ENVIRONMENT PROTECTION NOTICE No. 10231/1

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 wastewater treatment plant (ACTIVITY TYPE: Wastewater Treatment Works)**
BLACKMANS BAY WASTEWATER TREATMENT PLANT, OFF TINDERBOX RD EAST
BLACKMANS BAY TAS 7051

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
3326	18 November 1987	Director of Environmental Control
DA-2008-512	19 December 2008	Kingborough Council
2016-423	16 March 2017	Kingborough Council

PARTICULARS

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

1 The conditions in permits (see table above) have been varied simultaneously because the activities can be viewed as forming one integrated activity under section 44(9) of the EMPCA.

2 It is necessary to remove conditions G3, G6, G7, CN1, H1, CN2, M2, M4, M5, N1, N2, WM1 of PCE No. 7551 and conditions A1, A3, A4, A5, CM1, CN1, CN2, CN3, CN4, CN5 of PCE No. 9057 because they detail requirements that have been fulfilled and/or are no longer required.

3 Conditions E2 of PCE No. 7551 and E4 of PCE No. 9057 are not measurable. The permits have been varied to remove these conditions.

4 Permit conditions need to reflect that specific requirements are no longer applicable because they reference documents relating to the activity that have been superseded or are now redundant.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 desirable to remove conditions because they pertain to specific requirements imposed under EMPCA or Regulations thereunder.

6 The Permit conditions refer to The Environment Protection Act 1973 which has been repealed and replaced by the EMPCA. It is necessary to vary condition(s) to remove references to the repealed Act.

7 Environmentally hazardous substances are likely to be stored and handled on The Land and current best practice environmental management necessitates conditions to be varied for the storage and handling of environmentally hazardous substances.

8 Different regulatory limits are imposed in each permit. Permit conditions are varied to clarify the correct regulatory limit to apply is that from PCE No. 9057.

9 It is necessary to vary the condition requiring the person responsible to take action to minimise environmental harm if an incident occurs.

10 Effluent quality limits have been modified to change the parameter thermotolerant coliforms to E. coli as a better microbiological indicator of human derived faecal contamination.

11 Effluent quality limits have been modified to remove the oil and grease parameter. A review of limits imposed on wastewater treatment plants concluded that limits for oil and grease are no longer required. Measurement of effluent oil and grease will continue to be monitored through the requirements of condition M3 and Attachment 3.

12 The frequency of ambient monitoring reporting has been reduced to reflect the conclusions of previous ambient monitoring reports which indicate the effluent discharge is having a low impact on the receiving environment.

13 Monitoring requirements imposed by condition M3 and Attachment 3 have been varied and reduced to reflect the conclusions of previous ambient monitoring undertaken which indicates the effluent discharge is having a low impact on the receiving environment.

14 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.

15 The requirement for a Contingency Management Plan has been modified to include a requirement for contingency measures to be developed to respond to an increase in odour which may arise from the activity and thus minimise any resultant environmental nuisance.

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 $173.00).

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 on you. The Appeal Tribunal contact details are:

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

Phone: (03) 6165 6794
Email: rmpat@justice.tas.gov.au

Signed: _____

DELEGATE FOR THE DIRECTOR, ENVIRONMENT PROTECTION AUTHORITY

Date: 12 August 2021

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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 applicable sample results over a twelve month period.

Activity means any environmentally relevant activity (as defined in Section 3 of EMPCA) to which this document relates, and includes more than one such activity.
Average Dry Weather Flow means the average of the daily flows to a wastewater treatment plant sustained during dry-weather periods with limited infiltration.

Authorized Officer means an authorized officer under section 20 of EMPCA.

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.

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.

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.

Median means the value at which the median of all applicable 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.

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 Values the current uses and values of Tasmanian surface waters (including estuarine and coastal waters) defined under the *State Policy on Water Quality Management 1997.*

Reporting Period means the financial 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.

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 Environment Protection Authority in June 2020, and includes any subsequent versions of this document.

Tasmanian Noise Measurement Procedures Manual means the document titled *Noise Measurement Procedures Manual*, by the Department of Environment, Parks, Heritage and the Arts, dated July 2008, and any amendment to or substitution of this document.

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

1 Certificate of Titles 157728/2 and 157728/1; and

2 as further delineated at Attachment 1.

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

WWTP means the wastewater treatment plant located on The Land and further defined by the operational boundary of the activity as shown in Attachment 1.

Schedule 2: Conditions

Maximum Quantities

Q1 Regulatory limits

1 The activity must not exceed the following limits :

1.1 8,530 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 succeeding him or her as 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 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.

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 Template which is available on request from the Director.

Atmospheric

A1 Odour management

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

Decommissioning And Rehabilitation

DC1 Notification of cessation

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

DC2 DRP requirements

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

DC3 Rehabilitation following cessation

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

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

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

1.3 decommissioning of any equipment that has not been removed.

2 Where a Decommissioning and Rehabilitation Plan (DRP) has been approved by the Director, decommissioning and rehabilitation must be carried out in accordance with that plan, as may be amended from time to time with written approval of the Director.

Effluent

EF1 Effluent discharge locations

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

1.1 Discharge to water: discharge to River Derwent from multiple ports on diffuser section of outfall located between grid reference 526856E, 5237377N and 527403E, 5237385N as depicted on the plan at Attachment 2.

EF2 Mixing zone

Unless otherwise specified in writing by the Director, the mixing zone is defined as the body of water that extends to a boundary 15 metres to the north and south of the centreline and a 15 metres radial arc to the east of the diffuser section, and extends vertically from the seafloor to the surface, as shown at Attachment 2.

EF3 Effluent quality limits for discharge to the River Derwent

Effluent discharged to the River Derwent must comply with the effluent quality limits set out in Table 1, Table of Effluent Quality Limits for discharge to the River Derwent, at the Effluent Quality monitoring location specified in Attachment 3.

Table 1 - Table of Effluent Quality Limits for discharge to the River Derwent

Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
Substance or measure	**Unit of measurement**	**Minimum Limit**	**Median limit**	**90th Percentile limit**	**Maximum limit**
Biochemical Oxygen Demand	mg/L		10	15	-
Suspended Solids	mg/L		10	20	-
Ammonia Nitrogen	mg/L		1	2	5
Total Nitrogen	mg/L		7	10	-
Total Phosphorus	mg/L		10	12	-
E. coli	MPN/100mL		200	500	750
pH	pH units	6.5	-	-	8.5

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.

Hazardous Substances

H1 Storage and handling of hazardous materials

1 Unless otherwise approved in writing by the Director, environmentally hazardous materials held on The Land must be:

1.1 located within impervious bunded areas, spill trays or other containment systems; and

1.2 managed to prevent unauthorised discharge, emission or deposition of pollutants:

1.2.1 to soils within the boundary of The Land in a manner that is likely to cause serious environmental harm;

1.2.2 to groundwater;

1.2.3 to waterways; or

1.2.4 beyond the boundary of The Land.

Monitoring

M1 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.

M2 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.

M3 Monitoring requirements

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

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

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

M4 Receiving Environment Monitoring Report

1 Unless otherwise specified in writing by the Director, a Receiving Environment Monitoring Report must be submitted to the Director by 31 December 2023, and triennially thereafter.

2 This report is to document the findings of any ambient monitoring undertaken over the previous reporting period in accordance with these conditions and as specified in Attachment 3 Table of Monitoring Requirements.

3 The report is to be prepared in accordance with any guidance provided by the Director and as a minimum the report must include:

3.1 details of sites monitored and sampling or survey methods;

3.2 all sampling and analysis results;

3.3 an assessment of the effects of the effluent discharge from the WWTP on the receiving environment both within and outside the Mixing Zone, taking into account Protected Environmental Values and relevant sensitive receptors; and

3.4 recommendations for any necessary mitigation measures and/or changes to the monitoring program as specified by these conditions.

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

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

Noise Control

N1 Noise emission limits

1 From the commencement of normal operations, 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 45 dB(A) between 0800 hours and 1800 hours (Day time); and

1.2 40 dB(A) between 1800 hours and 2200 hours (Evening time); and

1.3 35 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 or odour 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 approved Plan, including any amendment to or substitution of that Plan, approved in writing by the Director, must be implemented as approved.

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.

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 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 implement and act in accordance with the currently approved Sewage Sludge Management Plan.

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 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.

LO3 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.

Other Information

OI1 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;

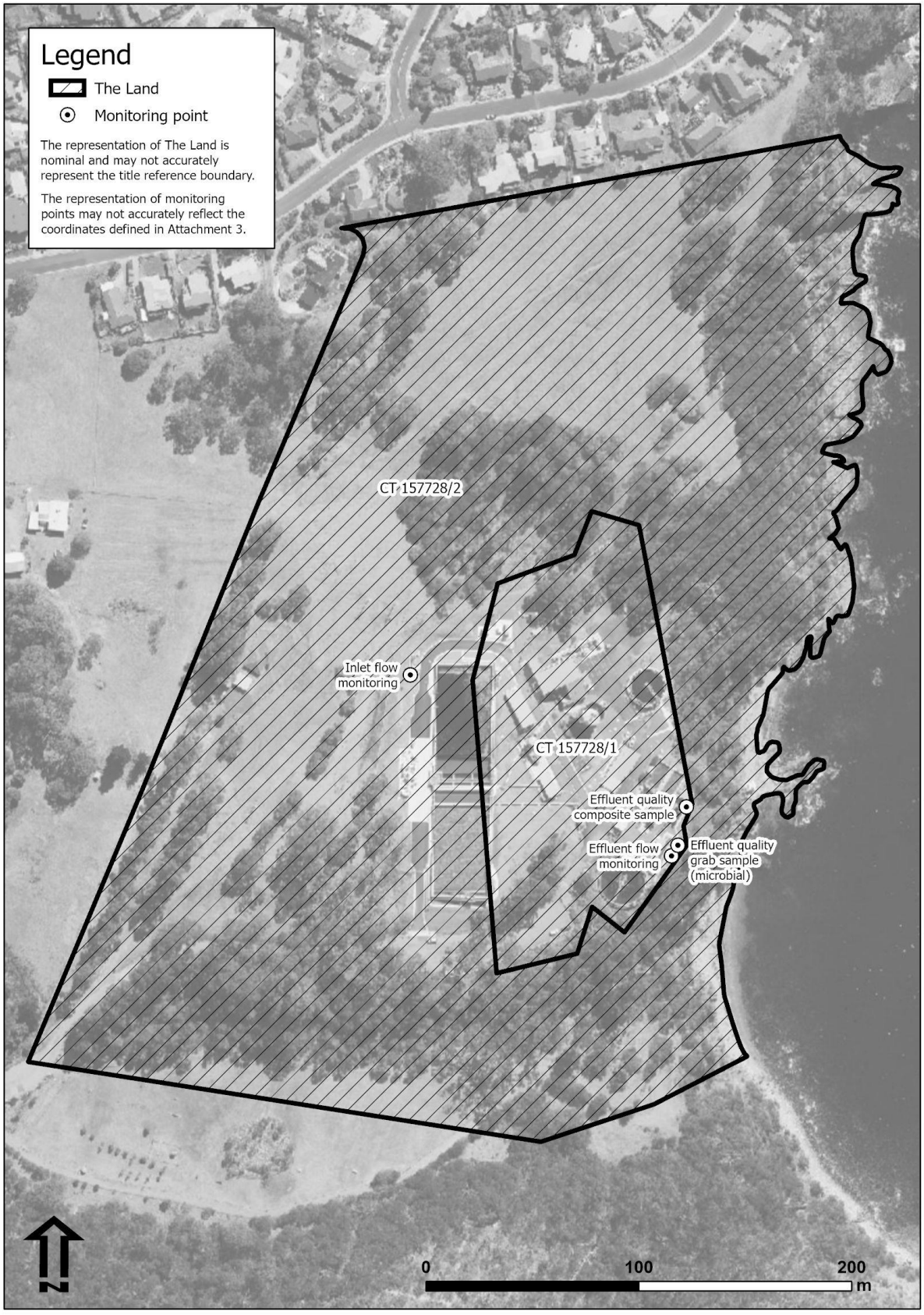
1.2 waste should be re-used or recycled to the maximum extent that is practicable; and

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.

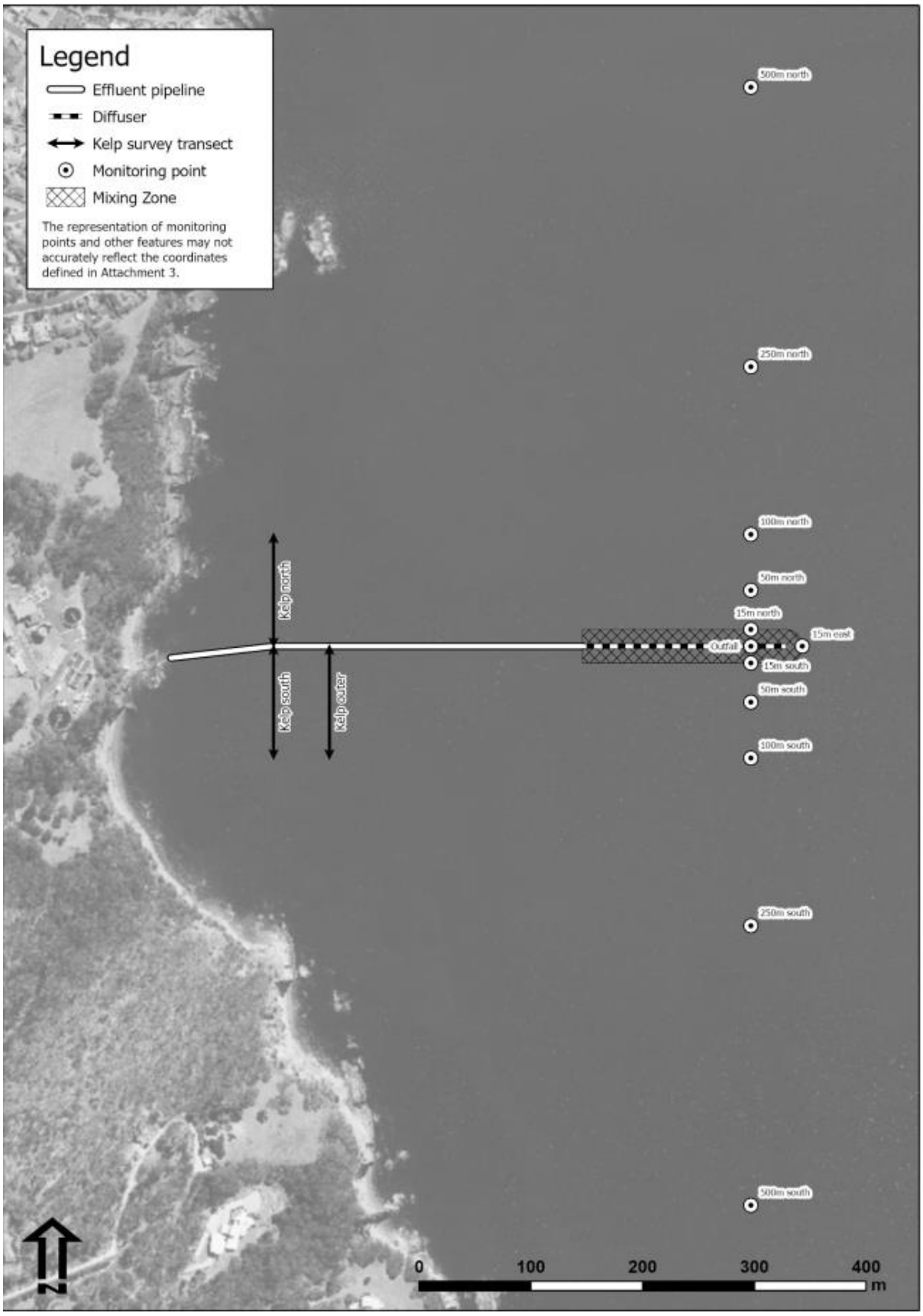
OI2 Notification of incidents under section 32 of EMPCA

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



ATTACHMENT 2: MIXING ZONE AND RECEIVING ENVIRONMENT MONITORING LOCATIONS



ATTACHMENT 3: TABLE OF MONITORING REQUIREMENTS

PART A: INFLUENT, EFFLUENT & SLUDGE MONITORING

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: 526646E 5237412N	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 Approximate grid reference: 526770E 5237330N	Flow	kL/day	Continuous measurement	Flow meter	Results to be included: a) as required in the Annual Environmental Review.
Effluent Quality	Effluent quality grab sample Approximate grid reference: 526773E 5237335N	*E. coli*	MPN/100ml	Weekly	Grab sample	Results to be included: a) in the Monthly Monitoring Report; and b) as required in the Annual Environmental Review.
		Enterococci				
	Effluent quality composite sample Approximate grid reference: 526778E 5237352N	pH	pH units	Weekly	Field Test	
		Temperature	°C			
		Conductivity	dS/m or µS/cm			
		Biochemical Oxygen Demand	mg/L		Flow-weighted 24-hour composite sample	
		Total Suspended Solids				
		Ammonia-Nitrogen				
		Nitrate-Nitrogen				
		Nitrite-Nitrogen				
		Total Nitrogen				
		Total Phosphorus				
		Oil and Grease				
		Arsenic (Total)	mg/L	Annual	Flow-weighted 24-hour composite sample	
		Cadmium				
		Chromium (Total)				
		Copper				
		Lead				
		Manganese				
		Mercury				
		Nickel				
		Selenium				
		Zinc				
Sludge	Sludge / Biosolids located on the Land	In accordance with the *Tasmanian Biosolids Reuse Guidelines 2020*, or as otherwise approved by the Director.	In accordance with the *Tasmanian Biosolids Reuse Guidelines 2020*, or as otherwise approved by the Director.	In accordance with the *Tasmanian Biosolids Reuse Guidelines 2020*, or as otherwise approved by the Director.	In accordance with the *Tasmanian Biosolids Reuse Guidelines 2020*, or as otherwise approved by the Director.	Results to be included: a) as required in the Annual Environmental Review; and b) as otherwise approved by the Director.

ATTACHMENT 3: TABLE OF MONITORING REQUIREMENTS

PART B: RECEIVING ENVIRONMENT MONITORING

Column 1 Item	Column 2 Sampling locations	Column 3 Parameter	Column 4 Units of measurement	Column 5 Default sampling frequency	Column 6 Sampling technique	Column 7 Reporting requirements
Receiving Water Quality Monitoring	North of outfall (15m, 100m and 250m) South of outfall (15m, 100m and 250m) East of Outfall (15m) Kelp sites 1, 2,3 (see below) (refer to map at Appendix 2) Reference sites West (527780E 5236750N) and East (530740E 5236350N) (Derwent Estuary Program sites B1 & B3)	pH	pH units	As required by the Director, in consideration of review of WWTP effluent quality performance.	Sampling techniques as per the methodology stipulated in CEE (2015), *Blackmans Bay Outfall: Water Quality Monitoring Program, Sixth Operational Survey*[1].	Results to be reported within Monitoring Report required under condition M4 of the permit.
		Temperature	°C			
		Salinity	PSU			
		Dissolved oxygen	% saturation			
		Ammonia-Nitrogen	mg/L			
		Nitrate-Nitrogen				
		Nitrite-Nitrogen				
		Total Nitrogen				
		Total Phosphorus				
		Dissolved Reactive Phosphorus				
		Enterococci	MPN/100ml			
		Chlorophyll a	µg/L			
Benthic Infauna and Sediment Monitoring	Outfall North of outfall (15m, 100m and 500m) South of outfall (15m, 100m and 500m) East of the outfall (15m) (refer to map at Appendix 2)	Benthic infauna and sediment samples as per the methodology stipulated in CEE (2015), *Blackmans Bay Outfall: Marine Ecological Monitoring Program, Infauna Community and Giant Kelp, Sixth Operational Survey.*	NA	Biannually every 3 years commencing in 2023 and as required by the Director, in consideration of report findings.	Collection of benthic infauna and sediment samples as per the methodology stipulated in CEE (2015), *Blackmans Bay Outfall: Marine Ecological Monitoring Program, Infauna Community and Giant Kelp, Sixth Operational Survey.*	Results to be reported within Monitoring Report required under condition M4 of the permit.
Kelp Monitoring	0-100 m north of fertiliser ports (Kelp site 1) 0-100 m south of fertiliser ports (Kelp site 2) 0-100 m south of fertiliser ports (outer) (Kelp site 3) (refer to map at Appendix 2)	Number of stipes	NA	Biannually every 3 years commencing in 2023 and as required by the Director, in consideration of report findings.	Diver transects counting number of stipes within 1m of transect, changing sides every 10m of transect. Also canopy density estimated every 10m, based on a 1-4 ranking with 1 being up to 25% and 4 being 100%.	Results to be reported within Monitoring Report required under condition M4 of the permit.

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
Flow-weighted 24-hour composite means a composite sample consisting of grab samples taken continuously over a 24-hour period at a rate proportional to wastewater flow.

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

[1] Sampling depths: Outfall – top of the plume as defined by salinity profiling.
15m of outfall (North, South and East) - top, middle, bottom of plume as defined by salinity profiling.
All other locations - mid-depth of plume as defined by salinity profiling (or as otherwise approved by the Director).