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JUSTICE OF THE PEACE NUMBER

B. H. MANN JUSTICE OF THE PEACE

ENVIRONMENT PROTECTION NOTICE No. 7933/1 4062 TAS

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

Issued to: **TASMANIAN WATER & SEWERAGE CORPORATION PTY LTD**
ACN 162 220 653
163 - 169 MAIN RD
MOONAH TAS 7009

Environmentally Relevant Activity: **The operation of a wastewater treatment plant (ACTIVITY TYPE: Wastewater Treatment Works)**
GEORGE TOWN WASTEWATER TREATMENT PLANT, OLD BELL BAY RD
BELL BAY TAS 7253

GROUNDS

I, Wes Ford, Director, Environment Protection Authority, (the Director), being satisfied in accordance with section 44(1)(d) of the *Environmental Management and Pollution Control Act 1994* (the EMPCA) that in relation to the above-mentioned environmentally relevant activity that 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
3952	03 December 1991	Director of Environmental Control

PARTICULARS

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

- 1 The permit conditions need to be varied to reflect current or updated terminology and/or to clarify the meaning of the condition.
- 2 It is desirable to add a condition to require the development, submission and implementation of a groundwater monitoring bore plan to ensure best practice environmental management is applied to groundwater monitoring.
- 3 A regulatory limit which sets the maximum scale or throughput of the activity is needed because any increase in scale or throughput may result in additional environmental impacts or emissions that were not considered at the time of granting of the permit.
- 4 It is necessary to add a condition requiring the submission of a publicly available Annual Environmental Review to inform the Director and the public of the environmental performance of the activity.
- 5 It is desirable to add a condition requiring odour management. Odour management consideration is part of best practice environmental management.

DIRECTOR, ENVIRONMENT PROTECTION AUTHORITY

Wes Ford
B. H. Mann

Date of issue:

14 SEP 2015

- 6 It is necessary to add a condition requiring notification of the likely permanent cessation of the activity so that the Director has sufficient time in which to ensure that appropriate measures are in place to minimise environmental harm arising from the permanent cessation of the activity
- 7 It is necessary to add a condition to require the submission to the Director, for approval, a Decommissioning and Rehabilitation Plan so that appropriate measures to minimise environmental harm are available to be implemented in the event of the permanent cessation of the activity.
- 8 The permit conditions refer to the Environment Protection Act 1973 which has been repealed and replaced by the EMPCA. It is necessary to remove reference to the repealed Act.
- 9 Conditions are required to ensure all persons responsible for the activity have access to and are familiar with the relevant documents associated with activities at the site and thereby promote compliance with the conditions.
- 10 The permit does not include a condition requiring the person responsible to take action to minimise environmental harm if an incident occurs.
- 11 Conditions are needed to bring the permit into accordance with the development and planning requirements under the EMPCA and the Land Use and Planning Approvals Act 1993.
- 12 A condition requiring notification of a change of ownership of the land is needed because this Environment Protection Notice may affect title to land and the new owner's interest may be affected by pollutants emitted or disturbed by the activity.
- 13 It is necessary to add a condition requiring a public complaints register to be maintained so that the Director can appraise the frequency and characteristics of complaints which may indicate nuisance should any complaints be received.
- 14 The permit contains no requirements for ensuring that when decommissioning is undertaken, it is done in a manner to minimise environmental harm.
- 15 The permit does not have sufficiently specific and measureable effluent quality limits or noise limits. Conditions are needed to control emissions from the activity and to impose limits upon those emissions to reflect current State Policies or Environment Protection Policies.
- 16 Monitoring and reporting requirements set out in the permit conditions need to be varied to reflect current best practice environmental management and to require accurate measurement of emissions and their impact upon the receiving environment and to consistently inform the Director of the results of monitoring.
- 17 The permit conditions need to be varied to reflect contemporary information management practices such as electronic submission of monitoring data.
- 18 The permit does not contain sufficient conditions involving operational procedures or contingency management. The risk of environmental harm from the activity is reduced by having documented plans and procedures in place for operating conditions likely to be experienced by the activity and by having contingency plans developed for unplanned events that may occur.

- 19 An inflow and infiltration plan is needed to ensure that best practice environmental management is applied to inflow and infiltration issues that increase the risk of unauthorised sewage discharges to the environment.
- 20 The permit does not include any fencing requirement. Fencing of the activity is required to discourage unauthorised persons from entering the site and coming into contact with sewage or any hazardous substance.
- 21 Conditions are required regarding minimum design criteria and maintenance requirements for the treatment lagoons to minimise the risk of leakage causing environmental harm.
- 22 The permit does not include conditions about dealing with hazardous substances. Hazardous substances are likely to be stored and handled at the activity and current best practice environmental management takes into account the storage and handling of hazardous substances.
- 23 It is necessary to remove conditions G7, G8 and G10 of permit 3952 because they detail requirements that have been fulfilled and/or are no longer required.
- 24 It is desirable to add a condition to require the development, submission and implementation of a Sewage Sludge Management Plan to ensure best practice environmental management is applied to sewage sludge.
- 25 The permit does not include conditions relating to controlled waste movement. Condition(s) are required to reflect current best practice environmental management and to bring the permit into accordance with the Environmental Management and Pollution Control (Controlled Waste Tracking) Regulations 2010.

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

The person responsible for the activity must comply with the varied permit conditions as set out in Schedule 2 of this Notice.

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 \$154.00).

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:

14 SEP 2015

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Attachments

Attachment 1: Plan Of Activity (modified: 03/06/2015 16:43)..... 1 page
Attachment 2: Table of Monitoring (modified: 17/08/2015 13:02)..... 2 pages

Wes Lamb
B. 14.09.15

Schedule 1: Definitions

90th percentile means the value at which the relevant parameter is exceeded by no more than 10 percent of all sample results over a twelve month period.

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

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.

Australian Guidelines For Water Quality Monitoring And Reporting means the document of this title published as part of the *National Water Quality Management Strategy* in 2000, or any subsequent updates.

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.

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

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.

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.

Environmental Standards Applying To Liner Construction means the document of this title dated March 2006 available from the Department of Primary Industries, Parks, Water and Environment and includes any subsequent versions of the document.

Environmentally Hazardous Material means any substance or mixture of substances of a nature or held in quantities which present a reasonably foreseeable risk of causing serious or material environmental harm if released to the environment and includes fuels, oils, waste and chemicals but excludes sewage.

Median means the value at which the relevant parameter is exceeded by no more than 50 percent of all sample results over a 12 month period.

Minimum Construction Requirements For Water Bores In Australia means the document published under this title by The National Uniform Drillers 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.

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.

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 referred to in regulation 4 of the *Environmental Management and Pollution Control (Miscellaneous Noise) Regulations 2014*.

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 Certificate of Title 109249/1; and
- 2 as further delineated at plan shown 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.

Water Quality Objectives has the meaning given to the expression in the *State Policy on Water Quality Management 1997*, as amended from time to time.

WWTP means the wastewater treatment plant located on The Land.

Schedule 2: Conditions

Maximum Quantities

Q1 Regulatory limits

- 1 The activity must not exceed the following limits (annual fees are derived from these figures):
 - 1.1 3,600 kilolitres per day of design capacity to treat an average dry weather flow of sewage or wastewater

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 owner of The Land upon which the activity is carried out changes or is to change, then, as soon as reasonably practicable but no later than 30 days after becoming aware of the change or intended change in the ownership of The Land, the person responsible must notify the Director in writing of the change or intended 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.

Atmospheric

A1 Odour management

The person responsible must institute such odour management measures as are necessary to prevent odours causing 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 the activity 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 removed.
- 2 Where a Decommissioning and Rehabilitation Plan (DRP) has been approved by the Director, decommissioning and rehabilitation must be carried out in accordance with that plan, as may be amended from time to time with written approval of the Director.

Effluent

EF1 Effluent discharge location

- 1 Treated effluent from the activity must only be discharged at the following discharge location:

EF3 Blue-green algae notification

Unless otherwise specified by the Director, if blue-green algae are present at a concentration of 1,400,000 cells/mL or a biovolume of 113 mm³/L or greater in the effluent at the discharge point, the Director must be notified within 24 hours of the monitoring results being received.

Hazardous Substances**H1 Storage and handling of hazardous materials**

- 1 Unless otherwise approved in writing by the Director, environmentally hazardous materials held on The Land must be:
 - 1.1 located within impervious bunded areas, spill trays or other containment systems; and
 - 1.2 managed to prevent unauthorised discharge, emission or deposition of pollutants:
 - 1.2.1 to soils within the boundary of The Land in a manner that is likely to cause serious environmental harm;
 - 1.2.2 to groundwater;
 - 1.2.3 to waterways; or
 - 1.2.4 beyond the boundary of The Land.

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 2, 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 measurement equipment must be maintained and operated in accordance with the manufacturer's specifications;
 - 1.3 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;
 - 1.4 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
 - 1.5 noise measurements must be undertaken in accordance with the Tasmanian Noise Measurement Procedures Manual.

- 1.1** Discharge to water: discharge to the Tamar Estuary approximately 180m off Point Effingham at grid reference GDA94 coordinate 485467E 5446223N and depth of 30m, as shown on the plan at Attachment 1.

EF2 Effluent quality limits for discharge to water

- 1 Effluent discharged to the Tamar Estuary must comply with the quality limits set out in the Table of Effluent Quality Limits below, at the Effluent Quality Monitoring Location depicted at Attachment 1 and specified in Attachment 2.

2 Table of Effluent Quality Limits

Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
Substance or measure	Unit of measurement	Minimum limit	Median limit	90th percentile limit	Maximum limit
Biochemical Oxygen Demand	mg/L		15	30	50
Suspended Solids	mg/L		40		100
Ammonia Nitrogen	mg/L		3	5	20
Total Nitrogen	mg/L		15	25	40
Total Phosphorus	mg/L		4	6	8
Oil and Grease	mg/L		5		10
Thermotolerant Coliforms	cfu/100mL		200	750	1,500
pH	pH units	6.5			10
Manganese	mg/L		2.3	4	5
Arsenic	mg/L				0.3
Boron	mg/L				10
Cadmium	mg/L				0.001
Chromium (total)	mg/L				0.01
Copper	mg/L				0.05
Cyanide (free)	mg/L				0.1
Iron	mg/L				0.7
Lead	mg/L				0.03
Mercury	mg/L				0.0003
Polycyclic Aromatic Hydrocarbons (16 USEPA priority PAH's)	mg/L				0.005
Phenolic compounds as phenol	mg/L				1
Thiocyanate	mg/L				3
Zinc	mg/L				0.3

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 receipt 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 laboratories at which sample analyses were carried out;
 - 1.2 contact details for a person responsible for managing monitoring programs;
 - 1.3 the estimated or measured average daily flow to the wastewater treatment plant for the previous monthly period; and
 - 1.4 for each sampling location or site test location:
 - 1.4.1 a location name which allows the location to be clearly identifiable;
 - 1.4.2 the date and time at which each sample was taken or site test conducted;
 - 1.4.3 the indicators for which analyses or tests were carried out and the units in which the results are reported; and
 - 1.4.4 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 maintained in accurate working order in accordance with the manufacturer's specifications and, unless otherwise approved in writing by the Director, must be validated at least once every 12 months.
- 2 The dates on which flow monitoring equipment has been validated must be recorded and validation records kept for a minimum of 3 years.
- 3 For the purposes of this condition:
 - 3.1 'validate' means to undertake a set of actions including inspecting the flow monitoring equipment to check that it is installed in compliance with any relevant standards and is maintained to an acceptable state of repair, which provides an acceptable level of confidence that the flow monitoring equipment operates within an acceptable range of error under normal operating conditions.
 - 3.2 'Flow monitoring equipment' means an instrument, including a flow meter, that measures and may record a flow or level of liquid and includes any ancillary device attached to or incorporated into the instrument.

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 12 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.

M7 Receiving Environment Monitoring Plan

- 1 A Receiving Environment Monitoring Plan must be submitted by the person responsible to the Director for approval within 12 months of the date on which these conditions take effect, or by a date otherwise specified in writing by the Director.
- 2 The Receiving Environment Monitoring Plan must:
 - 2.1 be consistent with the Australian Guidelines for Water Quality Monitoring and Reporting;
 - 2.2 outline the program scope, methods, locations, parameters, frequency and duration of the proposed monitoring program, including the rationale for design features of the program;
 - 2.3 be designed to assess the ongoing impact of effluent discharged from the activity, taking into account seasonal effects and other variation in the receiving environment;
 - 2.4 be designed to take into account the Protected Environmental Values and any relevant Water Quality Objectives and to identify sensitive receptors within the receiving environment;

- 2.5 consider the suitability for assessment of the ongoing impact of the effluent discharge on the environment of a range of monitoring methods including, but not limited to, benthic biological and sediment monitoring and provide a recommendation for an appropriate method or methods,
 - 2.6 incorporate monitoring events at intervals of not more than 5 years; and
 - 2.7 include an implementation timetable for the plan.
- 3 Unless otherwise approved in writing by the Director, the approved Receiving Environment Monitoring Plan must be implemented within 6 months of the plan being approved in writing by the Director.
 - 4 Within 3 months of the completion of each receiving environment monitoring event undertaken in accordance with the Receiving Environment Monitoring Plan, a Receiving Environment Monitoring Report must be submitted to the Director which must include the following information:
 - 4.1 a description of the nature and quality of the receiving environment, both in areas close to and removed from the effluent discharge location, including graphical presentation of monitoring results collected in accordance with these conditions and an analysis of seasonal effects and other variation;
 - 4.2 observations regarding the receiving environment in comparison to predictions or findings of previous studies or monitoring events; and
 - 4.3 an evaluation of the environmental impacts of the discharge with consideration of Protected Environmental Values, Water Quality Objectives and relevant sensitive receptors, based on the monitoring results and knowledge of seasonal effects and other causes of environmental variation.

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 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*.
- 5 All methods of measurement must be in accordance with the *Tasmanian Noise Measurement Procedures Manual*, issued by the Director.

Operations

OP1 Contingency management

- 1 Unless otherwise approved in writing by the Director, a Contingency Management Plan must be submitted by the person responsible to the Director within 3 months of the date on which these conditions take effect. 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 water users that may be adversely impacted, 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.
- 3 As far as is reasonable and practicable, the Contingency Management Plan must include contact details for all water users that may be impacted by an unplanned event and must be kept up to date by the person responsible.
- 4 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.
- 5 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 within 12 months of the date on which these conditions take effect or by a date 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 within 12 months of the date on which these conditions take effect 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;

- 3 The person responsible must implement and act in accordance with the approved I&I Management Plan.
- 4 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.

OP6 Lagoon liner

Wastewater treatment lagoon liners, storage lagoon liners, dam liners and sludge storage pond liners must be designed, installed and maintained in compliance with the relevant standards detailed in the document *Environmental Standards Applying to Liner Construction*.

Waste Management

WM1 Sewage Sludge Management Plan

- 1 A Sewage Sludge Management Plan must be submitted to the Director for approval within 12 months of the date on which these conditions take effect, or by a date specified in writing by the Director.
- 2 The Sewage Sludge Management Plan must be prepared in accordance with the EPA Sewage Sludge Management Plan Guidelines and the Tasmanian Biosolids Reuse Guidelines.
- 3 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, with the exception of sewage sludge contained within lagoons; 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 Change of responsibility

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

Other Information

OI1 Notification of incidents under section 32 of EMPCA

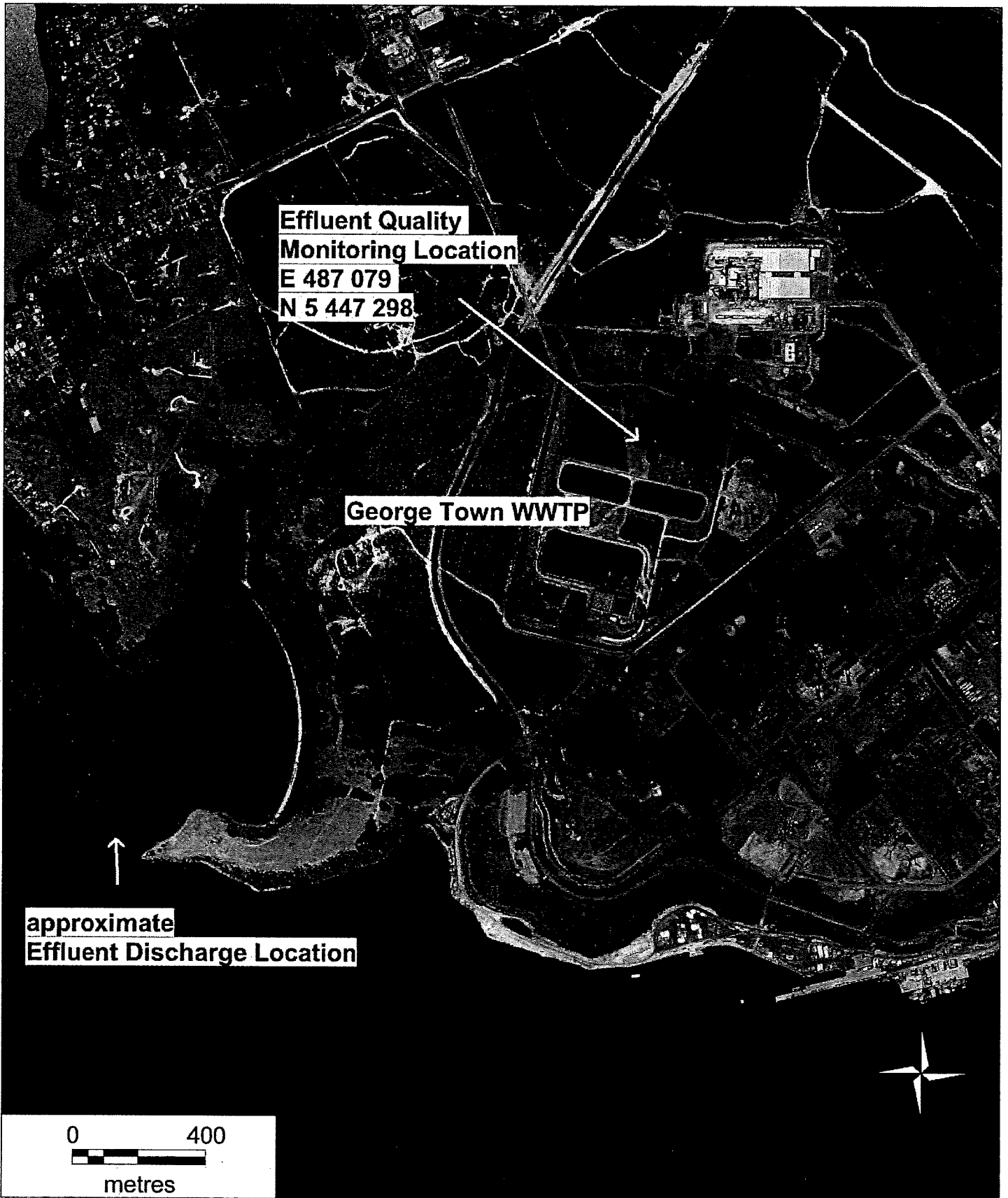
Where a person is required by section 32 of EMPCA to notify the Director of the release of a pollutant, the Director can be notified by telephoning 1800 005 171 (a 24-hour emergency telephone number).

Policy Requirements

PR1 Policy Framework

- 1 The policy framework and guidelines relevant to implementation of policy are as follows:
 - 1.1 State Policy on Water Quality Management (SPWQM);
 - 1.2 Emission Limit Guidelines for Sewage Treatment Plants That Discharge Pollutants In To Fresh And Marine Waters, June 2001;
 - 1.3 Approved Management Method For Biosolids Reuse;
 - 1.4 Tasmanian Biosolids Reuse Guidelines; and
 - 1.5 Environmental Guidelines for the Use of Recycled Water in Tasmania, December 2002.

Attachment 1: Plan of Activity EPN 7933/1



Effluent Quality
Monitoring Location
E 487 079
N 5 447 298

George Town WWTP

approximate
Effluent Discharge Location

0 400
metres

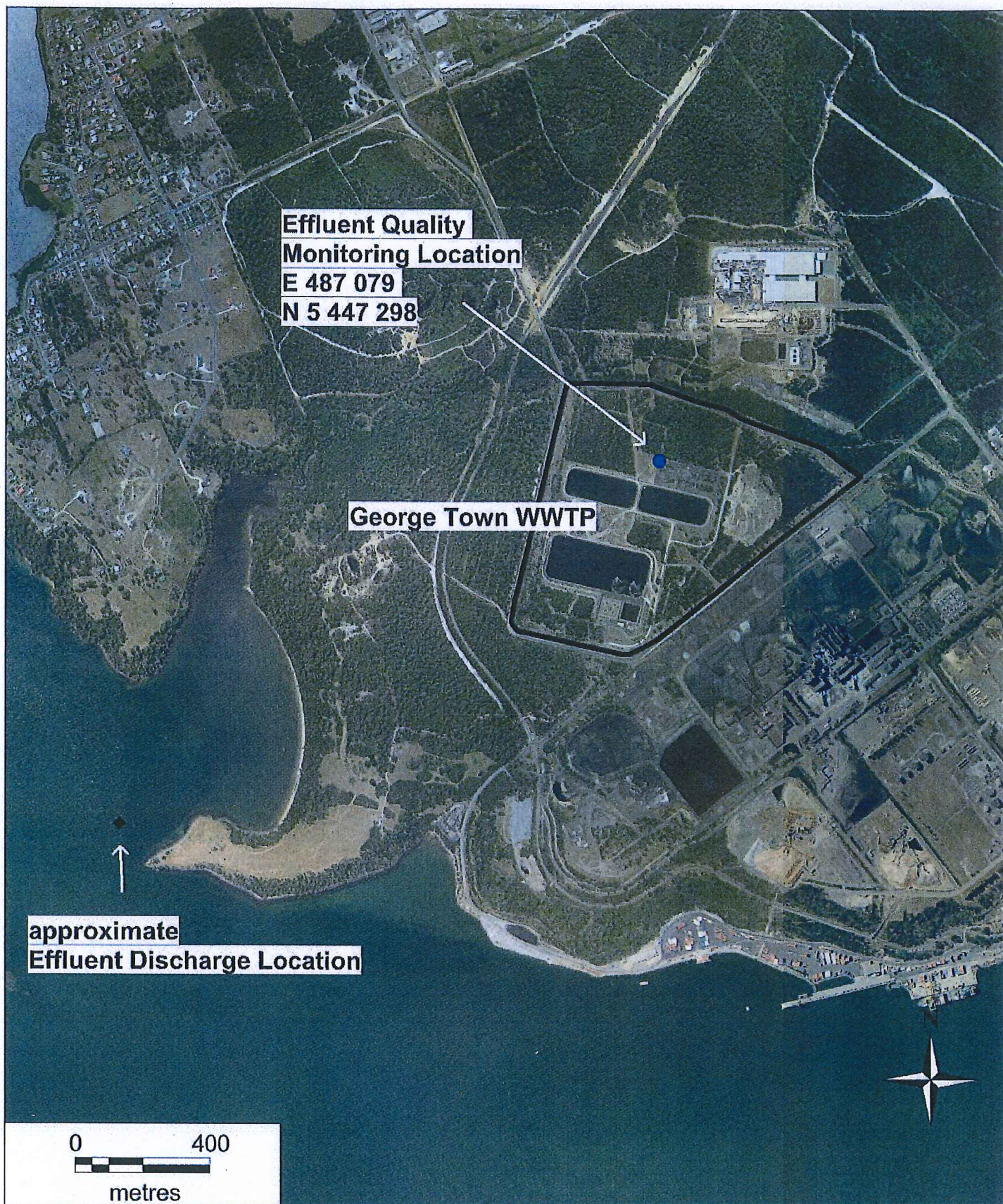
- Boundary of The Land
- WWTP Outlet
- Effluent Discharge Location




Coordinates in GDA 1994 MGA Zone 55

B. Hall, Wes Land

14 SEP 2015

Attachment 1: Plan of Activity EPN 7933/1



-  Boundary of The Land
-  WWTP Outlet
-  Effluent Discharge Location

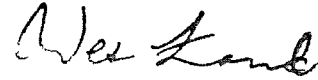
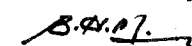
Coordinates in GDA 1994 MGA Zone 55

BPM *Wesley*

14 SEP 2015

ATTACHMENT 2: TABLE OF MONITORING REQUIREMENTS FOR EPN No. 7933/1

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	Flow	kL/day	Continuous measurement	On-line Flow Meter	<ol style="list-style-type: none"> To be reported in the Monthly Monitoring Report as an average for the reporting period of daily flow. To be report in the Annual Environmental Review as monthly averages of daily flow A summary of results including graphical presentation to be provided in the Annual Environmental Review.
Effluent	WWTP Outlet	Flow	kL/day	Continuous measurement	On-line Flow Meter or other approved technique	<ol style="list-style-type: none"> To be reported in the Annual Environmental Review as monthly flows for each calendar month, based on daily flows for that month. To be included in mass load calculations within the Annual Environmental Review; mass load calculations to be based on total daily flow on the day of sampling. A summary of results including graphical presentation to be provided in the Annual Environmental Review.
	Effluent Quality Monitoring Location at approximately E 487 079 N 5 447 298	pH	-	Monthly	Field Test	<ol style="list-style-type: none"> Results to be reported in the Monthly Monitoring Report A summary of results including graphical presentation to be provided in the Annual Environmental Review.
Temperature	°C					
	Conductivity	dS/m	Monthly	Grab sample		
	Thermotolerant Coliforms	cfu/100mL				
	Enterococci	cfu/100mL				
	Biochemical Oxygen Demand	mg/L				
	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				
	Manganese	mg/L				
	Cyanide (free)	mg/L				
	Phenolic compounds as phenol	mg/L				
	Chlorophyll 'a'	µg/L				
	Boron	mg/L	Monthly for 12 months then quarterly			
	PAH (Polycyclic Aromatic Hydrocarbons - 16 USEPA priority hydrocarbons)	mg/L	Monthly for 12 months then quarterly			
	Arsenic (total)	mg/L	Quarterly			
	Barium	mg/L				
	Cadmium	mg/L				
	Chromium (total)	mg/L				
	Copper	mg/L				
	Lead	mg/L				
	Mercury	mg/L				
	Zinc	mg/L				
	Cobalt	mg/L		Annually		
	Iron	mg/L				
	Nickel	mg/L				
	Selenium	mg/L				


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Column 1 Item	Column 2 Locations	Column 3 Parameter	Column 4 Unit of Measure	Column 5 Frequency	Column 6 Technique	Column 7 Reporting requirements
		Thiocyanate	mg/L			
		Tin (inorganic)	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
Groundwater	Groundwater monitoring bores at locations on the Land to be approved by the Director in accordance with these conditions	Standing water level	m bgs	Annually	Field Test	1. Results must be submitted in form of a report prepared by a suitably qualified professional. The report must provide interpretation whether monitoring results indicate evidence of environmental harm caused by the activity.
		pH	-		Grab sample	
		Temperature	° celsius			
		Conductivity	dS/m			
		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			
		Filterable Reactive Phosphorus	mg/L			
		Thermotolerant Coliforms	cfu/100mL			
Enterococci	cfu/100mL					
Sludge/Biosolids	Sludge/Biosolids located on The Land	In accordance with the Tasmanian Biosolids Reuse Guidelines 1999, or as otherwise approved by the Director.	In accordance with the Tasmanian Biosolids Reuse Guidelines 1999, or as otherwise approved by the Director.	In accordance with the Tasmanian Biosolids Reuse Guidelines 1999, or as otherwise approved by the Director.	1. As required in the Annual Environmental Review 2. As otherwise approved by the Director.	
Receiving Environment	In accordance with the Receiving Environment Monitoring Plan approved by the Director		Within 18 months of the date on which these conditions take effect, then at intervals not exceeding 5 years	In accordance with the Receiving Environment Monitoring Plan approved by the Director	Results must be submitted in form of a report prepared by a suitably qualified professional. The report must provide interpretation whether monitoring results indicate evidence of environmental harm caused by the activity.	

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

Flow Meter means an instrument that measures and records a flow or level of liquid and includes any ancillary device attached to or incorporated into the instrument

Continuous measurement means automatic ongoing measurement at all times

On-line means measurements or analyses are carried out automatically and the results electronically recorded for remote viewing and analysis

Field test/ on-site 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

Composite grab samples means two or more samples or sub-samples mixed together in appropriate known proportions (either discretely or continuously) from which the average result of a desired characteristic may be obtained

Grid references are expressed as Map Grid of Australia Zone 55G GDA94

Wes Lamb 14 SEP 2015
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