



## ENVIRONMENT PROTECTION NOTICE No. 7371/1

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 ROAD**  
**MOONAH TAS 7009**

Environmentally Relevant Activity: **The operation of a waste water treatment plant (ACTIVITY TYPE: Wastewater Treatment Works)**  
**RICHMOND WASTEWATER TREATMENT PLANT, 40 COMMERCIAL ROAD**  
**RICHMOND TAS 7025**

### GROUND

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

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

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

it is necessary to secure compliance with the general environmental duty,

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

### PARTICULARS

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

- 1 The Tasmanian Water and Sewerage Corporation Pty Limited owns and operates the Richmond Wastewater Treatment Plant that is designed to treat more than 100,000 litres of municipal sewerage per day.
- 2 The activity consists of three treatment lagoons and discharges treated effluent to an effluent storage dam on a neighbouring premises. Treated effluent from the effluent storage dam is predominantly irrigated on agricultural ground. In winter when there is little agronomic demand for irrigation and the storage available in the effluent storage dam is fully utilised treated effluent from the effluent storage dam is discharged to the Coal River.

- 3 The Coal River is part of the upstream catchment of Pitt Water, the location of several oyster leases and the Pitt Water - Orielton Lagoon Ramsar Site, a wetland of international importance, which supports a diversity of coastal, intertidal and marine habitats and communities. Treated effluent discharged to the Coal River from the effluent storage dam contains nutrients and pathogenic organisms in concentrations that is likely to cause serious and/or material environmental harm.
- 4 Serious or material environmental harm is likely to be caused to persons who use the downstream Pitt Water for commercial oyster growing. When a discharge of treated effluent from the effluent storage dam occurs the Tasmanian Water and Sewerage Corporation Pty Limited is required to notify the Tasmanian Shellfish Quality Assurance Program. This results in the closure of downstream shellfish leases located in Pitt Water to reduce the risk of contaminating oysters intended for human consumption with pathogenic organisms and has a significant economic impact on those lease holders.
- 5 Material environmental harm is being or likely to be caused by nutrients that are present in the discharge of treated effluent to the Coal River, where their concentration or mass loading has an adverse effect on the river's ecosystem that is not negligible. Nutrient loads may also affect water quality further downstream in the catchment including the Pitt Water - Orielton Lagoon Ramsar Site.
- 6 It is necessary to issue this notice to ensure that the person responsible takes such steps as a practicable or reasonable to prevent or minimise environmental harm or environmental nuisance likely to be caused by the activity conducted by that person.
- 7 It is necessary to control emissions from the activity and to impose limits upon those emissions to reflect current State Policies or Environment Protection Policies.
- 8 It is necessary to require environmental management plans are developed and implemented to ensure the reuse of treated effluent discharged from the activity is conducted in a manner to minimise the risk of environmental nuisance or environmental harm occurring.
- 9 Conditions are required regarding minimum design criteria and maintenance requirements for the treatment lagoons to minimise the risk of leakage causing environmental harm.
- 10 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 and that the person responsible complies with the Environmental Management and Pollution Control (Waste Management) Regulations 2010.
- 11 Monitoring and reporting requirements are required to require accurate measurement of emissions and their impact upon the receiving environment and to consistently inform the Director of the results of monitoring.
- 12 It is necessary to require the submission of an Annual Environmental Review to assist the Director in determining the nature of the harm or nuisance or likely harm or nuisance arising from the activity. The Annual Environmental Review needs to be made publicly available to give effect to clause 47.1 of the State Policy on Water Quality Management 1997.
- 13 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.

- 14 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 that may indicate environmental nuisance, should any complaints be received.
- 15 To prevent or minimise the causing of environmental harm or environmental nuisance and to give effect to clause 15.1 of the State Policy on Water Quality Management 1997, it is necessary to prevent the discharge of treated effluent to surface waters through the implementation of the hierarchy of waste management.
- 16 It is necessary to require that the conditions of this notice and associated documents are accessible to persons working on the land and that those persons are made aware of the conditions that are relevant to their work to secure compliance with the general environmental duty.
- 17 It is necessary to issue this notice to ensure environmentally hazardous substances are stored and handled in accordance with best practice principles to prevent environmental nuisance and/or environmental harm occurring.
- 18 To secure compliance with the general environmental duty it is necessary to require the development of documented plans and procedures for operating conditions likely to be experienced by the activity and contingency plans for unplanned events which may occur.
- 19 It is necessary to provide a 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.
- 20 The activity generates pollutants and uses infrastructure which may create legacy issues on the land which requires remediation to ensure environmental harm and/or nuisance does not occur after cessation of the activity. To ensure that appropriate measures are in place to prevent or minimise environmental harm or environmental nuisance arising following the permanent cessation of the activity, it is necessary to require notification of the likely permanent cessation of the activity and to require decommissioning and rehabilitation plans to be developed and implemented.



**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 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 \$157.00).

**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: 7 September 2017

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*Attachments*

Attachment 1: Plan of Activity (modified: 04/07/2017 16:26)..... 1 page  
Attachment 2: Table of Monitoring Requirements (modified: 13/07/2017 09:59)..... 2 pages

### Schedule 1: Definitions

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

**Authorized Officer** means an authorised officer under section 20 of EMPCA

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

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

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

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

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

**DRP** means Decommissioning and Rehabilitation Plan

**Effluent** means wastewater discharged from The Land.

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

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

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

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

**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.

**incident** has the meaning described in Section 32 of the Environmental Management and Pollution Control Act 1994.

**Inflow and Infiltration Management Plan** means the documents entitled 'TasWater Inflow and Infiltration Strategy v1.0 10/3/2016' in conjunction with the document entitled 'TasWater Inflow and Infiltration Management Plan v1.0 19/05/2016' and includes any amendment to or substitution of these documents approved in writing by the Director.

**Irrigation Environmental Management Plan** means the document entitled 'Richmond Recycled Water Scheme: Outline of proposed recycled water irrigation scheme for "Lowlands" Richmond' produced by Agricultural Resource Management (circa 2006) and any amendment to or substitution of this document.

**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 30 June of each calendar year.

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

**Sewage Sludge Management Plan Guidelines** means the document of this title published by EPA Tasmania, dated September 2014, and includes any subsequent versions of this document.

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

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

**Tasmanian Noise Measurement Procedures Manual** means the 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 as delineated as the Richmond WWTP and Richmond WWTP Reuse Dam at Attachment 1.

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



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

**Wastewater Reuse EMP** means the document entitled 'Coal River Valley Water Recycling Scheme Environmental Management Plan', GHD Document 32/10658/22971 and dated February 2003 and includes any amendment to or substitution of this document approved in writing by the Director.

**Wastewater Reuse Scheme** means the Clarence Recycled Water Scheme as described in the Wastewater Reuse EMP.

**WWTP** means the Richmond Wastewater Treatment Plant.

## Schedule 2: Conditions

### Maximum Quantities

#### **Q1 Regulatory limits**

- 1 The activity must not exceed the following limits :
  - 1.1 236 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 date and 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 Guideline which is available on request from the Director.

**G7 Additional annual reporting information for wastewater reuse schemes**

- 1 Annual Environmental Reviews submitted in accordance with these conditions must include the following additional information:
  - 1.1 a statement indicating the degree of fulfilment or otherwise of environmental commitments and management prescriptions, including those relating to monitoring, contained in the Wastewater Reuse EMP; and
  - 1.2 details of any proposed variations to the operation of the wastewater reuse scheme from those described in the Wastewater Reuse EMP.
- 2 Where the Director is of the opinion that the Wastewater Reuse EMP needs updating to reflect the current practices and potential environmental impacts associated with the reuse scheme the Director may direct the person responsible to cause a new Wastewater Reuse EMP to be prepared and submitted for approval and the responsible person must comply with the direction or cease the discharge to the wastewater reuse scheme.

**G8 Use of dam located on Lowlands Property identified by Property Identification Number 1919588**

A written agreement from the landholder, such as a lease or similar, for the parts of the land identified by Property Identification Number 1919588 that are in use by the Tasmanian Water and Sewerage Corporation Pty Ltd for the wastewater activity, must be maintained and provided to an Authorized Officer upon request.

**G9 Review of Irrigation Environmental Management Plan for Lowlands Property**

- 1 A review of the Irrigation Environmental Management Plan for irrigation on Lowlands Property identified by Property Identification Numbers 1919588, 2590948 and 2590964 must be undertaken, and an updated Irrigation Environmental Management Plan must be provided to the Director 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 Irrigation Environmental Management Plan must include, but not be necessarily limited to, the following information:
  - 2.1 an overview of the components of the irrigation scheme including maps depicting all irrigation areas;
  - 2.2 details of any variation to the operation of the irrigation scheme from those described in the original Irrigation Environmental Management Plan;
  - 2.3 a comparison of the environmental performance of the irrigation scheme as predicted in the original management plan taking into account monitoring and data analysis undertaken in accordance with the management plan;
  - 2.4 a description of the circumstances where the environmental performance is below the actual performance predicted in the original management plan; and a strategy to improve the environmental performance of the irrigation scheme;

- 2.5 specific measures to satisfactorily address the lack of suitable buffer distances from the irrigation areas to publicly accessible roads and resulting public health risks from spraydrift; and
- 2.6 a description of the potential environmental impacts arising from the ongoing operation of the activity over the next 5 years including a strategic consideration of potential changes to the activity during that period and consideration of opportunities to implement continuous improvement.

### **Atmospheric**

#### **A1 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 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 Treated effluent from the activity must only be discharged at the following discharge points:
  - 1.1 Discharge to a wastewater reuse scheme: discharge to the Clarence Recycled Water Scheme at GDA94 MGA55 536226E 5267147N as shown on Attachment 1;
- 2 Treated effluent must not be discharged to the point referred to in clause 1.1 unless the effluent is managed in accordance with the Wastewater Reuse EMP.

**EF2 Effluent quality limits for discharge to the Clarence Recycled Water Scheme**

- 1 Effluent discharged to the Clarence Recycled Water Scheme must comply with the effluent quality limits set out in Table of Effluent Quality Limits for discharge to the Clarence Recycled Water Scheme at the Effluent Quality monitoring location specified in Attachment 1.
- 2 **Table of Effluent Quality Limits for discharge to the Clarence Recycled Water Scheme**

Column 1	Column 2	Column 3	Column 4	Column 6
Substance or measure	Unit of measurement	Minimum limit	Median limit	Maximum limit
Biochemical Oxygen Demand	mg/L	-	-	50
Thermotolerant Coliforms	cfu/100mL	-	1,000	10,000
pH	mg/L	6	-	9

**EF3 Blue-green algae notification**

Unless otherwise specified by the Director in writing, if blue-green algae are present at concentrations of 11,500 cells/mL or at a biovolume of 1.3 mm<sup>3</sup>/L or greater in the effluent at the treated effluent monitoring point, the Director must be notified within 24 hours of the monitoring results being received.

**Hazardous Substances**

**H1 Storage and handling of hazardous materials**

Unless otherwise approved in writing by the Director, environmentally hazardous material held on The Land, including chemicals, fuels and oils, must be located within impervious bunded areas or spill trays which are designed and maintained to contain at least 110% of the total volume of material.

**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 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 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 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 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.

### **OP2 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 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.



**OP3 Inflow and Infiltration Management Plan**

- 1 An Inflow and Infiltration ('I&I') Management Plan must be submitted annually by the person responsible to the Director for approval by 30 September each year or by a date otherwise specified in writing by the Director.
- 2 The person responsible must implement and act in accordance with the approved I&I Management Plan to the extent that it relates to the WWTP on the land.

**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 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.

**WM2 Sludge Removal**

The person responsible must complete works to remove sufficient accumulated sludge from the treatment lagoons so that the remaining sludge does not consume more than 30 per cent of each treatment lagoon capacity. Desludging must occur and a report detailing the findings of a sludge survey conducted after desludging must be provided by 31 December 2019, or by a date otherwise specified in writing by the Director.

**WM3 Sewage Sludge Management Plan**

- 1 A Sewage Sludge Management Plan must be submitted annually by the person responsible to the Director for approval by 30 September, or by a date otherwise specified in writing by the Director.
- 2 The Sewage Sludge Management Plan must be prepared in accordance with the *Sewage Sludge Management Plan Guidelines* and the *Tasmanian Biosolids Reuse Guidelines*.
- 3 The Sewage Sludge Management Plan must contain, in respect of the WWTP to which this notice relates:
  - 3.1 an assessment of sewage sludge volume, collection, treatment and dewatering options for the WWTP and determination of the likely biosolid classification for material produced by it;
  - 3.2 results of sludge profiling of all lagoons located at the WWTP, detailing levels of accumulated sludge;
  - 3.3 identification of strategic options to optimise collection, treatment and dewatering of sewage sludge to produce biosolids suitable for beneficial reuse;
  - 3.4 a program of works covering the next reporting period in relation to improvements to sewage sludge collection, treatment, dewatering and beneficial reuse of biosolids;
  - 3.5 a report detailing progress against works commitments made in the previous Sewage Sludge Management Plan; and
  - 3.6 revision of any components of the approved Sewage Sludge Management Plan to reflect any operational changes in relation to sewage sludge and biosolids management.
- 4 The person responsible must implement and act in accordance with the approved Sewage Sludge Management Plan.

### **Schedule 3: Information**

#### **Legal Obligations**

**LO1 Change of responsibility**

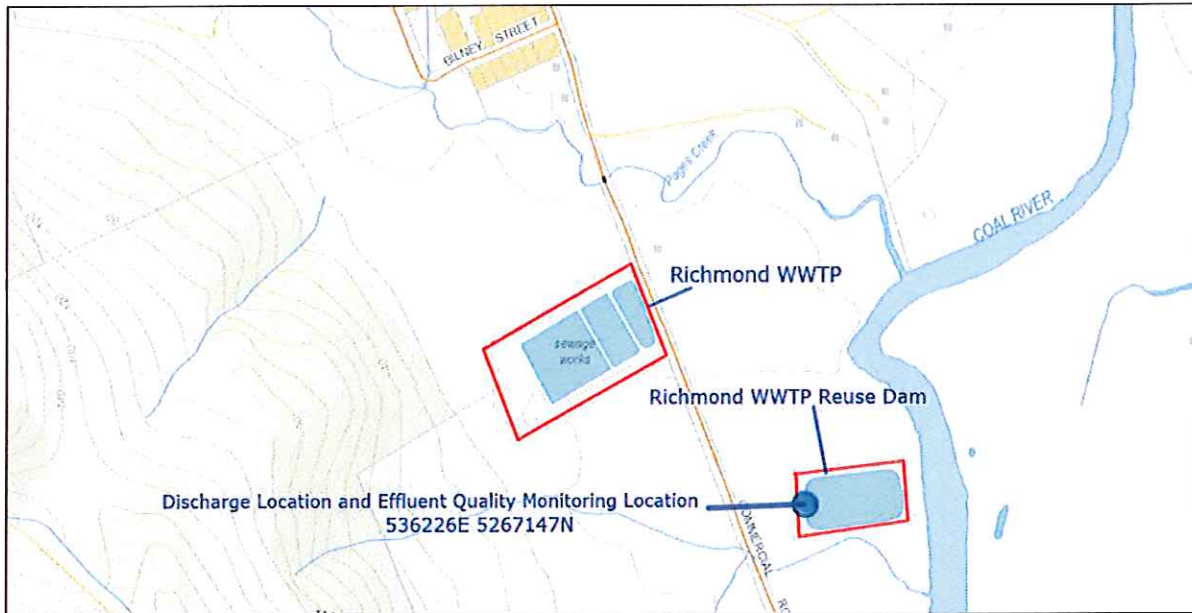
If the person responsible for the activity ceases to be responsible for the activity, they must notify the Director in accordance with Section 45 of the EMPCA.

#### **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).

# ATTACHMENT 1 PLAN OF ACTIVITY FOR EPN No. 7371/1



Disclaimer: All coordinates are based on the best available information at the time of EPN issue but can only be considered accurate within a few metres

**ATTACHMENT 2: TABLE OF MONITORING REQUIREMENTS EPN No. 7371/1**

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 535796 N 5267412	Flow	kL/day	Continuous measurement	On-line Flow Meter	<ol style="list-style-type: none"> <li>To be reported in the Monthly Monitoring Report as an average for the reporting period of daily flow.</li> <li>To be reported in the Monthly Monitoring Report or Annual Environmental Review as monthly averages of daily flow.</li> </ol>		
Effluent	WWTP Outlet Approximate grid reference E 536226 N 5267147	Flow	kL/day	Continuous or periodic measurement or estimate based on approved method	On-line Flow Meter	<ol style="list-style-type: none"> <li>To be reported in the Monthly Monitoring Report or Annual Environmental Review as monthly flows for each calendar month, based on daily flows for that month.</li> <li>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.</li> </ol>		
	Effluent Quality Monitoring Location  Approximate grid reference E 536226 N 5267147	pH	-	Monthly	Field Test	<ol style="list-style-type: none"> <li>Results to be reported in the Monthly Monitoring Report</li> <li>A summary of results to be provided in the Annual Environmental Review.</li> </ol>		
		Temperature	°C					
		Conductivity	dS/m					
		Total Residual Chlorine	mg/L	Monthly	Grab sample			
		Thermotolerant Coliforms	cfu/100mL					
		Enterococci	cfu/100mL					
		Biochemical Oxygen Demand	mg/L	Monthly				
		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					
		Blue-green algae	cells/mL				Monthly between November – March (or until no longer present)	
		Alkalinity (as bicarbonate)	mg/L				Annually	
		Calcium	mg/L					
		Potassium	mg/L					
		Magnesium	mg/L					
		Molybdenum	mg/L					
		Sodium	mg/L					
		Sulphate	mg/L					
		Arsenic	mg/L					
		Cadmium	mg/L					
		Chromium	mg/L					
		Copper	mg/L					
		Lead	mg/L					
	Manganese	mg/L						
	Mercury	mg/L						
	Nickel	mg/L						
	Selenium	mg/L						
	Zinc	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
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.	<ol style="list-style-type: none"> <li>1. As required in the Annual Environmental Review</li> <li>2. As otherwise approved by the Director.</li> </ol>

For the purposes of the Table of Monitoring Requirements the following definitions apply: (see next page)

**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.