this licence, monitoring for the concentration of a pollutant discharged to waters or applied to a utilisation area must be done in accordance with the Approved Methods Publication unless another method has been approved by the EPA in writing before any tests are conducted.

Note: Testing methods - load limit

Note: Clause 18 (1) and (2) of the Protection of the Environment Operations (General) Regulation 1998 requires that monitoring of actual loads of assessable pollutants listed in L2.1 must be carried out in accordance with the testing method set out in the relevant load calculation protocol for the fee-based activity classification listed in condition A1.2.

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
 - (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 Conditions M5.1 and M5.2 do not apply until 3 months after:
- (a) the date of the issue of this licence or
 - (b) if this licence is a replacement licence within the meaning of the Protection of the Environment Operations (Savings and Transitional) Regulation 1998, the date on which a copy of the licence was served on the licensee under clause 10 of that regulation.
- M5.4 For the purpose of this condition, operating hours are defined as twenty four hours a day, seven days a week.

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	kL/day	Electronic level sensor and continuous logger

POINT 10

Frequency	Unit Of Measure	Sampling Method
Continuous	kL/day	Electronic level sensor and continuous logger

POINT 11

Frequency	Unit Of Measure	Sampling Method
Continuous	kL/day	Electronic level sensor and continuous logger

M6.2 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 Requirement to record wet and dry weather sewage treatment plant bypasses

M7.1 From the licence issue date the licensee must record the following details in relation to each bypass from the premises:

- (a) the EPA point identification number through which the bypass discharged;
- (b) the 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;
- (e) classification as a dry or wet weather bypass;
- (f) the most likely cause of the bypass; and
- (g) the name or names of the treatment process or processes bypassed.

M7.2 A dry weather bypass is a bypass that occurs when the inflow rates of sewage to the sewage treatment plant does not exceed 35 L/s and a wet weather bypass occurs when this flow is equalled or exceeded.

M8 Registers

M8.1 Not applicable.

M9 Continuation of Monitoring Programs

M9.1 Not applicable.

M10 Environmental monitoring

M10.1 The licensee must undertake the following environmental monitoring:

- (a) The licensee must collect water samples at the monitoring sites referred to in the Sydney Water publication "Environmental indicators monitoring for Sydney Water, December 1995", as further detailed in Table 30 of the Sydney Water publication "Sydney Water Annual Environment Report 1996, Auxiliary Volume: Environmental Indicators Monitoring Report & Special Objectives Statement" (Page 71).
- (b) The water samples must be sampled at the frequency specified in the publication cited above.
- (c) The water samples must be analysed for the parameters specified in the publication cited above. It is not necessary to measure light intensity at sites where, due to the shallowness of the stream and the presence of overhanging vegetation, it is not practical to do so.
- (d) The licensee must supply the results of the analyses to the EPA as part of an annual Environment Report, in accordance with Clause 5.12 and Section 14 (1) of the Sydney Water Act. All data must be identified by the site number.

M11 Biosolids monitoring

M11.1 Biosolids at the premises must be recorded, monitored and classified in accordance with the Biosolids Guidelines, or as otherwise approved in writing by the EPA.

6 Reporting conditions

R1 Annual return documents

What documents must an Annual Return contain?

- R1.1 The licensee must complete and supply to the EPA an Annual Return in the approved form comprising:
- (a) a Statement of Compliance; and
 - (b) a Monitoring and Complaints Summary.
- A copy of the form in which the Annual Return must be supplied to the EPA accompanies this licence. Before 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.

Period covered by Annual Return

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.

Deadline for Annual Return

R1.5 The Annual Return for the reporting period must be supplied to the EPA by registered post not later than 60 days after the end of each reporting period or in the case of a transferring licence not later than 60 days after the date the transfer was granted (the 'due date').

Notification where actual load can not be calculated

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.

Licensee must retain copy of Annual Return

R1.7 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.

Certifying of Statement of Compliance and Signing of Monitoring and Complaints Summary

R1.8 Within the Annual Return, the Statement of Compliance must be certified and the Monitoring and Complaints Summary must be signed by:

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

R1.9 A person who has been given written approval to certify a certificate of compliance under a licence issued under the Pollution Control Act 1970 is taken to be approved for the purpose of this condition until the date of first review of this licence.

R2 Notification of environmental harm

Note: The licensee or its employees must notify the EPA of incidents causing or threatening material harm to the environment as soon as practicable 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 EPA's Pollution 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; and
- (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;
- (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.

R3.5 For the purposes of this condition, the definition of event in the Special Dictionary does not apply.

R4 Notification of bypass or overflow incidents

R4.1 Where either:

- (i) a bypass of the biological or disinfection process at the sewage treatment plant is discharged from the premises during either dry or wet weather conditions; 
- (ii) a wet weather sewage treatment plant overflow occurs, (which for the purpose of this condition is defined as being when the effluent flow rate from the sewage treatment plant exceeds  L/s and a precautionary discharge is occurring); or

- (iii) an overflow has occurred from the reticulation system that has discharged to waters or could reasonably be expected to discharge to waters,

the licensee must give each of the notifications listed below. ~~Each 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, and in the case of (b) below, becomes aware that the incident is of significance for public health.~~ Notifications must be made to the following groups or organisations in the following manner:

- (a) ~~the DEC, as per the current Notification Protocols between that organisation, namely the DEC Protocol and the National Parks Protocol, and the licensee;~~
- (b) ~~the Department of Health, as per the current Notification Protocol between that organisation and the licensee;~~
- (c) ~~NSW Safe Food, as per the current Notification Protocol between that organisation and the licensee;~~
- (d) ~~the relevant local council, as per the licensee's current Notification Protocol for councils;~~
- (e) ~~issuing a media release as per the Notification Protocols referred to in (a) to (d) above; and~~
- (f) ~~placing a notification of the details of the overflow on Sydney Water's internet site as per the Notification Protocols referred to in (a) to (d) above.~~

- (a) ~~telephoning For the EPA's Pollution Line service on 131 555;~~
 - (b) ~~for incidents purposes of public health significance, advising this condition, "overflow" does not include leakage and "waters" do not include artificial watercourses that are dry at the Department of Health by fax on (02) 9816 0377 (during office hours) and by telephone on 0411 264 070 (after hours);~~
- ~~except commencement of the overflow, or water in the case of wet weather overflows, advising the relevant local council(s) by fax;~~
- ~~issuing a media release underground pipes, channels or gutters used or designed to the media for dry weather bypasses or overflows that are of public health significance. This media release must include details (if known) of the nature of the operational incident that led to the bypass or overflow; and~~
- ~~placing a notification of the details of the overflow on an Internet page accessible from a prominently and appropriately labelled link (URL) from the Internet home page www.sydneywater.com.au receive or pass rainwater.~~

~~For (a), (e) or (e) above, notification for wet weather bypasses or wet weather overflows could detail incidents in more than one 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 that cause or threaten material harm to the environment~~

~~Notification of the EPA or Council as required by this condition is to occur even if the licensee is unaware of the cause of the incident, or whether the incident is of significance to public health at the time of notification.~~

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

~~"waters" do not include artificial watercourses that are dry at the time of the overflow or water in underground pipes or channels designed to receive or pass rainwater.~~

Notes:

~~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 material harm to the environment.~~

~~The definition of "waters" does not include any gutter used or designed to receive or pass rainwater.~~

~~R4.2 Not applicable~~

~~R4.3 Not applicable~~

R5 Notification of New Sewage Pumping Station Connections

R5.1 Prior to the operation of any sewage pumping station that is installed within the sewage treatment system after May 2000, the licensee must notify the EPA in writing of the location of the new sewage pumping station that is to commence operation. The location of that sewage pumping station must also be noted on the system map under condition M8.1 prior to commencement of operation.

R6 Annual System Performance Report

R6.1 The licensee must supply to the EPA an Annual System Performance Report not later than 60 days after the end of each reporting period.

R6.2 The Report is to supplement the Annual Return and must include but need not be limited to:

- (a) the 50 percentile, 80 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) the relevant reporting forms contained in the Biosolids Guidelines and completed for the reporting period in accordance with the Biosolids Guidelines or as otherwise approved in writing by the EPA;
- (c) a diagram showing the major process elements, discharge points and monitoring points at the sewage treatment plant(s);
- (d) a breakdown of the total number of complaints received by the licensee in relation to the premises into categories of "odours", "water pollution – sewage treatment plant", "water pollution – sewage pumping station" and any other category indicated by the complaints. A brief description of any significant unresolved issues arising out of the complaints must be provided.

R6.3 The Annual System Performance Report must be presented in a format approved in writing by the EPA.

General conditions

G1 Copy of licence kept at the premises

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 Signage

- G2.1 The location of EPA point numbers Point number(s) 1 and 11 must be clearly marked by a sign that indicates the point identification number used in the licence and located as close as practical to the point.

G3 Contact number for incidents and responsible employees

- G3.1 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
 - (ii) provide any information or document required under this licence.
- G3.2 Not applicable.
- G3.3 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 the appointment or change.

G4 Clean-up (Emergency Response)

- G4.1 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.

Pollution studies and reduction programs

102.2 Development of load calculation method and trial calculation

102.2.5 The licensee must provide a written report to the EPA by 31 December 2005 which:

- (a) compares existing site specific emission factors in the SWC document *Development of Load Calculation Method and Trial Calculation (June 2003)* (as amended from time to time) with representative sampling of those pollutants discharged from that part of the system, including sampling using flow-weighted mean concentrations where applicable, to determine whether, and if so, how particular emission factors should be revised;
- (b) investigates and makes recommendations about the feasibility of undertaking direct flow measurement for all sewage treatment plant bypasses; and

- (c) investigates the feasibility of developing a methodology for calculating loads from leakage.

Special conditions

Dictionary

General Dictionary

In this licence, unless the contrary is indicated, the terms below have the following meanings:

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 1998
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 1998
assessable pollutants	Has the same meaning as in the Protection of the Environment Operations (General) Regulation 1998
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 1998.
flow weighted composite sample	Means a sample whose composites are sized in proportion to the flow at each composites time of collection.
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
industrial waste	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
inert 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 1998
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.
reprocessing of 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

solid waste	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
IX	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
treatment of waste	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
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 code	Means the waste codes listed in Appendix 5 of the EPA document A Guide to Licensing Part B.
waste type	Means Group A, Group B, Group C, inert, solid, industrial or hazardous waste

Special Dictionary

ug/L	Means micrograms per litre.
access chamber	a structure constructed to provide physical access to sewer pipes.
approved	Means approved in writing by the EPA. The EPA's approval may be given unconditionally, or subject to conditions.
average dry weather (ADWF)	Means the average flow at a point in the sewage calculated or measured over a 24 hour period.
Biosolids	Has the same meaning as in Schedule 1, Part 3 of the <i>Protection of the Environment Operations Act 1997</i> .
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.
catchment	Catchment boundaries are marked on the system map prepared under M8.1.
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.
Cl₂	Means chlorine.
CN	Means cyanide.
condition	Means a condition of this licence.

customer contract	Has the same meaning as in the <i>Sydney Water Act 1994</i> .
directed flow 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 <i>Protection of the Environment Operations (General) Regulation 1998</i> .
dry weather	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). Dry weather SPS discharge occurs when 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 bypass	Mean a bypass that occurs when the flow rate of sewage at the influent point of the STP does not exceed the flow rate specified in M7.2.
dry weather overflow	Means an overflow in the reticulation system not caused by wet weather, as determined by the hydraulic sewer system model.
dry weather sewage treatment plant discharge	Means a discharge of sewage or effluent from the STP that occurs when the flow rate of sewage at the influent point of the STP is less than the rate specified in condition M7.2.
effluent	Means sewage that has received all of the designed treatment processes at the sewage treatment plant.
EIS	Means the Licensing Sewer Overflows Environmental Impact Statements prepared by the licensee dated June 1998 relating to the issuing of Pollution Control Act licences for the operation of 27 sewerage systems.
emission factor	In relation to load-based licensing, means the level of emissions expected to be generated relative to another characteristic of the activity.
error range	Has the same meaning as in 3.2.1 of the Generic Load Calculation Protocol.
event (all systems except NSOOS and SWOOS)	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.
event (NSOOS and SWSOOS)	In respect to directed overflows an event is an overflow occurrence at one or more overflow locations in a sub-catchment which continues until all overflows have ceased discharging for more than 24 hours.
existing system environmental performance	Means the hydraulic and environmental performance of the reticulation system prior to commencement of any works required by PRP105. From 1 July 2000, the definition of existing system performance in relation to the following is: (a) Chokes: the average of the average annual number of chokes per 100km of pipe in the reticulation system of all the licensee's sewage treatment systems averaged over the period 1 July 1995 to 30 June 2000. (b) Odour complaints: the number of odour complaints from the reticulation system per year averaged over the period 1 July 1995 to 30 June 2000. (c) Wet weather overflows: the number of wet weather overflows per 10 years as predicted by the hydraulic sewer system model for reticulation system conditions in 1994 using the 10 year rainfall time series data. (d) Wet weather STP overflows: the number of wet weather STP overflows per 10 years as predicted by the hydraulic sewer system model for reticulation system conditions in 1994 using the 10 year rainfall time series data. Section (d) of this definition does not apply in relation to existing system environmental performance as contained in condition O5 and PRP103.

existing wet weather STP overflow frequency	Means the frequency of wet weather STP overflows prior to commencement of any works required by PRP105. From 1 July 2000, the definition of existing wet weather STP overflows frequency means the number of wet weather STP overflows per 10 years as predicted by the hydraulic sewer system model for reticulation system conditions in 1994 using the 10 year rainfall time series data.
fc	Means faecal coliforms expressed in colony forming units per 100mL.
FRC	Means free residual chlorine.
Group A waste	Has the same meaning as in Part 3 of Schedule 1 of the <i>Protection of the Environment Operations Act 1997</i> .
Group B waste	Has the same meaning as in Part 3 of Schedule 1 of the <i>Protection of the Environment Operations Act 1997</i> .
Group C waste	Has the same meaning as in Part 3 of Schedule 1 of the <i>Protection of the Environment Operations Act 1997</i> .
harm	Has the same meaning as in the <i>Protection of the Environment Operations Act 1997</i> .
hydraulic sewer system model	Means the model relating to the operation of the sewage treatment system, re-calibrated in accordance with PRP101. Until the model is re-calibrated, the licensee will use the hydraulic model as used for the EISs.
infiltration	Means the process by which groundwater enters the reticulation system through faults, such as crack, 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.
leakage ratio	Means water consumption expressed as a ratio of average dry weather flow, using the method described in Attachment B of the Sydney Water document "Licensing Sewer Overflows Environmental Impacts Statement: Methods" dated June 1998.
licence issue date	Means the date of the issue of this licence, or if this licence is a replacement licence within the meaning of the Protection of the Environment Operations (Savings and Transitional) Regulation 1998, the date on which a copy of the licence was served on the licensee under clause 10 of that regulation.
metal-A	Means the following metals: arsenic, cadmium, chromium, copper, lead, mercury, nickel, selenium, silver and zinc.
mL	Means millilitres.
ML	Means megalitres.
NH₃-N	Means nitrogen as ammonia.
NO_x-N	Means nitrogen as nitrate and nitrite.
node	Is a point in the hydraulic sewer system model that represents one or more overflows in the same catchment.
offensive odour	Has the same meaning as in the <i>Protection of the Environment Operations Act 1997</i> .
overflow	Is a discharge of untreated or partially treated sewage from the sewage treatment system. Overflows may occur as directed overflows, uncontrolled overflows, sewage treatment wet weather overflows or bypasses.

performance acceptance criteria	In relation to computer modelling, means the standard of accuracy (sometimes called the "goodness of fit") to be achieved when observations of a particular performance indicator are compared to the results predicted by the model.
performance indicator	In the context of computer modelling the criterion or criteria used to assess the ability of the model to reproduce observations.
phenols	Means total phenols.
receiving environment zone	Used in the EISs as method of categorising the catchments into which overflows discharge.
reticulation system	Means that part of the sewage treatment system which collects and transports sewage to the sewage treatment plant and includes all sewer pipes (whether greater or less than 300mm diameter), access chambers, vent shafts, directed overflow structures and sewage pumping stations, but does not include the sewage treatment plant.
sensitive areas	The categories of sensitive areas are listed in Attachments C and D of the Sydney Water document "Licensing Sewer Overflows Environmental Impacts Statement: Methods" dated June 1998.
sewage	Means untreated liquid waste received in the reticulation system.
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.
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.
sewer gauge	Means a device to measure particular parameters of sewage passing a specified point. Commonly measured parameters include pressure, water level and velocity.
sewer gauge network	Means the sewer gauges permanently or temporarily installed in the reticulation system.
sub-catchment	Sub-catchment boundaries are marked on the system map prepared under condition M8.
system environmental performance	Means the hydraulic and environmental performance of the reticulation system. From 1 July 2000, the definition of existing system performance in relation to the following is: (a) chokes: the average of the average annual number of chokes per year per 100km of pipe in the reticulation system of all of the licensee's sewage treatment systems averaged over the reporting period and the preceding four twelve month periods. (b) odour complaints: the number of odour complaints from the reticulation system per year averaged over the reporting period and the preceding four twelve month periods. (c) wet weather overflows: the number of wet weather overflows per 10 years as predicted by the hydraulic sewer system model for the reporting period using the 10 year rainfall time series data. (d) wet weather STP overflows: the number of wet weather STP overflows per 10 years as predicted by the hydraulic sewer system model for the reporting period using the 10 year rainfall time series data. Section (d) of this definition does not apply in relation to system environmental performance as contained in condition O5 and PRP103
system map	Means the map or maps maintained by the licensee under condition M8.
TKN – N	Means total Kjeldahl nitrogen.

TN	Means total nitrogen.
TP	Means total phosphorus.
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 sewerage system.
TRC	Means total residual chlorine.
ten year rainfall time series data	Means the rainfall data for the period 1985 to 1994 as used in the EISs.
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 or uncontrolled overflows.
waters	Has the same meaning as in the <i>Protection of the Environment Operations Act 1997</i> .
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).
wet weather bypass	Means a bypass that occurs when the flow rate of sewage at the influent point of the STP exceeds the rate specified in condition M7.2.
wet weather overflow	A wet weather overflow in the reticulation system is an overflow caused by wet weather, as determined by the hydraulic sewer system model.
wet weather sewage treatment plant overflow	Means a discharge of sewage or effluent from an STP that occurs when the flow rate of sewage at the influent point of the STP equals or exceeds the rate specified in condition O6.3.

Mr Neale Philip

Environment Protection Authority

(By Delegation)

Date of this edition - 03-Jun-2005

Licence Variation

Section 58(5) Protection of the Environment Operations Act 1997

End Notes

- | | |
|---|---|
| 1 | Licence varied by notice 010628, issued on 04-Jul-2000, which came into effect on 29-Jul-2000. |
| 2 | Licence fee period changed by notice 1011799 on 28-Sep-2001. |
| 3 | Licence varied by notice 1005279, issued on 22-Oct-2001, which came into effect on 16-Nov-2001. |
| 4 | Licence varied by notice 1017899, issued on 27-Jun-2002, which came into effect on 28-Jun-2002. |
| 5 | Licence varied by notice 1018896, issued on 19-Aug-2002, which came into effect on 19-Aug-2002. |
| 6 | Licence varied by notice 1021142, issued on 23-Dec-2002, which came into effect on 17-Jan-2003. |
| 7 | Licence varied by notice 1032953, issued on 22-Mar-2004, which came into effect on 02-Apr-2004. |