Environment Protection Notice 7934/3 (r1)

ESO-1

This is the document marked ESO-1 referred to in the affidavit of sworn at Hobart in Tasmania this 5th day of October 2012 before me:

JUSTICE OF THE PEACE
Number: 2198

ENVIRONMENT PROTECTION NOTICE No. 7934/3

Issued under the *Environmental Management and Pollution Control Act 1994*

Issued to: **TASMANIAN WATER AND SEWERAGE CORPORATION (NORTHERN REGION) PTY LIMITED trading as BEN LOMOND WATER**
ACN 133 655 062
36 - 42 CHARLES ST
LAUNCESTON TAS 7250

Environmentally Relevant Activity: **The operation of a wastewater treatment plant and discharge to a wastewater reuse scheme (ACTIVITY TYPE: Wastewater Treatment Works)**
BEACONSFIELD WASTEWATER TREATMENT PLANT, BOWENS JETTY RD
BEACONSFIELD TAS 7270

GROUNDS

I, Alexander Schaap, Director, Environment Protection Authority, being satisfied in accordance with section 44(1)(a), (c) and (d) of the *Environmental Management and Pollution Control Act 1994* (the EMPCA) and in relation to the above-mentioned environmentally relevant activity that:-

serious or material environmental harm or environmental nuisance is being or is likely to be caused; and

it is necessary to do so in order to give effect to a State Policy or an environment protection policy; and

it is desirable to vary the conditions of a permit (see table below),

hereby issue this environment protection notice to the above-mentioned person as the person responsible for the activity.

Permit No.	Date Granted	Granted By
3597	10 July 1992	Director of Environmental Control

PARTICULARS

The particulars of the grounds upon which this notice is issued are that:

1 Because the permit conditions need to be varied to reflect continuous improvement consistent with the objectives of EMPCA.

2 Because the permit conditions need to be varied to reflect current or updated terminology and/or to clarify the meaning of the conditions.

3 Because the permit conditions need to be varied to reflect current regulatory practice.

4 Because the permit conditions need to be varied to ensure that there are adequate safeguards against environmental harm or nuisance being caused by the activity.

DIRECTOR, ENVIRONMENT PROTECTION AUTHORITY

Date of issue: - 2 OCT 2012

5 Because it is necessary to give effect to the State Policy on Water Quality Management 1997.

Further details of the particulars are contained in Schedule 4 of this notice.

DIRECTOR, ENVIRONMENT PROTECTION AUTHORITY

Date of issue: - 2 OCT 2007

DEFINITIONS

Unless the contrary appears, words and expressions used in this Notice have the meaning given to them in Schedule 1 of this Notice and in the EMPCA. If there is any inconsistency between a definition in the EMPCA and a definition in this Notice, the EMPCA prevails to the extent of the inconsistency.

REQUIREMENTS

In accordance with s.44(3) of the EMPCA, the person responsible for the activity is required to comply with the conditions contained in Schedule 2 of this Notice. These conditions prevail over the terms of the permit to the extent of any inconsistency.

INFORMATION

Attention is drawn to **Schedule 3**, which contains important additional information.

PENALTIES

If a person bound by an environment protection notice contravenes a requirement of the notice, that person is guilty of an offence and is liable on summary conviction to a penalty not exceeding 1000 penalty units in the case of a body corporate or 500 penalty units in any other case (at the time of issuance of this Notice one penalty unit is equal to $130.00).

NOTICE TAKES EFFECT

This Notice takes effect on the date on which it is served upon you.

APPEAL RIGHTS

You may appeal to the Appeal Tribunal against this notice, or against any requirement contained in the notice, within 14 days from the date on which the notice is served, by writing to:

The Chairperson
Resource Management and Planning Appeal Tribunal
GPO Box 2036
Hobart TAS 7001

Signed: _____

DIRECTOR, ENVIRONMENT PROTECTION AUTHORITY

Date: - 2 OCT 2012

Table Of Contents

Attachments

DIRECTOR, ENVIRONMENT PROTECTION AUTHORITY

Date of issue: - 2 OCT 2012

Schedule 1: Definitions

Activity means any environmentally relevant activity (as defined in Section 3 of EMPCA) to which this document relates, and includes more than one such activity

AMT or **Accepted Modern Technology** means technology which has consistently demonstrated capacity to achieve the desired emission concentration in a cost-effective manner, takes account of engineering and scientific developments in economically viable operations and pursues opportunities for waste minimisation.

Approved Management Method For Biosolids Reuse means the document of this title first gazetted by the Director in June 2006 as amended by the Director from time to time.

Authorized Officer means an authorized officer under section 20 of EMPCA

Average dry weather flow means the average of the daily flows to a wastewater treatment plant sustained during dry-weather periods with limited infiltration.

Best Practice Environmental Management or **'BPEM'** has the meaning described in Section 4 of EMPCA

Biosolids means sewage sludge that has been extracted from a wastewater treatment plant and stabilised for beneficial reuse.

Controlled Waste has the meaning described in Section 3(1) of EMPCA.

Director means the Director, Environment Protection Authority holding office under Section 18 of EMPCA and includes a person authorised in writing by the Director to exercise a power or function on the Director's behalf.

DRP means Decommissioning and Rehabilitation Plan

Effluent means wastewater discharged from The Land.

Emission Limit Guidelines means the *Emission Limit Guidelines for Sewage Treatment Plants that Discharge Pollutants into Fresh and Marine Waters 2001* published by the Department of Primary Industries, Water and Environment, dated June 2001, and includes subsequent versions of this document.

EMPCA means the *Environmental Management and Pollution Control Act 1994*

Environmental Harm and **Material Environmental Harm** and **Serious Environmental Harm** each have the meanings ascribed to them in Section 5 of EMPCA

Environmental Nuisance and **Pollutant** each have the meanings ascribed to them in Section 3 of EMPCA

Minimum Construction Requirements For Water Bores In Australia means the document published under this title by The National Uniform Driller Licensing Committee, February 2012, or any subsequent updates of this document.

Noise Sensitive Premises means residences and residential zones (whether occupied or not), schools, hospitals, caravan parks and similar land uses involving the presence of individual people for extended periods, except in the course of their employment or for recreation.

Peak wet weather flow is the sum of the average dry weather flow plus rain dependant inflow and infiltration.

Person Responsible is any person who is or was responsible for the environmentally relevant activity to which this document relates and includes the officers, employees, contractors, joint venture partners and agents of that person, and includes a body corporate.

Protected Environmental Value means a value or use for which it has been determined that a given area of the environment should be protected. There can, and often will be, more than one protected environmental value for a given area. A list of potential protected environmental values is provided in clause 7.1 of the *State Policy on Water Quality Management 1997.*

Reporting Period means the financial year ending on 30th June of each calendar year.

Sewage Sludge means concentrated solids separated from wastewater during the wastewater treatment process.

Sewerage System means a system of pipes, maintenance holes, pumps, treatment facilities and other items for handling wastewater.

SPWQM means the *State Policy on Water Quality Management 1997*, as amended from time to time.

Stormwater means water traversing the surface of the land as a result of rainfall.

Tasmanian Biosolids Reuse Guidelines means the document of this title published by the Department of Primary Industries, Water and Environment in August 1999, and includes any subsequent versions of this document.

Tasmanian Noise Measurement Procedures Manual means the Noise Measurement Procedures Manual dated July 2004 issued by the Director of Environmental Management in accordance with regulation 25 of the *Environmental Management and Pollution Control (Miscellaneous Noise) Regulations 2004* and includes any subsequent versions of the document.

The Land means the land on which the activity to which this document relates may be carried out, and includes: buildings and other structures permanently fixed to the land, any part of the land covered with water, and any water covering the land. The Land falls within the area defined by:

1 Certificates of Title 157419/1, 144771/2 and 212020/1; and

2 as further delineated at Attachment 1

Waste has the meaning ascribed to it in Section 3 of EMPCA

Wastewater means spent or used water (whether from industrial or domestic sources) containing a pollutant and includes stormwater which becomes mixed with wastewater.

Wastewater Reuse EMP means the document entitled Development Proposal and Environmental Management Plan Beaconsfield Waste-Water Treatment Plant Effluent Re-use Scheme, Ben Lomond Water, 24 October 2011 and the document entitled Amendment to Beaconsfield Waste-Water Treatment Plant Effluent Reuse Scheme DPEMP, August 2012 and includes any amendment to or substitution of these documents approved in writing by the Director.

Wastewater Reuse Scheme means the Beaconsfield Effluent Reuse Scheme as described in the Wastewater Reuse EMP and depicted in Attachment 1.

WWTP means the wastewater treatment plant located off Bowens Jetty Road, Beaconsfield.

Schedule 2: Conditions

Maximum Quantities

Q1 Regulatory limits

1 The activity must not exceed the following limits:

1.1 400 kilolitres/day of design capacity to treat sewage or wastewater (average dry weather flow). (Annual fees are derived from this figure.)

1.2 1,600 kilolitres/day of maximum throughput (peak wet weather flow).

General

G1 Access to and awareness of conditions and associated documents

A copy of these conditions and any associated documents referred to in these conditions must be held in a location that is known to and accessible to the person responsible for the activity. The person responsible for the activity must ensure that all persons who are responsible for undertaking work on The Land, including contractors and sub-contractors, are familiar with these conditions to the extent relevant to their work.

G2 Incident response

If an incident causing or threatening environmental nuisance, serious environmental harm or material environmental harm from pollution occurs in the course of the activity, then the person responsible for the activity must immediately take all reasonable and practicable action to minimise any adverse environmental effects from the incident.

G3 No changes without approval

1 The following changes, if they may cause or increase the emission of a pollutant which may cause material or serious environmental harm or environmental nuisance, must only take place in relation to the activity if such changes have been approved in writing by the EPA Board following its assessment of an application for a permit under the *Land Use Planning and Approvals Act 1993*, or approved in writing by the Director:

1.1 a change to a process used in the course of carrying out the activity; or

1.2 the construction, installation, alteration or removal of any structure or equipment used in the course of carrying out the activity; or

1.3 a change in the quantity or characteristics of materials used in the course of carrying out the activity.

G4 Change of ownership

If the person responsible for the activity is not the owner of The Land upon which the activity is carried out and the owner of The Land changes or is to change, then, as soon as reasonably practicable but no later than 30 days after becoming aware of the change, the person responsible must notify the Director in writing of the change of ownership.

G5 Complaints register

1 A public complaints register must be maintained and made available for inspection by an Authorized Officer upon request. The public complaints register must, as a minimum, record the following detail in relation to each complaint received in which it is alleged that environmental harm (including an environmental nuisance) has been caused by the activity:

1.1 the time at which the complaint was received;

1.2 contact details for the complainant (where provided);

1.3 the subject-matter of the complaint;

1.4 any investigations undertaken with regard to the complaint; and

1.5 the manner in which the complaint was resolved, including any mitigation measures implemented.

2 Complaint records must be maintained for a period of at least 3 years.

G6 Annual Environmental Review

Unless otherwise approved by the Director a publicly available Annual Environmental Review must be submitted each year within 3 months of the end of the Reporting Period. The Annual Environmental Review must be prepared to the satisfaction of the Director using the latest version of the Annual Environmental Review Template which is available on request from the Director.

G7 Additional annual reporting information for wastewater reuse schemes

1 Annual Environmental Reviews submitted in accordance with these conditions must include the following additional information:

1.1 a list of all supplier-user agreements;

1.2 the volume of treated wastewater discharged to the wastewater reuse scheme during each calendar month of the reporting period and the reuse rate as a proportion of total wastewater discharged from the WWTP;

1.3 a summary of reuse activities including water and nutrient budgets;

1.4 results of monitoring undertaken in accordance with the Wastewater Reuse EMP and an assessment of those results. This information should be presented in graphical form where possible and should include comparison with the results of previous reporting periods;

1.5 discussion of any significant trends observable in the monitoring results over time, including comparison with previous monitoring periods, must be provided;

1.6 verification that the wastewater is only being used in the manner and on crops described in the Wastewater Reuse EMP and how this has been verified; and

1.7 details of any proposed variations to the operation of the reuse scheme from those described in the Wastewater Reuse EMP.

2 Where the Director is of the opinion that the Wastewater Reuse EMP needs updating to reflect the current practices and potential environmental impacts associated with the reuse scheme the Director may direct the person responsible to cause a new Wastewater Reuse EMP to be prepared and submitted for approval and the responsible person must comply with the direction or cease the discharge to the wastewater reuse scheme.

G8 Wastewater Reuse EMP review

1 A review of the Wastewater Reuse EMP and its operation must be undertaken, and an updated Wastewater Reuse EMP must be provided to the Director within 3 years of the date on which these conditions take effect, or by a date otherwise specified by the Director.

2 The updated Wastewater Reuse EMP must include a statement by the General Manager, Chief Executive Officer or equivalent for the activity acknowledging the contents of the updated Wastewater Reuse EMP. The updated Wastewater Reuse Scheme must include, but not necessarily be limited to, the following information:

2.1 details of any variation to the operation of the reuse scheme from those described in the original Wastewater Reuse EMP; and

2.2 a comparison of the environmental performance of the activity predicted in the original Wastewater Reuse EMP with the actual operation and performance of the reuse scheme taking into account monitoring and data analysis undertaken in accordance with the original Wastewater Reuse EMP; and

2.3 a description of the circumstances where environmental performance is below the actual performance predicted in the original Wastewater Reuse EMP; and

2.4 a strategy to improve the environmental performance to the level predicted in the original Wastewater Reuse EMP or propose alternative sustainable practices; and

2.5 a description of the potential environmental impacts arising from the ongoing operation of the activity over the next 5 years, including a strategic consideration of potential changes to the activity during that period and consideration of opportunities to implement continuous improvement.

Atmospheric

A1 Odorous gases

Odorous gases arising from the activity must be managed so that they do not cause environmental nuisance beyond the boundary of The Land.

Decommissioning And Rehabilitation

DC1 Notification of cessation

Within 30 days of becoming aware of any event or decision which is likely to give rise to the permanent cessation of the activity, the person responsible for the activity must notify the Director in writing of that event or decision. The notice must specify the date upon which the activity is expected to cease or has ceased.

DC2 DRP requirements

Unless otherwise approved in writing by the Director, a draft Decommissioning and Rehabilitation Plan (DRP) for the activity must be submitted for approval to the Director within 30 days of the Director being notified of the planned cessation of operations or by a date specified in writing by the Director. The DRP must be prepared in accordance with any guidelines provided by the Director.

DC3 Rehabilitation following cessation

1 Following permanent cessation of the activity, and unless otherwise approved in writing by the Director, The Land must be rehabilitated including:

1.1 stabilisation of any land surfaces that may be subject to erosion;

1.2 removal or mitigation of all environmental hazards or land contamination, that might pose an on-going risk of causing environmental harm; and

1.3 decommissioning of any equipment that has not been sold or salvaged.

2 Where a Decommissioning and Rehabilitation Plan (DRP) has been approved by the Director, rehabilitation must be carried out in accordance with that plan.

Effluent

EF1 Effluent discharge locations

1 Effluent from the activity must only be discharged at the following discharge points:

1.1 Discharge to water: discharge to an unnamed tributary of Brandy Creek at grid reference GDA94 E485040 N5440160 as depicted on the plan at Attachment 1.

1.2 Discharge to a wastewater reuse scheme: discharge to the Beaconsfield effluent reuse scheme as defined in the Wastewater Reuse EMP at the effluent pump station at approximate grid reference GDA94 E485916 N5439696 as depicted on the plan at Attachment 1.

2 Effluent must not be discharged to the point referred to in clause 1.2 unless the effluent is managed in accordance with the Wastewater Reuse EMP.

EF2 Effluent quality limits for discharge to water

1 Effluent discharged to water must comply with the water quality limits set out in the Table of Effluent Quality Limits below, at the Effluent Quality monitoring location specified in Attachment 3.

2 **Table of Effluent Quality Limits for discharge to water**

Column 1	Column 2	Column 3	Column 4
Substance or measure	Unit of measurement	Minimum limit	Maximum limit
Biochemical Oxygen Demand	mg/L	-	30
Suspended Solids	mg/L	-	50
Ammonia Nitrogen	mg/L	-	30
Total Nitrogen	mg/L	-	30
Total Phosphorus	mg/L	-	10
Oil and Grease	mg/L	-	10
Thermotolerant Coliforms	cfu/100mL	-	500
pH	-	6.5	8.5

EF3 Effluent quality limits for discharge to a reuse scheme

1 Effluent discharged to the wastewater reuse scheme must comply with the water quality limits set out in the Table of Effluent Quality Limits below, at the Effluent Quality monitoring location specified in Attachment 3.

2 **Table of Effluent Quality Limits for discharge to the wastewater reuse scheme**

Column 1	Column 2	Column 3	Column 4	Column 5
Parameter	Unit of measurement	**Minimum limit**	Median limit	Maximum limit
Biochemical Oxygen Demand	mg/L	-	-	80
Thermotolerant Coliforms	cfu/100mL	-	<10000	-
pH	-	6.0	-	9.0

EF4 Notification of discharge other than to a reuse scheme

The person responsible must notify the Director as soon as reasonably practicable after becoming aware of a discharge or the need for discharge of effluent other than to the wastewater reuse scheme.

EF5 Blue-green algae notification

Unless otherwise specified by the Director, if blue-green algae are present at concentrations of 5,000 cells/mL or greater or at a biovolume of 0.4 mm3/L or greater in the effluent during discharge to water, the Director must be notified within 24 hours of the monitoring results being received.

Monitoring

M1 Monitoring requirements

1 Unless otherwise specified in writing by the Director, monitoring must be undertaken in accordance with the Table of Monitoring at Attachment 3, as follows:

1.1 the items listed in Column 1 must be sampled or tested at the locations listed in Column 2 for the parameters listed in Column 3 at the frequencies listed in Column 5 using the techniques listed in Column 6; and

1.2 resultant monitoring data must be reported to the Director in accordance with the requirements set out in Column 7 and in the units listed in Column 4.

M2 Dealing with samples obtained for monitoring

1 Any sample or measurement required to be obtained under these conditions must be taken and processed in accordance with the following:

1.1 Australian Standards, NATA approved methods, the American Public Health Association Standard Methods for the Analysis of Water and Waste Water or other standard(s) approved in writing by the Director;

1.2 samples must be tested in a laboratory accredited by the National Association of Testing Authorities (NATA), or a laboratory approved in writing by the Director, for the specified test;

1.3 results of measurements and analysis of samples and details of methods employed in taking measurements and samples must be retained for at least three years after the date of collection; and

1.4 noise measurements must be undertaken in accordance with the Tasmanian Noise Measurement Procedures Manual.

M3 Monitoring reporting and record keeping

1 Unless otherwise specified in writing by the Director, a Monthly Monitoring Report, in an electronic format approved by the Director, must be submitted to the Director within 21 days of completion of laboratory analyses of samples collected for the previous monthly period. As a minimum, the Monthly Monitoring Report must include the following information:

1.1 the estimated or measured average daily flow to the wastewater treatment plant for the previous monthly period; and

1.2 for each sampling location or site test location:

1.2.1 a location name which allows the location to be clearly identifiable;

1.2.2 the date and where relevant the time at which each sample was taken or site test conducted;

1.2.3 the indicators for which analyses or tests were carried out and the units in which the results are reported; and

1.2.4 the results for all sample analyses and site tests.

2 A record of all monthly monitoring reports submitted to the Director must be maintained and copies of all laboratory analysis reports referenced to the relevant Monthly Monitoring Reports kept for a minimum period of three years.

M4 Flow monitoring equipment

1 Flow monitoring equipment must be calibrated as frequently as recommended by the manufacturer or at least once every 12 months, whichever is the more frequent.

2 The dates on which flow monitoring equipment has been calibrated must be recorded and records kept for a minimum of 3 years.

M5 Signage of monitoring points

With the exception of open water sampling, all monitoring points must be clearly marked to indicate the location and name of the monitoring point.

M6 Groundwater Monitoring Bore Planning and Construction

1 A groundwater monitoring bore plan must be submitted by the person responsible to the Director for approval within 3 months of the date on which these conditions take effect, or by a date otherwise specified in writing by the Director.

2 The groundwater monitoring bore plan must be prepared by a suitably qualified person.

3 The groundwater monitoring bore plan must:

3.1 describe the location and design of groundwater monitoring bores to be constructed or which have all ready been constructed to detect groundwater contamination caused by the activity;

3.2 include a map of the Land on which the location of existing and proposed bores are marked;

3.3 provide reasons as to why the location and design of proposed bores is appropriate for the purpose of detecting groundwater contamination caused by the activity;

3.4 provide reasons as to why the location and design of existing bores are appropriate for the purpose of detecting groundwater contamination caused by the activity.

4 Where the groundwater monitoring bore plan requires the construction of bores, those bores must be constructed within 6 months of the date on which the Director approves the groundwater monitoring bore plan.

5 At the time of construction of any bore required by the groundwater monitoring bore plan, the following information must be recorded and compiled into a Bore Installation and Development Record:

5.1 a description of the materials used for construction;

5.2 initial field measurements of the groundwater for conductivity, total dissolved solids, pH and temperature;

5.3 details of slot screens installed, and the depth to which they were installed;

5.4 depth of gravel packing;

5.5 depth of the bentonite cap;

5.6 details of bore development during pumping (removal of drilling contamination);

5.7 results of pump tests;

5.8 aquifer levels; and

5.9 a detailed geological log.

6 The Director must be notified of construction of the bores required by the groundwater monitoring bore plan within 1 month of their construction. The Bore Installation and Development Record for each newly constructed bore must be provided with the notification.

7 The groundwater bores required by this condition must be established by a suitably qualified person in accordance with the Minimum Construction Requirements for Water Bores in Australia.

Noise Control

N1 Noise emission limits

1 Noise emissions from the activity when measured at any noise sensitive premises in other ownership and expressed as the equivalent continuous A-weighted sound pressure level must not exceed:

1.1 50 dB(A) between 0700 hours and 1800 hours (Day time); and

1.2 45 dB(A) between 1800 hours and 2200 hours (Evening time); and

1.3 40 dB(A) between 2200 hours and 0700 hours (Night time).

2 Where the combined level of noise from the activity and the normal ambient noise exceeds the noise levels stated above, this condition will not be considered to be breached unless the noise emissions from the activity are audible and exceed the ambient noise levels by at least 5 dB(A).

3 The time interval over which noise levels are averaged must be 10 minutes or an alternative time interval specified in writing by the Director.

4 Measured noise levels must be adjusted for tonality, impulsiveness, modulation and low frequency in accordance with the Tasmanian *Noise Measurement Procedures Manual - July 2004.*

5 All methods of measurement must be in accordance with the Tasmanian *Noise Measurement Procedures Manual - July 2004.*

Operations

OP1 Contingency Management Plan

1 Unless otherwise approved in writing by the Director, a Contingency Management Plan must be submitted by the person responsible to the Director by 31 December 2012. The plan must detail measures to prevent and mitigate environmental harm if an unplanned event occurs. Unplanned events that must be addressed by the plan include:

1.1 incidents, accidents, power failures and malfunctions with the potential to cause the release of effluent that does not comply with these conditions;

1.2 pipe ruptures leading to discharge of wastewater;

1.3 development of blue green algae (cyanobacteria) concentrations that have the potential to cause environmental harm; and

1.4 fire and flooding.

2 The Contingency Management Plan must include communication procedures for ensuring that downstream water users, the general public and relevant government agencies are informed of any unplanned event to the extent necessary to allow them to take precautions against adverse impacts upon the environment, human health and livestock health. The Contingency Management Plan must include contact details for all downstream water users that may be impacted by an unplanned event and must be updated annually by the person responsible.

3 The person responsible must ensure that all personnel are aware of the Contingency Management Plan and their responsibilities in relation to unplanned events and have access at all times to the Contingency Management Plan.

4 The Contingency Management Plan must be implemented if an unplanned event occurs.

OP2 Operational Procedures Manual

1 An Operational Procedures Manual ('the Manual') must be developed by 31 December 2012 or by a date otherwise specified in writing by the Director. The Manual must provide detailed information relating to the activity and must detail operational procedures as required to ensure compliance with these conditions.

2 The person responsible must take all reasonable and practicable measures to ensure that personnel, including contractors, carry out their duties in accordance with the manual.

OP3 Inflow and Infiltration (I&I) Management Plan

1 An Inflow and Infiltration ('I&I') Management Plan must be submitted by the person responsible to the Director for approval by 31 December 2013 or by a date otherwise specified in writing by the Director.

2 The I&I Management Plan must contain the following:

2.1 Details of surveys or investigations previously undertaken to identify I&I points within the sewerage system including;

2.1.1 summaries of results;

2.1.2 descriptions of the methods used;

2.1.3 identification of sub-catchment I&I rates; and

2.1.4 I&I sources identified.

2.2 An outline of future surveys or investigations to be undertaken to identify I&I points within the sewerage system;

2.3 A strategy for the reduction of I&I into the sewerage system including:

2.3.1 specific reduction targets;

2.3.2 a table containing all of the commitments made in the strategy; and

2.3.3 an implementation timetable for the strategy;

2.3.4 The person responsible must implement and act in accordance with the approved I&I Management Plan.

3 In the event that the Director, by notice in writing to the person responsible, either approves a minor variation to the approved I&I Management Plan or approves a new I&I Management Plan in substitution for the plan originally approved, the person responsible must implement and act in accordance with the varied plan or the new plan, as the case may be.

OP4 Site security

The WWTP must be fenced to prevent entry by unauthorised persons and these fences must be adequately maintained for this purpose.

OP5 Lagoon maintenance

1 Floating matter including grass, weeds and rubbish must not be allowed to accumulate on the surface of any ponds or lagoons.

2 All lagoon and pond embankments must be kept in good repair and free of woody vegetation and rubbish.

Waste Management

WM1 Sewage Sludge Management Plan

1 A Sewage Sludge Management Plan must be submitted to the Director by 3 February 2013, or by a date otherwise specified in writing by the Director.

2 The Sewage Sludge Management Plan must be prepared with reference to the Tasmanian Biosolids Reuse Guidelines and must include:

2.1 a monitoring program to ensure the correct testing and classification of sewage sludge; and

2.2 a proposal for the appropriate end use or disposal of sewage sludge.

3 The Sewage Sludge Management Plan must contain a description of any onsite containment facility for sewage sludge at the WWTP including measures to prevent environmental nuisance.

4 Unless otherwise approved in writing by the Director, sewage sludge must be managed in accordance with the Sewage Sludge Management Plan approved in writing by the Director.

WM2 Controlled Waste Register

1 A Controlled Waste Register, to document storage and movement of sewage screenings, grit material, sewage sludge and biosolids, must be maintained and made available for inspection by an Authorized Officer upon request.

2 The Controlled Waste Register must:

2.1 keep an accurate record of type and quantity of Controlled Wastes stored on The Land; and

2.2 record the following detail in relation to Controlled Waste removed from The Land:

2.2.1 the type of Controlled Waste;

2.2.2 the quantity of Controlled Waste;

2.2.3 the Controlled Waste Transporter who moved the Controlled Waste;

2.2.4 the date the Controlled Waste was moved;

2.2.5 the recipient of the Controlled Waste; and

2.2.6 The destination address of the Controlled Waste.

3 Controlled Waste records must be maintained for a period of at least 3 years.

Schedule 3: Information

Legal Obligations

LO1 Notification of incidents under section 32 of EMPCA

1 A person responsible for an activity that is not a level 2 activity or a level 3 activity must notify the relevant Council, as soon as reasonably practicable but not later than 24 hours, after becoming aware of the release of a pollutant occurring as the result of any incident in relation to that activity, including an emergency, accident or malfunction, if this release causes or may cause an environmental nuisance.

2 A person responsible for an activity that is a level 2 activity or a level 3 activity must notify the Director, as soon as reasonably practicable but not later than 24 hours, after becoming aware of the release of a pollutant occurring as a result of any incident in relation to that activity, including an emergency, accident or malfunction, if this release causes or may cause an environmental nuisance.

3 A person responsible for an environmentally relevant activity must notify the Director, as soon as reasonably practicable but not later than 24 hours, after becoming aware of the release of a pollutant occurring as a result of any incident in relation to that activity, including an emergency, accident or malfunction, if this release causes or may cause serious or material environmental harm.

4 The Director can be notified by telephoning 1800 005 171 (a 24-hour emergency telephone number).

5 Any notification given by a person in compliance with this section is not admissible in evidence against the person in proceedings for an offence or for the imposition of a penalty (other than proceedings in respect of the making of a false or misleading statement).

6 A person is required to notify the relevant Council or the Director of an incident despite the fact that to do so might incriminate the person or make the person liable to a penalty.

7 Any notification referred to in subsection (1), (2) or (3) must include details of the incident, its nature, the circumstances in which it occurred and any action that has been taken to deal with it.

8 For the purposes of subsections (1), (2) and (3):

8.1 a person is not required to notify the relevant Council of an incident if the person has reasonable grounds for believing that the incident has already come to the notice of the Council

8.2 a person is not required to notify the Director of an incident if the person has reasonable grounds for believing that the incident has already come to the notice of the Director;

LO2 EMPCA

The activity must be conducted in accordance with the requirements of the *Environmental Management and Pollution Control Act 1994* and Regulations thereunder. The conditions of this document must not be construed as an exemption from any of those requirements.

LO3 Storage and handling of Dangerous Goods and Dangerous Substances

1 The storage, handling and transport of dangerous goods and dangerous substances must comply with the requirements of relevant State Acts and any regulations thereunder, including:

1.1 *Dangerous Goods (Road and Rail Transport) Act 2010*;

1.2 *Dangerous Goods (Road and Rail Transport) Regulations 2010;*

1.3 *Dangerous Substances (Safe Handling) Act 2005;*

1.4 *Dangerous Substances (Safe Handling) Regulations 2009;*

1.5 *Workplace Health and Safety Act 1995*; and

1.6 *Workplace Health and Safety Regulations 1998.*

LO4 Change of responsibility

If the person who is or was responsible for the activity ceases to be responsible for the activity, they must notify the Director in accordance with Section 45 of the EMPCA.

Policy Requirements

PR1 Policy Objectives

1 Wastewater Treatment Plants (WWTP) in Tasmania must comply with the requirements for best practice environmental management (BPEM) and move toward implementing accepted modern technology (AMT) under the Environmental Management and Pollution Control Act 1994 (EMPCA) and the State Policy on Water Quality Management 1997 (SPWQM). The management of pollutant discharge from point sources is governed by the principles defined in clause 16.2 of SPWQM, namely:

1.1 pollutant discharges must not prejudice water quality objectives (WQO) defined for the receiving waters; and

1.2 pollutant discharges must be reduced to the maximum extent that is reasonable and practical having regard to Best Practice Environmental Management and in accordance with the hierarchy of waste management.

PR2 Policy Framework

1 The policy framework and guidelines relevant to implementation of policy are as follows:

1.1 State Policy on Water Quality Management 1997;

1.2 Emission Limit Guidelines for Sewage Treatment Plants That Discharge Pollutants In To Fresh And Marine Waters, June 2001;

1.3 Tasmanian Biosolids Reuse Guidelines, August 1999;

1.4 Environmental Guidelines for the Use of Recycled Water in Tasmania, December 2002; and

1.5 Approved Management Method for Biosolids Reuse, June 2006.

Schedule 4
Grounds Matrix

EPN 7934/3
Legal entity name: Tasmanian Water and Sewerage Corporation (Northern Region) Pty Ltd
Trading name: Ben Lomond Water

EPN7934/3 Condition	Corresponding Condition in Permit 3597	Further particulars of the grounds
Q1	Maximum Quantities	Equivalent requirement specifying average dry weather flow and adding an allowance for increased flows during times of high rainfall.
Nil	G1	Removed because the condition refers to the repealed *Environment Protection Act 1973* and therefore is no longer relevant.
G1	Nil	New requirement to ensure any person responsible for the activity and any person responsible for undertaking work on The Land is aware of the requirements of these conditions.
G2	G3	Equivalent requirement for the responsible person to take action if an incident may have an adverse affect on the environment. Reporting requirements are now enclosed in Schedule 3.
G3	G2	Equivalent condition requiring approval from the Director prior to any changes in the activity.
Nil	G4	Removed as no longer relevant.
G4	Nil	New requirement to notify the Director of a change in ownership relating to the activity.
G5	A1	Equivalent condition requiring a complaints register to be maintained and detailing the actions taken to investigate and resolve the complaint. Complaints register now relates to all kinds of complaints, not just odour related complaints, in order to facilitate the assessment of alleged incidents of nuisances and environmental harm under EMPCA and BPEM.
G6	Nil	Introduces requirements for the submission of an Annual Environmental Review to provide an assessment of the recent performance of the WWTP.
G7	Nil	Introduces a requirement for the submission of additional annual reporting information for wastewater reuse schemes, to enable the Director to effectively assess compliance with requirements for discharge to the wastewater reuse scheme.

- 2 OCT 2012

EPN7934/3 Condition	Corresponding Condition in Permit 3597	Further particulars of the grounds
G8	Nil	New requirement to undertake a review of the Wastewater Reuse EMP to ensure effluent discharged from the activity to the wastewater reuse scheme is managed in accordance with section 6 of the SPWQM and BPEM.
A1	Nil	New requirement to ensure the activity is conducted in compliance with EMPCA with respect to odour management.
DC1	Nil	New requirement to ensure the Director is notified prior to the cessation of the activity so that compliance with the other relevant conditions of this notice can be reviewed.
DC2	Nil	New requirement to ensure an appropriate Decommissioning and Rehabilitation Plan is developed to mitigate the potential for environmental harm to be caused following cessation of the activity.
DC3	Nil	New requirement to ensure the Land is rehabilitated in accordance with an appropriate Decommissioning and Rehabilitation Plan.
EF1	Nil	New requirement specifying the location of authorised discharge points to enable accurate monitoring of receiving waters as defined in section 45 SPWQM and effluent discharges to the wastewater reuse scheme.
EF2	E1	Varied to reflect emission limit requirements in accordance with Division 2B of the SPWQM. Removal of reference to repealed *Environment Protection (Water Pollution) Regulations.*
EF3	Nil	New requirement specifying emission limits for treated wastewater discharged to the wastewater reuse scheme in order to mitigate against the potential for environmental harm to occur as a result of discharge of treated wastewater to the wastewater reuse scheme.
EF4	Nil	New requirement to notify the Director upon becoming aware of the need to discharge effluent other than to the wastewater reuse scheme to enable the Director to effectively monitor compliance with requirements for discharge to the wastewater reuse scheme.
EF5	Nil	New requirement to ensure discharges are being

- 2 OCT 2012

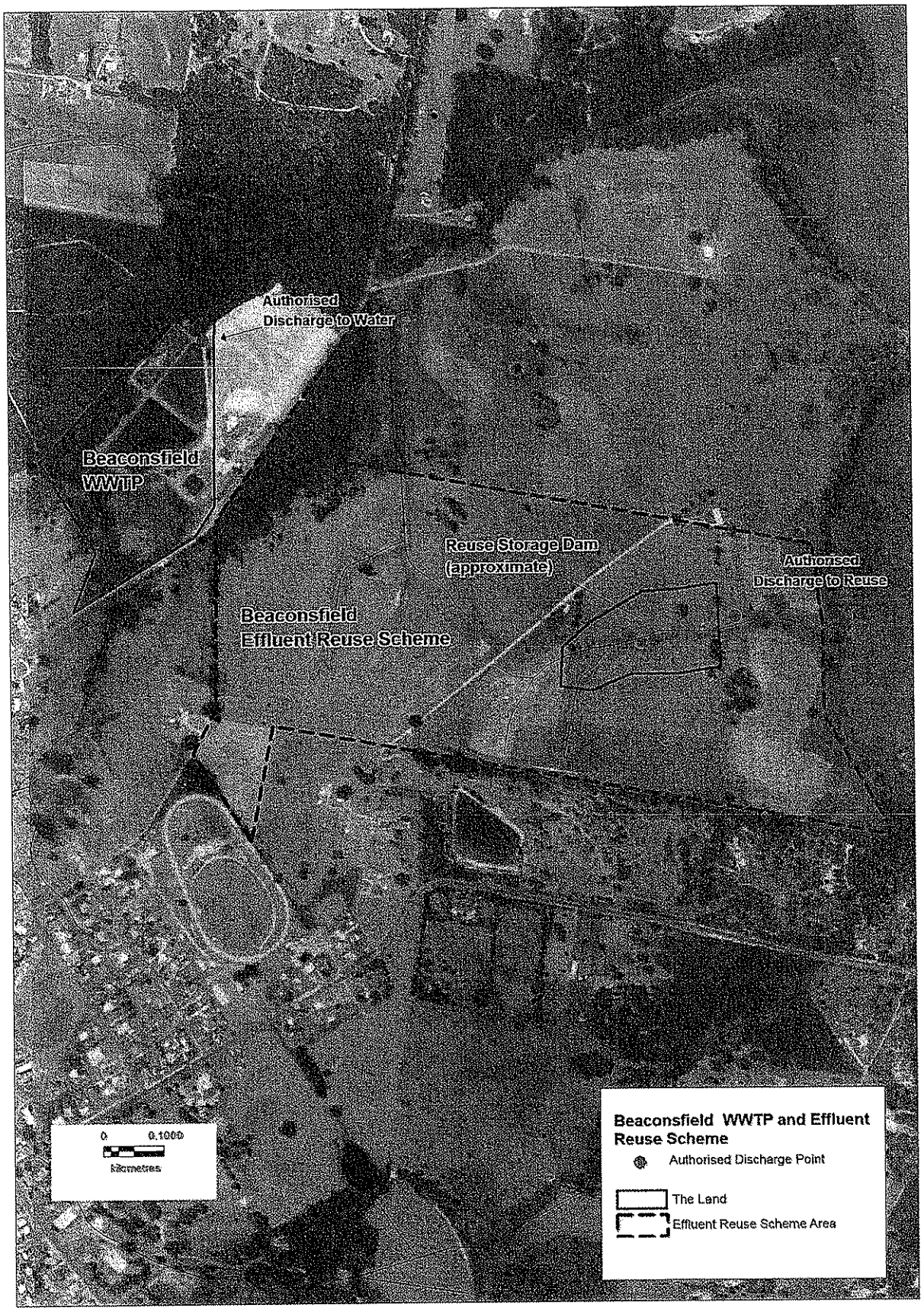
EPN7934/3 Condition	Corresponding Condition in Permit 3597	Further particulars of the grounds
		managed in accordance with EMPCA and the SPWQM with respect to blue-green algae.
M1 & Attachment 3	M2	Varied condition to ensure monitoring requirements reflect the requirements of the SPWQM.
M2	M1	Equivalent condition to ensure samples required by this EPN are collected and analysed in accordance with relevant acceptable standards.
M3	M2	Monitoring reporting requirements are varied by this condition to ensure reporting to current standards.
M4	Nil	New requirement for calibration of flow monitoring equipment to ensure accuracy of flow measurements.
M5	Nil	New requirement requiring signposting and identification of monitoring points to ensure monitoring occurs consistently at identified locations so that results can be appropriately interpreted.
M6	Nil	New requirements to install groundwater monitoring bores to ensure groundwater can be monitored for any potential contamination caused by the activity, consistent with section 24 SPWQM.
Nil	M3	Condition for monthly reporting of odour complaints removed as reporting of odour complaints is now included in Annual Environmental Review.
N1	Nil	New requirement specifying the limits and management of noise emission limits as required by EMPCA.
OP1	Nil	New condition to ensure contingency measures are in place to mitigate potential for an incident to occur that may cause environmental harm, consistent with EMPCA.
OP2	Nil	New requirements requiring operational procedures to be documented and that all personnel operating at the activity are familiar with these procedures to ensure the activity is managed in a manner that does not cause environmental harm, consistent with EMPCA.
OP3	Nil	New condition to develop an inflow and infiltration management plan to reduce the hydraulic load on the WWTP if appropriate, in accordance with BPEM.
OP4	Nil	New requirement stipulating site security to discourage unauthorised personnel accessing the

- 2 OCT 2012

EPN7934/3 Condition	Corresponding Condition in Permit 3597	Further particulars of the grounds
		activity and potentially causing environmental harm.
OP5	Nil	New requirement to ensure proper maintenance of wastewater treatment lagoons in accordance with BPEM.
Nil	S1	Condition removed as if referred to repealed legislation.
WM1	S2	New requirement for Sewage Sludge Management Plan to mitigate the potential for environmental harm, in accordance with BPEM and EMPCA.
WM2	Nil	New requirement to maintain a controlled waste register, in accordance with BPEM.

- 2 OCT 2012

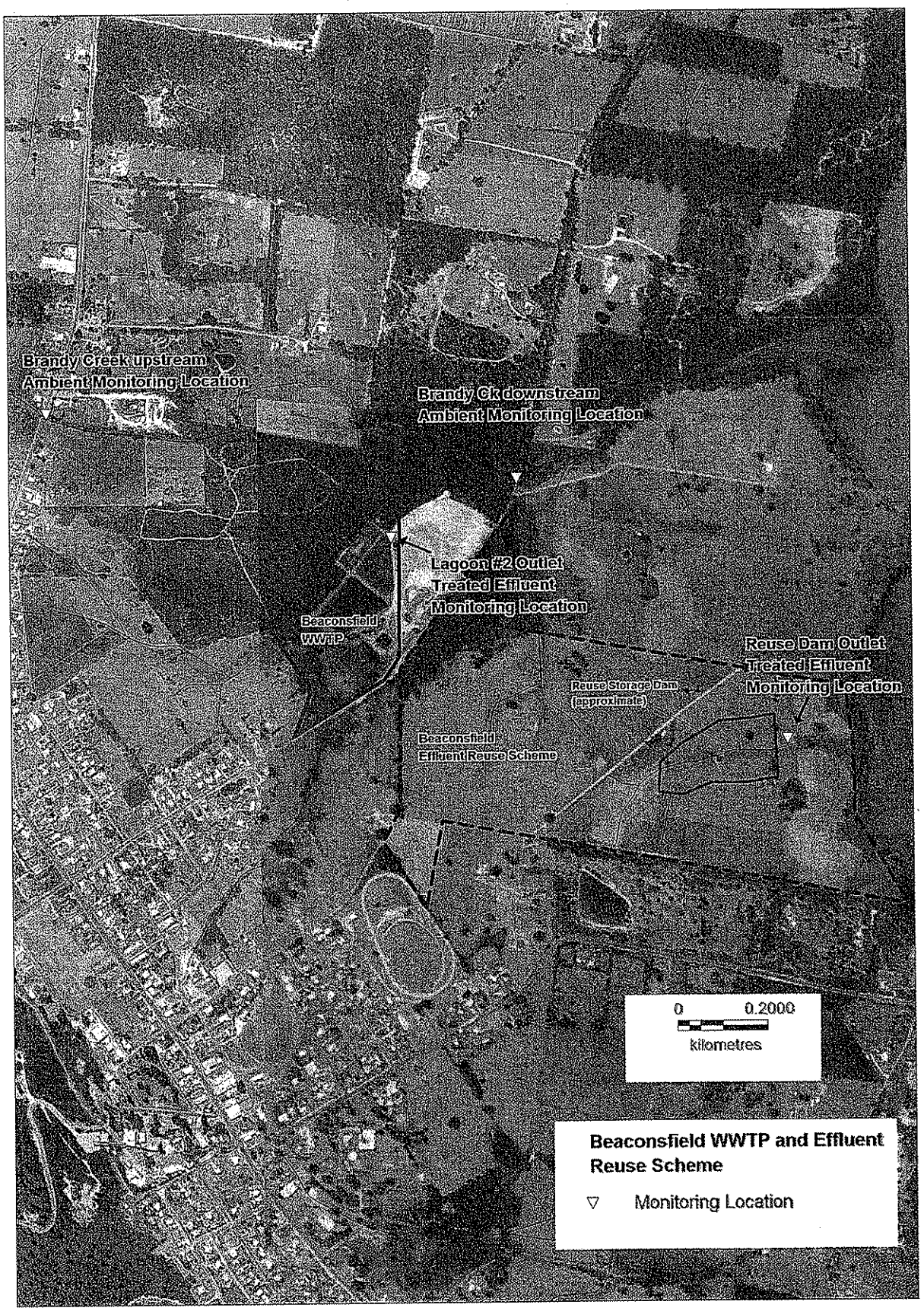
Attachment 1: Beaconsfield WWTP and Effluent Reuse Scheme Plan of Activity



DIRECTOR, ENVIRONMENT PROTECTION AUTHORITY

Date of issue: - 2 OCT 2012

Attachment 2: Beaconsfield WWTP Monitoring Locations



DIRECTOR, ENVIRONMENT PROTECTION AUTHORITY

Date of issue: - 2 OCT 2012

ATTACHMENT 3: TABLE OF MONITORING REQUIREMENTS FOR EPN No. 7934/3

Column 1 Item	Column 2 Locations	Column 3 Parameter	Column 4 Unit of Measure	Column 5 Frequency	Column 6 Technique	Column 7 Reporting requirements
Influent wastewater flow to the activity	WWTP Inlet at Lagoon #1	Flow	kL/day	Continuous measurement	In-line	1. To be reported in the Monthly Monitoring Report as an average for the reporting period of daily flow. 2. To be report in the Annual Environmental Review as monthly averages of daily flow
Treated effluent	Lagoon #2 Outlet	Flow	kL/day	Continuous or periodic measurement or estimate based on approved method	Flow meter or other approved technique	1. To be reported on the Monthly Monitoring Report as the instantaneous flows at the time treated effluent samples were collected. 2. All Monthly Monitoring Reports must specify effluent discharge location and "discharge to reuse" or "discharge to water" as appropriate. 3. A summary of results including graphical presentation to be provided in the Annual Environmental Review.
	Lagoon #2 Outlet	pH	-	Bi-monthly during months reuse irrigation is not occurring; and within 24hrs and then monthly if discharge to water commences	Field Test	1. Results to be reported in the Monthly Monitoring Report 2. Monthly Monitoring Reports must specify if effluent is discharging to authorised "discharge to water" or not. 3. A summary of results including graphical presentation to be provided in the Annual Environmental Review.
		Temperature	°C			
		Conductivity	dS/m			
		Dissolved Oxygen	mg/L			
		Biochemical Oxygen Demand	mg/L	Bi-monthly during months reuse irrigation is not occurring; and within 24hrs and then monthly if discharge to water commences	Grab sample	
		Suspended Solids	mg/L			
		Ammonia-Nitrogen	mg/L			
		Nitrate-Nitrogen	mg/L			
		Nitrite-Nitrogen	mg/L			
		Total Nitrogen	mg/L			
		Total Phosphorus	mg/L			
		Oil and Grease	mg/L			
		Thermotolerant Coliforms	cfu/100mL			
		Enterococci	cfu/100mL			
		Arsenic	mg/L	Annually		
		Chromium (total)	mg/L			
		Chromium VI	mg/L			
		Copper	mg/L			
		Iron	mg/L			
		Lead	mg/L			
		Molybdenum	mg/L			
		Selenium	mg/L			
		Silver	mg/L			
		Zinc	mg/L			
		Blue-green algae	cells/mL	Monthly between November – March (or until no longer present)	Grab sample	1. Results to be reported annually in an electronic format approved by the Director 2. A summary of results including graphical presentation to be provided in the Annual Environmental Review
Treated effluent	Reuse Dam Outlet/ Discharge to Reuse	Flow	kL/day	Continuous measurement	Flow meter	1. To be reported in the Monthly Monitoring Report and Annual Environmental Review as total flow for month
		pH	-	Within 24hrs of discharge to reuse commencing and then monthly during months irrigation is occurring	Field test	1. Results to be reported in the Monthly Monitoring Report 2. A summary of results including graphical presentation to be provided in the Annual Environmental Review
		Temperature	°C			
		Conductivity	dS/m			
		Dissolved Oxygen	mg/L			
		Biochemical Oxygen Demand	mg/L		Grab sample	
		Thermotolerant Coliforms	cfu/100mL			

- 2 OCT 2012

Column 1 Item	Column 2 Locations	Column 3 Parameter	Column 4 Unit of Measure	Column 5 Frequency	Column 6 Technique	Column 7 Reporting requirements
		Blue-green algae	cells/mL	Monthly between November – March (or until no longer present)	Grab sample	1. Results to be reported annually in an electronic format approved by the Director 2. A summary of results including graphical presentation to be provided in the Annual Environmental Review
Groundwater	Groundwater monitoring bores at locations on the Land to be approved by the Director in accordance with these conditions	Conductivity	dS/m	Annually	Field Test	1. Results to be provided in Annual Environmental Review
		pH				
		Total Dissolved Solids	mg/L			
		Ammonia-Nitrogen	mg/L			
		Nitrite-Nitrogen	mg/L			
		Nitrate-Nitrogen	mg/L			
		Total Nitrogen	mg/L			
		Total Phosphorus	mg/L			
		Thermotolerant Coliforms	cfu/100mL			
		Enterococci	cfu/100mL			
Sludge	In accordance with the Sewage Sludge Management Plan approved by the Director	Temperature	°C	Prior to sewage sludge being removed from the site or as otherwise required in accordance with the Sewage Sludge Management Plan approved by the Director.	Field Test	1. Prior to any sewage sludge being removed from the site 2. A summary of results to be provided in Annual Environmental Review, if collected during Reporting Period
		Conductivity	dS/m			
		Moisture	%		Composite sampling in accordance with the methodologies described in the Tasmanian Biosolids Reuse Guidelines 1999	
		Organic matter	%dry matter			
		Ammonia Nitrogen	mg/kg			
		Nitrate Nitrogen	mg/kg			
		Nitrite Nitrogen	mg/kg			
		Total Nitrogen	mg/kg			
		Total Phosphorus	mg/kg			
		Total Potassium	mg/kg			
		Total Arsenic	mg/kg			
		Total Cadmium	mg/kg			
		Total Chromium	mg/kg			
		Total Copper	mg/kg			
		Total Lead	mg/kg			
		Total Mercury	mg/kg			
		Total Nickel	mg/kg			
		Total Selenium	mg/kg			
		Total Zinc	mg/kg			
		DDT	mg/kg			
		DDE	mg/kg			
		DDD	mg/kg			
		Aldrin	mg/kg			
		Dieldrin	mg/kg			
		Chlordane	mg/kg			
		Heptachlor	mg/kg			
		Lindane	mg/kg			
		HCB	mg/kg			
		BHC	mg/kg			
		PCB	mg/kg			
Ambient water quality	As shown on Attachment 2: 1. Upstream monitoring point (Brandy Ck crossing on West Tamar Hwy)	pH		Within 24 hours and then monthly during discharges to water	Field Test	1. Results to be reported in the Monthly Monitoring Report 2. A summary of results including graphical presentation to be provided in the Annual Environmental Review.
		Temperature	°C			
		Dissolved Oxygen	mg/L			
		Conductivity	dS/m			
		Suspended Solids	mg/L		Grab sample	
		Ammonia Nitrogen	mg/L			
		Nitrate Nitrogen	mg/L			

2 OCT 2012

Column 1 Item	Column 2 Locations	Column 3 Parameter	Column 4 Unit of Measure	Column 5 Frequency	Column 6 Technique	Column 7 Reporting requirements
	approx. E 484280 N5440430 2. Downstream monitoring point (Brandy Ck crossing on Bowens Jetty Rd) approx. E 485320 N 5440280	Nitrite Nitrogen	mg/L			
		Total Nitrogen	mg/L			
		Total Phosphorus	mg/L			
		Dissolved Reactive Phosphorus	mg/L			
		Oil and Grease	mg/L			
		Thermotolerant Coliforms	cfu/100mL			
		Enterococci	cfu/100mL			
		Blue-green algae	cells/mL	During algal blooms in the WWTP where effluent is being released to water, within 24 hours and then monthly	Grab sample	

For the purposes of the Table of Monitoring Requirements the following definitions apply:

Continuous measurement means automatic ongoing measurement at all times.
In-line means measurement taken from instrumentation installed within the conduit of flow
on-line means measurements or analyses are carried out automatically and the results electronically recorded for remote viewing and analysis
field test means either *in situ* testing or analysis of samples immediately with appropriate instrumentation
grab sample means a discrete sample collected in a manner that ensures it is a representative sample

- 2 OCT 2012