



ENVIRONMENT PROTECTION NOTICE No. 8533/1

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)**
CYGNET WASTEWATER TREATMENT PLANT, CHANNEL HWY
CYGNET TAS 7112

GROUNDS

I, Cindy Ong, Delegate for the Director, Environment Protection Authority, being satisfied in accordance with section 44(1)(d) of the *Environmental Management and Pollution Control Act 1994* (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
3489	14 October 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 updated terminology and regulatory practice, to reflect continuous improvement consistent with the objectives of EMPCA and/or to clarify the meaning of the conditions.
- 2 The permit conditions refer to The Environment Protection Act 1973 which has been repealed and replaced by the EMPCA. It is necessary to vary condition(s) to remove references to the repealed Act.
- 3 It is necessary to add a condition to require these conditions and associated documents to be accessible and persons working on The Land to be made aware of conditions as may be relevant to their work, to minimise environmental harm and/or nuisance.
- 4 It is necessary to remove conditions G4, G5, G7 and W1 of the permit because they detail requirements that have been fulfilled and/or are no longer required.
- 5 The permit does not contain conditions in relation to dealing with environmentally hazardous substances. Environmentally hazardous substances are likely to be stored and handled on The Land and current best practice environmental management necessitates conditions to be added

for the storage and handling of environmentally hazardous substances.

- 6 The permit does not have sufficiently specific and measurable limits for effluent quality. A condition is needed to control emissions from the activity and to impose limits upon those emissions to reflect current State Policies or Environment Protection Policies.
- 7 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.
- 8 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.
- 9 It is necessary to update the condition requiring the person responsible to take action to minimise environmental harm if an incident occurs to reflect contemporary best practice.
- 10 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.
- 11 A condition requiring notification of a change of ownership of The Land is needed because this Notice may affect title to land and the new owner's interests may be affected by pollutants emitted or disturbed by the activity.
- 12 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.
- 13 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.
- 14 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.
- 15 The permit contains no requirements for ensuring that when decommissioning is undertaken, it is done in a manner to minimise environmental harm.
- 16 It is necessary to update the description of the authorised discharge location to identify the point of discharge to the environment and to allow accurate detection of impacts from emissions on the receiving environment.
- 17 Conditions are required to determine the impact of the discharge of effluent to water from the activity and determine the most appropriate and sustainable future end use or discharge option in accordance with the hierarchy of waste management as specified under 16.2 of the State Policy on Water Quality Management 1997.
- 18 It is desirable to add a condition to require the development, submission to the Director and implementation of a groundwater monitoring bore plan to reduce the risk of environmental

harm arising from emission of pollutants from the activity to groundwater.

- 19 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.
- 20 The permit conditions need to be varied to reflect contemporary information management practices, such as electronic submission of monitoring data.
- 21 It is desirable to add a condition setting noise emission limits to minimise environmental nuisance and manage noise emissions, in accordance with the Environment Protection Policy (Noise) 2009.
- 22 The permit does not contain any condition 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.
- 23 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.
- 24 Conditions are required regarding minimum design criteria and maintenance requirements for the treatment lagoons to minimise the risk of leakage causing environmental harm.
- 25 It is desirable to update the conditions to require the development, submission and implementation of a Sewage Sludge Management Plan to ensure best practice environmental management is applied to sewage sludge.
- 26 The permit does not contain conditions relating the movement of controlled wastes. It is desirable to add a condition to reflect current best practice environmental management and to ensure the management of controlled waste in 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:



DELEGATE FOR THE DIRECTOR, ENVIRONMENT PROTECTION AUTHORITY

Date:

20/1/17

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Attachments

Attachment 1: Plan of Activity (modified: 09/09/2016 12:16).....1 page

Attachment 2: Table of Monitoring Requirements (modified: 06/12/2016 11:02).....2 pages

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.

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.

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.

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.

Full Effluent Reuse means an effluent reuse scheme designed to beneficially reuse or contain all effluent during a 90th percentile wet year

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.

Mixing Zone means a three dimensional area of the receiving waters around a point of discharge of pollutants within which it is recognised that the water quality objectives for the receiving waters may not be achieved.

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.

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 document titled *Noise Measurement Procedures Manual*, by the Department of Environment, Parks, Heritage and the Arts, dated July 2008, and any amendment to or substitution of this 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 Certificate of Title 157713/1; and
- 2 as further delineated at Attachment 1.

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

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 :
 - 1.1 400 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.

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 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 locations

- 1 Effluent from the activity must only be discharged at the following discharge location:
 - 1.1 Discharge to water: discharge to Port Cygnet at approximate grid reference GDA94 MGA55 507444E, 5220400N as depicted on the plan at Attachment 1.

EF2 Effluent quality limits for discharge to Port Cygnet

- 1 Effluent discharged to Port Cygnet must comply with the effluent quality limits set out in the Table of Effluent Quality Limits below, at the Effluent Quality monitoring location specified in Attachment 2.

2 Table of Effluent Quality Limits

Column 1	Column 2	Column 3	Column 4
Substance or measure	Unit of measurement	Minimum limit	Maximum limit
Biochemical Oxygen Demand	mg/L	-	20
Suspended Solids	mg/L	-	20
Ammonia Nitrogen	mg/L	-	5
Total Nitrogen	mg/L	-	25
Total Phosphorus	mg/L	-	10
Oil and Grease	mg/L	-	2
Thermotolerant Coliforms	cfu/100mL	-	400
Total Residual Chlorine	mg/L		1.5
pH	mg/L	6.5	8.5

Effluent Management

EM1 Effluent Management

- 1 The person responsible must:
 - 1.1 submit to the Director within 6 months of the date on which these conditions take effect, or by a date otherwise specified in writing by the Director, a written undertaking to implement full effluent reuse; or
 - 1.2 submit an Emission Limit Guidelines Compliance Plan 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; or
 - 1.3 submit a Discharge Management Plan to the Director for approval within 2 years and 6 months of the date on which these conditions take effect, or by a date otherwise specified in writing by the Director.

EM2 Effluent reuse feasibility study

- 1 A feasibility study for reuse of effluent from the activity must be submitted to the Director within 6 months of the date on which these conditions take effect, or a date otherwise specified in writing by the Director. The study must be to the satisfaction of the Director and must include:
 - 1.1 a strategic evaluation of the potential for the establishment of an effluent reuse scheme;
 - 1.2 details of investigations undertaken to maximise the reuse of treated effluent discharged from the activity including identification of potential land areas and uses suitable for reuse and a summary of discussions undertaken with potential end users to enable reuse; and
 - 1.3 where reuse is feasible, a written commitment from the person responsible to implement a reuse scheme including an action plan with timelines for completion of significant actions.

EM3 Emission Limit Guidelines Compliance Plan

- 1 For the purposes of these conditions an Emission Limit Guidelines Compliance Plan must, with reference to the *Emission Limit Guidelines*, include:

- 1.1 confirmation that the volume of effluent discharged from the activity will be less than 500 kL/day average dry weather flow;
 - 1.2 a strategy to ensure that the flow rate of the receiving waters is equal to or greater than 80 times the flow rate of effluent discharged to water during low seasonal water flow conditions;
 - 1.3 a strategy to bring effluent quality into compliance with Accepted Modern Technology emission limits including details of any infrastructure upgrade requirements.
 - 1.4 a table containing all of the major commitments made in the Emission Limit Guidelines Compliance Plan;
 - 1.5 an implementation timetable for key aspects of the Emission Limit Guidelines Compliance Plan; and
 - 1.6 a reporting schedule to regularly advise the Director of progress with the implementation of the Emission Limit Guidelines Compliance Plan.
- 2 The person responsible must implement and act in accordance with the approved Emission Limit Guidelines Compliance Plan.
 - 3 In the event that the Director, by notice in writing to the person responsible, either approves a minor variation to the approved Emission Limit Guidelines Compliance Plan or approves a new Emission Limit Guidelines Compliance 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.

EM4 Discharge Management Plan

- 1 For the purposes of these conditions a Discharge Management Plan must be prepared to the satisfaction of the Director and must include the following:
 - 1.1 an assessment of the available options for improved effluent management in accordance with the hierarchy set out in Division 2: 'Management of Point Sources of Pollution' of the SPWQM;
 - 1.2 a description of the volume and quality of effluent likely to be discharged to the receiving waters with consideration of effluent loads discharged to any approved reuse schemes;
 - 1.3 an assessment of the current impact of effluent discharges from the activity on the receiving environment. The assessment must incorporate and analyse the findings of an Ambient Monitoring Report submitted to the Director in accordance with these conditions;
 - 1.4 measures to ensure that the discharge of effluent to the receiving waters does not prejudice the achievement of the recommended water quality objectives at the discharge point including:
 - 1.4.1 recommended emission limits determined in accordance with the SPWQM;
 - 1.4.2 proposed effluent management measures including alternate discharge point options, seasonal discharge management and / or the establishment of a mixing zone, where necessary; and
 - 1.4.3 details of any upgrades of wastewater treatment infrastructure necessary to achieve the recommended emission limits and implement the discharge management measures.
 - 1.5 a table containing all of the major commitments made in the plan;
 - 1.6 an implementation timetable for key aspects of the plan; and
 - 1.7 a reporting schedule to regularly advise the Director of progress with implementation of the plan.

- 2 The person responsible must implement and act in accordance with the approved Discharge 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 Discharge Management Plan or approves a new Discharge 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.

EM5 Ambient monitoring of receiving waters

- 1 Where an Ambient Monitoring Report is required by these conditions, an ambient monitoring plan for receiving waters must be submitted by the person responsible to the Director for approval within 9 months of the date on which these conditions take effect, or by a date otherwise specified in writing by the Director.
- 2 The ambient monitoring plan for receiving waters 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 such as any modelling undertaken;
 - 2.3 be designed to characterise variations in the effluent quality that may arise as a result of
 - 2.3.1 batch treatment and discharge processes;
 - 2.3.2 events within the WWTP sewerage catchment such as rainfall dependent inflow and infiltration.
 - 2.4 be designed to characterise the ambient water quality and biological conditions and to assess the impact of effluent discharged from the activity, taking into account seasonal effects and other variation in the receiving environment;
 - 2.5 be designed to take into account the Protected Environmental Values and identify sensitive receptors within the receiving environment; and
 - 2.6 incorporate an effluent plume dilution study which identifies the behaviour and dimensions of the mixing zone at the authorised discharge point;
 - 2.7 be designed to identify the location and extent of the mixing zone, taking into account seasonal effects and other variation in the receiving environment;
 - 2.8 include an implementation timetable for the plan.
- 3 Unless otherwise approved in writing by the Director, the approved ambient monitoring plan for receiving waters must be implemented within 3 months of the plan being approved in writing by the Director.
- 4 Within 4 months of the completion of ambient monitoring in accordance with the ambient monitoring plan for receiving waters, an Ambient Monitoring Report must be submitted to the Director which must include the following information:
 - 4.1 a description of the quality of the receiving waters environment, both in areas impacted by the discharge and in areas that are not impacted by the discharge, 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 dilution and dispersion of effluent into the receiving waters in comparison to predictions or findings of previous studies (e.g. plume dilution studies);

- 4.3 an assessment of the dilution and dispersion patterns achieved in the receiving waters and recommendations regarding the location and extent of the mixing zone;
- 4.4 an evaluation of the environmental impacts with consideration of Protected Environmental Values and relevant sensitive receptors, based on the monitoring results and knowledge of seasonal effects and other variation.

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, the National Association of Testing Authorities (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 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 (3) years after the date of collection;
 - 1.4 measurement equipment must be maintained and operated in accordance with manufacturer's specifications and records of maintenance must be retained for at least three (3) years; and
 - 1.5 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 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 these conditions taking 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 12 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 0800 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 0800 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.

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

Operations

OP1 Contingency management

- 1 A Contingency Management Plan must be prepared and submitted to the Director within 3 months of the date on which these conditions take effect and maintained with relevant and contemporary information. 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 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 Site security

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

OP4 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.

OP5 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 within 12 months of the date these conditions take effect, 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, 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

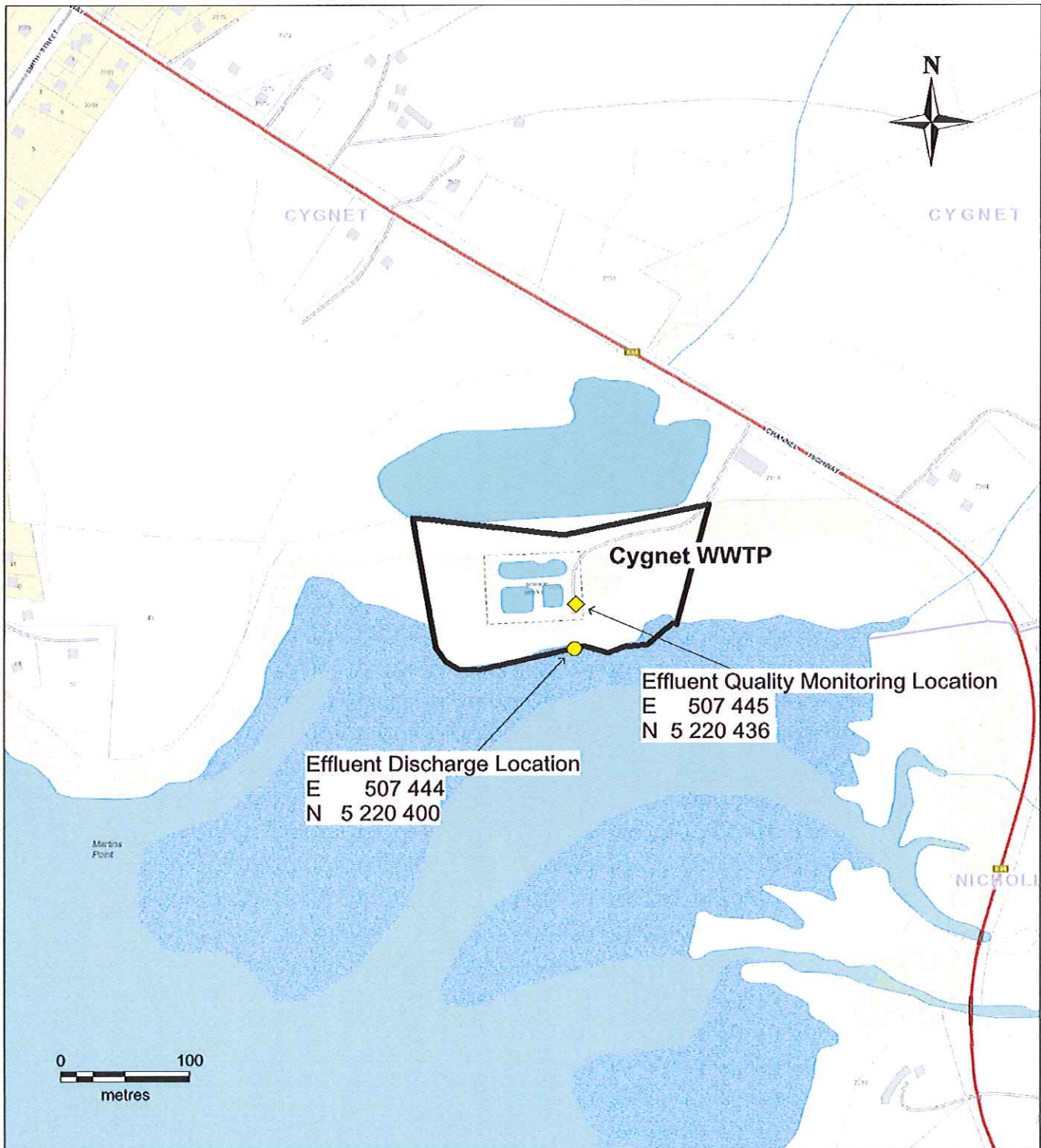
If the person responsible for the activity ceases to be responsible for the activity, they must notify the Director in accordance with Section 45 of the EMPCA.

Other Information

OII 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).

Attachment 1: Plan of Activity EPN 8533/1



Grid references are stated in MGA55 GDA94.
All coordinates are based on the best information available at the time of EPN issue.
They can only be considered accurate within a few metres.



ATTACHMENT 2: TABLE OF MONITORING REQUIREMENTS FOR EPN No. 8533/1

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 Approximate grid reference E 507 385 N 5 220 470	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 or periodic measurement or estimate based on approved method	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. 		
		Effluent Quality Monitoring Location	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. 	
	Approximate grid reference E 507 445 N 5 220 436	Temperature	°C					
		Conductivity	dS/m					
		Total Residual Chlorine	mg/L	Monthly	On-line or field test. Reading to be taken within 5 min of grab sample collection			
		Thermotolerant Coliforms	cfu/100mL	Monthly	Grab sample			
		Enterococci	cfu/100mL					
		Biochemical Oxygen Demand	mg/L	Monthly	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					
		Arsenic (total)	mg/L			Annually		
		Cadmium (total)	mg/L					
		Chromium (total)	mg/L					
		Copper (total)	mg/L					
		Lead (total)	mg/L					
Manganese (total)	mg/L							
Mercury (total)	mg/L							
Nickel (total)	mg/L							
Selenium (total)	mg/L							
Zinc (total)	mg/L							
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	<ol style="list-style-type: none"> 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					

Column 1 Item	Column 2 Locations	Column 3 Parameter	Column 4 Unit of Measure	Column 5 Frequency	Column 6 Technique	Column 7 Reporting requirements
		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.

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

Grid references are expressed as Map Grid of Australia Zone 55 GDA94. Coordinates can only be considered accurate within a few metres.