ENVIRONMENT PROTECTION NOTICE No. 11379/1

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 wastewater treatment plant (ACTIVITY TYPE: Wastewater Treatment Works)**
DOVER WASTEWATER TREATMENT PLANT, OFF STATION ROAD
DOVER TAS 7117

GROUNDS

I, Glen Napthali, 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**
DA 101_2001	09 April 2002	Huon Valley Council

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 It is necessary to remove construction permit conditions C1, C2, C3, W1, N1, B1, A1, A2, A3 and R1 and operations permit conditions R8 and R9 of Permit Conditions - Environmental No.6228 because they detail requirements that have been fulfilled and/or are no longer required.

3 Condition E2 of Permit Conditions - Environmental No.6228 is not specific and is not measurable. The permit has been varied to remove this condition.

4 Permit conditions need to reflect that specific requirements are no longer applicable because they reference documents relating to the activity that have been superseded or are now redundant.

5 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.

6 The permit does not include a condition requiring the person responsible to take action to minimise environmental harm if an incident occurs.

7 It is desirable to add a condition requiring notification to the Director prior to the change in responsible person for the activity so that the Director is aware of changes to the person responsible for environmental management of the activity.

8 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.

9 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.

10 It is necessary to add a condition to require submission of a publicly available Annual Environmental Review so as to inform the Director and the public of the environmental performance of the activity.

11 It is necessary to add a condition to require the development, submission and implementation of a Construction Environmental Management Plan to ensure best practice environmental management is applied during construction activities for the extension and renewal of the marine outfall.

12 It is necessary to vary conditions to ensure effective management measures will be implemented to control dust emissions during construction to prevent environmental nuisance.

13 It is necessary to add a condition to define the standard operating hours for construction activities to reduce environmental nuisance impacts from construction activities on nearby residents and other sensitive receptors.

14 It is necessary to add a condition to require the development, submission and implementation of a Cetacean Monitoring and Construction Management Plan to ensure that appropriate measures are in place to minimise harm to cetaceans during construction of the marine outfall.

15 It is necessary to add a condition to notify the Director of commissioning of the marine outfall to ensure the Director has an up to date knowledge of the infrastructure used in the course of carrying out the activity.

16 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.

17 It is necessary to add a condition to require the submission to the Director, for approval, of 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.

18 The permit contains no requirements for ensuring that when decommissioning is undertaken,

it is done in a manner to minimise environmental harm.

19 The permit does not contain a condition that requires signage on land near effluent outfalls. Signage giving notice of potential public health risks is considered best practice environmental management.

20 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 section 16.2 of the State Policy on Water Quality Management 1997.

21 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 takes into account the storage and handling of environmentally hazardous substances.

22 Monitoring and reporting requirements set out in the permit 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.

23 The permit conditions need to be varied to reflect contemporary information management practices, such as electronic submission of monitoring data.

24 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.

25 Conditions are required regarding maintenance requirements for the treatment lagoons to minimise the risk of leakage causing environmental harm.

26 An inflow and infiltration plan is needed to ensure that best practice environmental management is applied to inflow and infiltration issues that increase the risk of unauthorised sewage discharges to the environment.

27 It is desirable to add a condition to require the development, submission and implementation of a Sewage Sludge Management Plan to ensure best practice environmental management is applied to sewage sludge.

28 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 (Waste Management) Regulations 2020.

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 $181.00).

NOTICE TAKES EFFECT

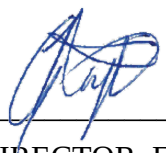
This notice takes effect on the date on which it is served upon you.

APPEAL RIGHTS

You may appeal to the Appeal Tribunal against this notice, or against any requirement contained in this notice, within fourteen days from the date on which the notice is served. The Appeal Tribunal contact details are:

Registry
Tasmanian Civil & Administrative Tribunal
GPO Box 1311
Hobart TAS 7001

Phone: 1800 657 500
Email: resourceplanning@tascat.tas.gov.au

Signed: 

DELEGATE FOR THE DIRECTOR, ENVIRONMENT PROTECTION AUTHORITY

Date: 21 April 2023

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Attachments

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.

Aboriginal Relic has the meaning described in section 2(3) of the *Aboriginal Heritage Act 1975*.

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.

Bypass means the discharge of untreated or partially treated effluent most commonly as a result of WWTP component failure or increased inflows to the WWTP as a result of high rainfall.

Construction means activities associated with the construction phase of the activity, including but not limited to, activities associated with the clearance of vegetation, site works to create a level site, rock breaking, installation of fences and other infrastructure whether on land or in water.

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 delegate or 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.

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.

EPA Board means the Board of the Environment Protection Authority established under section 13 of EMPCA and includes a delegate or person authorised in writing by the EPA Board to exercise a power or function on the EPA Board's behalf.

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

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.

Marine Outfall means the outfall pipeline transporting flows from the high-water mark at Kent Beach to the discharge location specified under EF1.2.

Median means the value at which the median of all results for the relevant parameter from the previous 12 month period is below the stated value.

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 [where the size and location of the mixing zone has been determined through appropriate investigations and approved by the EPA, the details should be loaded here or via an attachment].

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.

Planning Authority means the Council(s) for the municipal area(s) in which The Land is situated.

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 12 months ending on 30 June of each 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 in August 2020, and includes any subsequent versions of this document.

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

Tasmanian Biosolids Reuse Guidelines means the document of this title published by the Environment Protection Authority in June 2020, and includes any subsequent versions 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 Certificates of Title 234130/1 and 203285/1;

2 The portion of crown land from the high-water mark at Kent Beach to the terminal end of the outfall pipeline, and

3 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 :

1.1 360 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 responsibility

If the person responsible for the activity intends to cease to be responsible for the activity, that person must notify the Director in writing of the full particulars of any person who will become the person responsible for the activity, before such cessation.

G5 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.

G6 Complaints register

1 A public complaints register must be maintained. 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.

G7 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 Guidelines which is available on request from the Director.

Atmospheric

A1 Odour management

The person responsible must institute such odour management measures as are necessary to prevent odours causing environmental nuisance beyond the boundary of The Land.

Construction

CN1 Construction Environmental Management Plan

1 At least 30 days prior to the commencement of construction activities, or by a date otherwise specified in writing by the Director, a Construction Environmental Management Plan ('Construction EMP') must be submitted to the Director for approval.

2 The Construction EMP must contain a detailed description of the proposed timing and sequence of the major construction activities and of the proposed management measures to be implemented to avoid or minimise the environmental impacts during the construction phase. The Construction EMP must include, but not necessarily be limited to, management measures in relation to the following:

2.1 prevention of impacts upon surface water and waterways;

2.2 erosion and sediment control;

2.3 noise control;

2.4 dust control;

2.5 management of environmentally hazardous materials;

2.6 cultural (Aboriginal and non-aboriginal) heritage considerations;

2.7 flora and fauna management;

2.8 weed, pest and disease management;

2.9 quality control arrangements including supervision by appropriately qualified and experienced persons, detailed construction specifications for key items of environmental management infrastructure, documented site procedures, quality control testing and the keeping of appropriate records; and

2.10 acid sulphate soil management (if identified in pre construction testing).

3 Construction must not commence until the Construction EMP has been approved by the Director.

4 Unless otherwise specified in writing by the Director, construction activities must be carried out in accordance with an approved Construction EMP.

CN2 Control of dust emissions during construction

1 Construction activities must be managed using such measures as are necessary to prevent dust emissions causing environmental nuisance. Such measures may include but are not limited to:

1.1 using a dust suppression method such as watering dust generating surfaces; and

1.2 ceasing construction activities in windy weather when dust may be blown in the direction of residences.

CN3 Operating hours - Construction

1 Unless otherwise approved in writing by the Director:

1.1 Construction activities must not be undertaken outside 0700 hours to 1800 hours Monday to Friday; and 0800 hours to 1800 hours Saturdays

1.2 Notwithstanding the above paragraph, the construction activities must not be carried out on Sundays or Public Holidays that are observed State-wide (Easter Tuesday excepted).

CN4 Marine outfall construction

1 Unless otherwise approved in writing by the Director:

1.1 Construction of the Marine Outfall should avoid the main whale breeding and migration season from 1 May to 30 November.

1.2 If construction of the Marine Outfall must occur 1 May to 30 November the person responsible must submit a Cetacean Monitoring and Construction Management Plan to the Director for approval, at least 1 month prior to commencing construction of the Marine Outfall, demonstrating how acoustic impacts from construction will be managed.

2 The person responsible must act in accordance with any plan approved in writing by the Director.

CN5 Notification prior to and on completing commissioning

1 At least 14 days prior to the commencement of commissioning of the Marine Outfall, the person responsible for the activity must notify the Director of the date on which commissioning is expected to commence.

2 The person responsible must notify the Director of the completion of commissioning within 7 days of that occurring.

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 location

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

1.1 Prior to commissioning of the Marine Outfall: discharge to Port Esperance near grid reference GDA94 coordinates E502708 N5204109

1.2 Post commissioning of the Marine Outfall: discharge to Port Esperance in the vicinity of Knobbys Point near grid reference GDA94 coordinates E502755 N5203985 as depicted on the plan at Attachment 1.

2 Unless otherwise approved in writing by the Director, the discharge referred to in clause 1.2 must occur at a minimum low tide depths of 12 m, approximately 290m distance from the high-water mark through a seven port diffuser.

EF2 Effluent quality limits for discharge to Port Esperance

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

2 Table of Effluent Quality Limits for discharge to Port Esperance

Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
Substance or measure	**Unit of measurement**	**Minimum limit**	**Median limit**	**90th Percentile limit**	**Maximum limit**
Biochemical Oxygen Demand	mg O2/L		10	15	
Suspended Solids	mg/L		10	20	
Ammonia Nitrogen	mg/L				5
Total Nitrogen	mg/L		7	15	40
Total Phosphorus	mg/L		5	8	10
Escherichia coli	MPN/100 mL		200	500	750
Enterococci	MPN/100mL				3200
Total Residual Chlorine	mg/L				1
pH	pH units	6.5			8.5

EF3 Blue-green algae notification

Unless otherwise specified by the Director in writing, if blue-green algae are present at concentrations of 400,000 cells/mL or at a biovolume of 32 mm^3/L or greater in the effluent at the Effluent Quailty monitoring location, the Director must be notified within 7 days of the monitoring results being received.

EF4 Signage of discharge location

Signage must be installed and maintained on land near to outfalls to discourage recreational activities within waters immediately around the outfall. Signage is to alert the public as to the proximity and nature of the discharge.

Effluent Management

EM1 Capacity assessment of WWTP

1 The person responsible must submit a Plant Capacity Report to the Director for approval within 24 months of the completion of commissioning of the new outfall, or by a date otherwise specified in writing by the Director.

2 For the purposes of this condition the Plant Capacity Report must include the following:

2.1 An assessment of the current influent flows into the WWTP, including average dry weather flow and peak wet weather flows;

2.2 Confirmation of the influent flow rate and/or conditions when flows bypass the sequencing batch reactor treatment process at the WWTP inlet pump station;

2.3 A prediction of future volume and bacterial, organic and inorganic pollutant loading on the plant, taking into account population and industrial growth over 10 years, and a calculation of the plant's ability to process the loads;

2.4 A determination of the hydraulic capacity of the WWTP to adequately treat the characteristics of the wastewater typically received by the WWTP;

2.5 A review of the infrastructure and efficacy of the disinfections system to achieve compliance with the discharge limits for total residual chlorine and E.Coli for discharge to Port Esperance, and

2.6 Either, confirmation of the WWTP's capacity to adequately treat current and future loads, or, a strategy for future management of the WWTP.

EM2 Effluent Management

1 The person responsible must:

1.1 submit to the Director by 30 June 2024, or by a date otherwise specified in writing by the Director, a written undertaking to implement full effluent reuse, or

1.2 submit a Discharge Management Plan to the Director for approval by 30 December 2028, or by a date otherwise specified in writing by the Director.

EM3 Effluent reuse feasibility study

1 A feasibility study for reuse of effluent from the activity must be submitted to the Director by 30 December 2028, 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.

EM4 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 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;

2.4 be designed to take into account the Protected Environmental Values and identify sensitive receptors within the receiving environment; and

2.5 incorporate an effluent plume dilution study which identifies the behaviour and dimensions of the mixing zone at the authorised discharge point;

2.6 be designed to identify the location and extent of the mixing zone, taking into account seasonal effects and other variation in the receiving environment;

2.7 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 as stipulated in 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.

EM5 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 not implement the Discharge Management Plan until it is approved by the Director, once approved the person responsible must act in accordance with the approved 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. The varied plan must not be implemented until it is approved.

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 stored 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 or material 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 Samples and measurements for monitoring purposes

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

1.1 sampling and measuring must be undertaken by a person with training, experience, and knowledge of the appropriate procedure;

1.2 the integrity of samples must be maintained prior to delivery to a testing facility;

1.3 sample analysis must be conducted by a testing facility accredited by the National Association of Testing Authorities (NATA), or a testing facility approved in writing by the Director, for the specified test;

1.4 details of methods employed in taking samples and measurements and results of sample analysis, and measurements must be retained for at least three (3) years after the date of collection; and

1.5 sampling and 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.

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 by the 21st day of the following month. 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; and

1.4 for each sample or measurement:

1.4.1 a sample or measurement identification which allows the location from which the sample or measurement was taken to be clearly identifiable;

1.4.2 the date and time at which each sample or measurement was take;

1.4.3 the parameters for which analyses or measurements were carried out and the units in which the results are reported; and

1.4.4 the results for all sample analyses and measurements.

2 A record of all Monthly Monitoring Reports submitted to the Director must be maintained and copies of all test reports referenced to the relevant Monthly Monitoring Reports kept for a minimum period of three (3) years.

M4 Effluent flow meter

Prior to commissioning of the Marine Outfall, the person responsible must install an effluent flow meter which accurately measures and records the volume of effluent discharged to the discharge location specified by condition EF1(1.2).

M5 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.

M6 Signage of monitoring points

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

1.1 The location of monitoring points external to The Land must be recorded with sufficient accuracy to ensure that monitoring can be undertaken at the same location repeatedly and in accordance with these conditions.

M7 Plume dilution study

1 Unless otherwise specified in writing by the Director, a Plume Dilution Study must be undertaken within three (3) months and a Plume Dilution Study Report provided for approval within six (6) months of the completion of commissioning of the Marine Outfall.

2 The Plume Dilution Study must:

2.1 identify the behaviour and dimensions of the mixing zone at the discharge location authorised by condition EF1(1.1); and

2.2 be undertaken in both incoming and outgoing tidal conditions.

3 The Plume Dilution Report must:

3.1 document and summarise the findings of the plume dilution study;

3.2 include a comparison of the findings of this study against any mixing zone predicted by modelling; and

3.3 make recommendations, based on the findings of the plume dilution study, for the selection of receiving environment monitoring locations for the ambient monitoring plan required by condition EM3.

M8 Event Recorder for Bypass

The person responsible must install, within 12 months of the date on which these conditions take effect, an event recorder at a location which ensures that the date, time and duration of any bypass is recorded.

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 Operational Procedures and Maintenance Manual

1 An Operational Procedures and Maintenance 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 Manual must be prepared in accordance with any reasonable guidelines provided by the Director. If no guidelines are provided, the Manual must:

2.1 be written in an easy to understand format, with checklists, diagrams, instructions and photographs as appropriate.

2.2 be available for easy reference by operational staff, including any documents referenced by the Manual

2.3 be clear about who is responsible for carrying out tasks, as well as how, when or how often tasks should be performed.

3 The Manual must be kept up to date, and reviewed at least annually, and must take into account environment related complaints, incidents and changes to the activity.

OP2 Contingency management

1 A Contingency Management Plan must be prepared and submitted to the Director for approval within six (6) 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 but are not limited to:

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 that ensure that water users and land holders 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 and land holders 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 Plan, as may be amended by written agreement of the Director, must not be implemented by the person responsible until the Plan is approved by the Director. Once approved, the Plan must be implemented.

OP3 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.

OP4 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 within three (3) months of the end of the Reporting Period or by a date otherwise specified in writing by the Director.

2 The I&I Management Plan must be prepared in accordance with the Inflow and Infiltration Management Plan Guidelines.

3 The person responsible must not implement an I&I Management Plan until it is approved by the Director. Once approved the person responsible must act in accordance with the approved I&I Management Plan.

Waste Management

WM1 Sewage Sludge Management Plan

1 A Sewage Sludge Management Plan must be submitted annually by the person responsible to the Director for approval within three (3) months of the end of the Reporting Period or by a date 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 person responsible must not implement the Sewage Sludge Management Plan until the Director has approved the Plan, and once approved the person responsible must act in accordance with the currently approved Plan.

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.

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 EMPCA

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

LO2 Controlled waste transport

Transport of controlled wastes to and from The Land must be undertaken only by persons authorised to do so under EMPCA or subordinate legislation.

LO3 Storage and handling of dangerous goods, explosives and dangerous substances

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

1.1 *Work Health and Safety Act 2012* and subordinate regulations;

1.2 *Explosives Act 2012* and subordinate regulations; and

1.3 *Dangerous Goods (Road and Rail Transport) Act 2010* and subordinate regulations.

LO4 Aboriginal relics requirements

1 Aboriginal relics, objects, sites, places and human remains regardless of whether they are located on public or private land, are protected under the *Aboriginal Heritage Act 1975*.

2 Unanticipated discoveries of Aboriginal heritage must be reported to Aboriginal Heritage Tasmania on **1300 487 045** as soon as possible.

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).

OI2 Release of Relevant Information

Under the provisions of Section 23AA of EMPCA relevant information relating to monitoring of environmental impacts required under these conditions may be subject to publishing or public release by the Director.

OI3 Waste management hierarchy

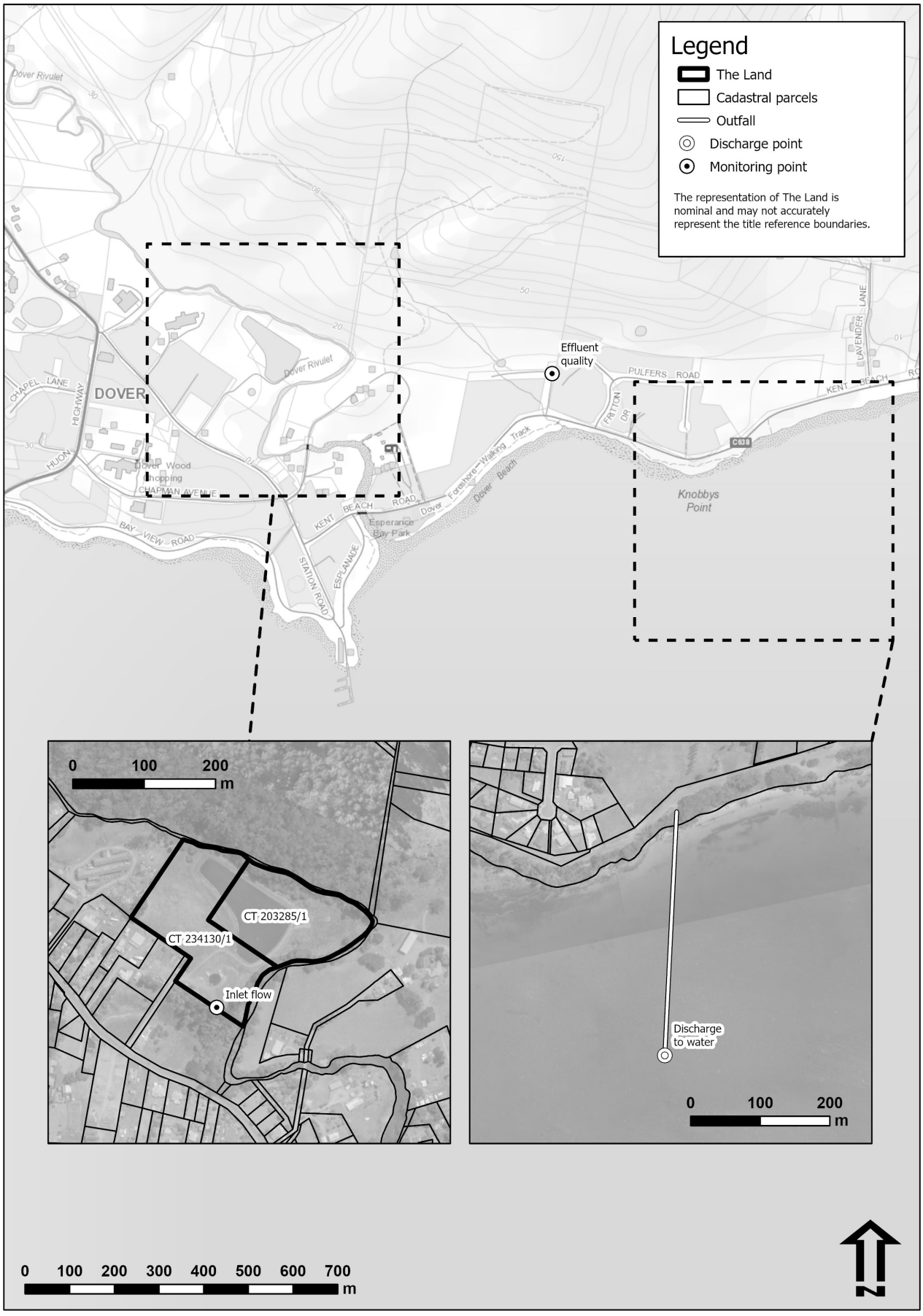
1 Wastes should be managed in accordance with the following hierarchy of waste management:

1.1 waste should be minimised, that is, the generation of waste must be reduced to the maximum extent that is reasonable and practicable, having regard to best practice environmental management;

1.2 waste should be re-used or recycled to the maximum extent that is practicable; and

1.3 waste that cannot be re-used or recycled must be disposed of at a waste depot site or treatment facility that has been approved in writing by the relevant planning authority or the Director to receive such waste, or otherwise in a manner approved in writing by the Director.

Attachment 1: Map of Activity



DELEGATE FOR THE DIRECTOR, ENVIRONMENT PROTECTION AUTHORITY

Date of issue: 21 April 2023

ATTACHMENT 2: TABLE OF MONITORING REQUIREMENTS FOR EPN 11379/1

Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7
Item	**Sampling locations**	**Parameter**	**Unit of measure**	**Sampling or testing frequency**	**Sampling or testing technique**	**Reporting requirements**
WWTP inflow	Inlet flow monitoring Approximate grid reference: 501620E 5204372N	Flow	kL/day	Continuous measurement	Flow meter	Results to be included: a) in the Monthly Monitoring Report as an average for the reporting period of total daily flow; and b) as required in the Annual Environmental Review.
WWTP outflow	Effluent flow monitoring	Flow	kL/day	Continuous or daily periodic measurement or estimate.	Flow meter or other technique approved by the Director	Results to be included: a) as required in the Annual Environmental Review.
Effluent quality	Effluent quality monitoring Approximate grid reference: 502290E 5204455N	pH	pH units	Monthly	Field test	Results to be included: a) in the Monthly Monitoring Report; and b) as required in the Annual Environmental Review.
		Temperature	°Celsius			
		Conductivity	dS/m or µS/cm		Field test/grab sample	
		Total Residual Chlorine	mg/L		On-line or field Total Residual Chlorine test. Reading to be taken within 5 minutes of grab sample collection.	
		E. coli	MPN/100mL		Grab sample	
		Enterococci				
		Biochemical Oxygen Demand	mg/L			
		Total Suspended Solids				
		Ammonia-Nitrogen				
		Nitrate-Nitrogen				
		Nitrite-Nitrogen				
		Total Nitrogen				
		Total Phosphorus				
		Oil and Grease				
		Blue green algae	Cells/mL or mm3/L	Monthly between November to March, or until no longer present		
		Arsenic	mg/L	Annual		
		Cadmium				
		Chromium				
		Copper				
		Lead				
		Mercury				
		Nickel				
		Selenium				
		Zinc				

ATTACHMENT 2: TABLE OF MONITORING REQUIREMENTS FOR EPN 11379/1

Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7
Item	**Sampling locations**	**Parameter**	**Unit of measure**	**Sampling or testing frequency**	**Sampling or testing technique**	**Reporting requirements**
Wastewater treatment bypass		Date and time	Date and time	When bypass occurs	Automated event recorder that logs bypasses.	Report the following in the Annual Environmental Review: a) Date, volume discharged, discharge location and level of treatment. b) Total number of bypasses in the reporting period.
		Duration of bypass	Time (days, hours, minutes)	When bypass occurs	Automated event recorder that logs duration of bypasses.	
		Flow	kL	When bypass occurs	Automated event recorder that allows the estimation or measurement of the volume of a bypass.	
		Level of treatment prior to discharge	Primary or secondary	When bypass occurs	Observation during the bypass	
Groundwater	Groundwater monitoring bores: DOGW1, DOGW2 and DOGW3 as per the 'Dover Sewage Treatment Plant Groundwater Monitoring Bore Installation & June 2017 Monitoring Event' report, SGEO PN 119250 dated 19 June 2017	Standing water level	m bgl	Annually	Field test	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	-			
		Temperature	° Celsius			
		Conductivity	dS/m or µS/cm		Field test/grab sample	
		Total Dissolved Solids	mg/L		Grab sample	
		Ammonia-Nitrogen				
		Nitrite-Nitrogen				
		Nitrate-Nitrogen				
		Total Nitrogen				
		Total Phosphorus				
		Filterable Reactive Phosphorus				
		E. coli	MPN/100 mL			
		Enterococci				
Sludge/ Biosolids	Sludge/ Biosolids located on The Land	In accordance with the Tasmanian Biosolids Reuse Guidelines, or as otherwise approved by the Director.	In accordance with the Tasmanian Biosolids Reuse Guidelines, or as otherwise approved by the Director.	In accordance with the Tasmanian Biosolids Reuse Guidelines, or as otherwise approved by the Director.	In accordance with the Tasmanian Biosolids Reuse Guidelines, or as otherwise approved by the Director.	a) As required in the Annual Environmental Review. b) 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.
Effluent Metal Analysis means total metals