Permit

Environmental Protection Act 1994

Environmental authority EA0002229

This environmental authority is issued by the administering authority under Chapter 5 of the Environmental Protection Act 1994.

Environmental authority number: EA0002229

Environmental authority takes effect on the 17th of August 2021.

Environmental authority holder(s)

Name(s)	Registered address
AQUATEC PTY. LTD.	349-351 Mulligan Hwy COOKTOWN QLD 4895 Australia

Environmentally relevant activity and location details

Environmentally relevant activity/activities	Location(s)
ERA 01 - Aquaculture 1: Cultivating or holding crustaceans in enclosures that are on land and have a total area of (b) more than 10ha but not more than 100ha	LOT 4 on RP887249

Additional information for applicants

Environmentally relevant activities

The description of any environmentally relevant activity (ERA) for which an environmental authority (EA) is issued is a restatement of the ERA as defined by legislation at the time the EA is issued. Where there is any inconsistency between that description of an ERA and the conditions stated by an EA as to the scale, intensity or manner of carrying out an ERA, the conditions prevail to the extent of the inconsistency.

An EA authorises the carrying out of an ERA and does not authorise any environmental harm unless a condition stated by the EA specifically authorises environmental harm.

A person carrying out an ERA must also be a registered suitable operator under the *Environmental Protection Act 1994* (EP Act).

Contaminated land

It is a requirement of the EP Act that an owner or occupier of contaminated land give written notice to the administering authority if they become aware of the following:

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- the happening of an event involving a hazardous contaminant on the contaminated land (notice must be given within 24 hours); or
- a change in the condition of the contaminated land (notice must be given within 24 hours); or
- a notifiable activity (as defined in Schedule 3) having been carried out, or is being carried out, on the contaminated land (notice must be given within 20 business days);

that is causing, or is reasonably likely to cause, serious or material environmental harm.

For further information, including the form for giving written notice, refer to the Queensland Government website www.qld.gov.au, using the search term 'duty to notify'.

Take effect

Please note that, in accordance with section 200 of the EP Act, an EA has effect:

a) if the authority is for a prescribed ERA and it states that it takes effect on the day nominated by the holder of the authority in a written notice given to the administering authority-on the nominated day; or

b) if the authority states a day or an event for it to take effect-on the stated day or when the stated event happens; or

c) otherwise-on the day the authority is issued.

However, if the EA is authorising an activity that requires an additional authorisation (a relevant tenure for a resource activity, a development permit under the *Planning Act 2016* or an SDA Approval under the *State Development and Public Works Organisation Act 1971*), this EA will not take effect until the additional authorisation has taken effect.

If this EA takes effect when the additional authorisation takes effect, you must provide the administering authority written notice within 5 business days of receiving notification of the related additional authorisation taking effect.

If you have incorrectly claimed that an additional authorisation is not required, carrying out the ERA without the additional authorisation is not legal and could result in your prosecution for providing false or misleading information or operating without a valid environmental authority.

Amanda Gray
Department of Environment and Science
Delegate of the administering authority
Environmental Protection Act 1994

Date issued: 17 August 2021

Enquiries:
Coastal and Marine Assessment
Department of Environment and Science

Phone: 1300 130 372
Email: palm@des.qld.gov.au

Obligations under the *Environmental Protection Act 1994*

In addition to the requirements found in the conditions of this environmental authority, the holder must also meet their obligations under the EP Act, and the regulations made under the EP Act. For example, the holder must comply with the following provisions of the Act:

- general environmental duty (section 319)
- duty to notify environmental harm (section 320-320G)
- offence of causing serious or material environmental harm (sections 437-439)
- offence of causing environmental nuisance (section 440)
- offence of depositing prescribed water contaminants in waters and related matters (section 440ZG)
- offence to place contaminant where environmental harm or nuisance may be caused (section 443)

Conditions of environmental authority

Agency interest: General	
Condition number	**Condition**
G1	The only areas permitted for aquaculture activities under this **environmental authority** are those outlined in Appendix 1, Figure 1 – Site Map.
G2	The **environmental authority** applies to the operation of not more than 34 production ponds having a combined total area of 47.4 hectares.
G3	The on farm waste water retention and treatment system must have a surface area of at least 9.83 hectares.
G4	Any breach of a condition of this environmental authority must be reported to the **administering authority** as soon as practicable within 24 hours of becoming aware of the breach. **Records** must be kept including full details of the breach and any subsequent actions taken.
G5	For a breach that has an impact to **waters**, the report required for condition G4 must be submitted via **WaTERS**, unless otherwise agreed by the **administering authority**.
G6	All reasonable and practicable **measures** must be taken to prevent or minimise environmental harm caused by the activities.
G7	The **activity** must be undertaken in accordance with written procedures that: a) identify potential risks to the environment from the **activity** during routine operations and emergencies; and b) establish and maintain control **measures** that minimise the potential for environmental harm; and c) ensure plant, equipment and **measures** are maintained in a proper and effective condition; and d) ensure plant, equipment and **measures** are operated in a proper and effective manner; and e) ensure that staff are trained and aware of their obligations under the *Environmental Protection Act 1994*; and

	f) ensure that reviews of environmental performance are undertaken at least annually.
G8	All **records** must be kept for a period of at least five years and provided to the **administering authority** upon request.
G9	Chemicals and fuels in containers of greater than 15 litres must be stored within a **secondary containment system.**
G10	All analyses required under this environmental authority must be carried out by a laboratory that has National Association of Testing Authorities (**NATA**) certification, or an equivalent certification, for such analyses. The only exception to this condition is for *in situ* monitoring of Dissolved Oxygen and pH.
G11	**You** must record the following details for all environmental complaints received: 1. date and time complaint was received 2. name and contact details of the complainant when provided and authorised by the complainant 3. nature of the complaint 4. investigations undertaken 5. conclusions formed 6. actions taken.
G12	When required by the **administering authority**, monitoring must be undertaken in the manner prescribed by the **administering authority** to investigate a complaint of **environmental nuisance** arising from the **activity**. The monitoring results must be provided within 10 business days to the **administering authority** upon its request.
G13	All ponds, channels and containment structures used for the storage, use or treatment of aquaculture waters at or on the authorised place must be constructed, installed and maintained: a) so as to minimise the likelihood of any release of water through the bed or banks of the pond, channels or containment structures to any waters (including groundwater); and b) so as to ensure the stability of the ponds, channels or containment structures' construction; and c) in accordance with the Queensland Government guideline titled Guideline for constructing and maintaining aquaculture containment structures (2007) or more recent editions.
G14	An annual monitoring report must be prepared and submitted to the **administering authority** by 30 November each year, for the preceding financial year.
G15	A receiving environment monitoring program must be designed and implemented by an **appropriately qualified person(s)** to monitor the effects of the activity on surface waters.
G16	The receiving environment monitoring program required by condition G15, must include at least the following: **Surface Waters** a) a monitoring program[1] to monitor the effects of the activity on the receiving environment[2] that includes: - Suitable test sites within the receiving waters that are potentially impacted by the release; - Suitable control sites where a background or reference condition can be established;

	- Monthly sampling (not including periods during or after rainfall). b) a description of potentially affected receiving waters including key communities and background water and sediment quality characteristics based on accurate and reliable monitoring data that takes into consideration any temporal variation (e.g. seasonality); and c) a description of applicable environmental values and sediment and water quality objectives to be achieved; and d) any relevant reports prepared by other governmental or professional research organisations that relate to the receiving environment within which the Receiving Environment Monitoring Program is proposed; and e) water and sediment quality targets within the receiving environment to be achieved, and clarification of contaminant concentrations or levels indicating adverse environmental impacts during the monitoring program. [1]The monitoring program should be developed using the administering authority's Receiving Environment Monitoring Program Guideline (ESR/2016/2399) 2015 or more recent versions as they become available. [2]For the purposes of the REMP, the receiving environment is the waters of Saltwater Creek, the mouth of the Annan River and Walker Bay. The REMP should encompass any sensitive receiving waters or environmental values that will potentially be directly affected by an authorised release from the facility.
G17	The Receiving Environment Monitoring Program must be provided to the **administering authority** at either of the addresses below: PALM@DES.qld.gov.au; or Department of Environment and Science Permit and License Management Implementation and Support Unit GPO Box 2454 Brisbane Qld 4001
G18	Condition G17 applies each time the Receiving Environment Monitoring Program is amended.
G19	REMP results should be prepared into a report detailing the results and outcomes of the program and provided to the **administering authority** annually.
Agency interest: Air	
Condition number	**Condition**
A1	Odours or airborne contaminants must not cause **environmental nuisance** to any **sensitive place** or **commercial place**.
Agency interest: Land	

Condition number	Condition
L1	Contaminants must not be released to **land.**
L2	Treatment and management of acid sulfate soils must comply with the latest edition of the Queensland Acid Sulfate Soil Technical Manual.
L3	Before applying to surrender this environmental authority, the site must be rehabilitated to achieve a safe, stable, non-polluting landform.
Agency interest: Acoustic	
Condition number	**Condition**
N1	Noise generated by the **activity** must not cause **environmental nuisance** to any **sensitive place** or **commercial place.**
Agency interest: Waste	
Condition number	**Condition**
W1	All waste generated in carrying out the **activity** must be lawfully reused, recycled or removed to a facility that can lawfully accept the waste.
W2	The administering authority must be notified of any disease outbreak requiring treatment and/or drainage of ponds and/or tank contents.
W3	Where diseased organisms and/or affected water requires disposal it must be monitored and the following records kept: a) the date, quantity and type of waste disposed of; and b) name of the waste transporter and or disposal operator that removed the waste; and c) the intended treatment/disposal destination of the waste.
W4	Pond sludge removed from the cultivation or settlement ponds must be stored and/or disposed of in a manner which does not cause the release of contaminants.
Agency interest: Water	
Condition number	**Condition**
WT1	Other than as permitted within this environmental authority, contaminants must not be released to any **waters**.
WT2	Contaminants must only be released to surface waters in accordance with *Table 1 – Contaminant monitoring and discharge locations and release limits* and the associated requirements.

Table 1 – Contaminant monitoring and discharge locations and release limits

Monitoring Locations	Discharge Locations	Quality Indicator	Release Limits			Minimum Monitoring Frequency
			Minimum	Mean	Maximum	
Outlet from Pond BR7 into Constructed Mangrove Wetland (BR7)	BR7	pH	6.5	-	9.0	Daily
		Dissolved Oxygen	4.0mg/L or 90% of the receiving water value whichever the greater	-	-	
		Total Nitrogen (mg/L)	-	0.8	3	Monthly
		Ammonia (mg/L)	-	-	-	
		Oxidised Nitrogen (mg/L)	-	-	-	
		Total Phosphorus (mg/L)	-	0.1	0.2	
		Filtered reactive phosphorus (FRP) (mg/L)	-	-	-	
		Total Suspended Solids (mg/L)	-	20	75	

Associated requirements

1. Monitoring must be in accordance with the methods prescribed in the current edition of the Department of Environment and Science Monitoring and Sampling Manual.
2. Water samples must be representative of the general condition of the water body.
3. All determinations must employ analytical practical quantification limits of sufficient sensitivity to enable comparisons to be made against water quality objectives/triggers/limits relevant to the particular water or sediment quality characteristic.
4. Monitoring must be undertaken during a release and at the frequency stated.

5. All monitoring devices must be calibrated and maintained according to the manufacturer's instruction manual. 6. Ammonia, NOx and Filterable Reactive Phosphorus (FRP) must be measured whenever TN and TP are monitored.	
WT3	The intake point must be monitored for the quality indicators and at the frequency prescribed in *Table 2 – intake water quality monitoring* and the associated requirements.

Table 1 – Contaminant monitoring and discharge locations and release limits

Monitoring Locations	Quality Indicator	Release Limits			Minimum Monitoring Frequency
		Minimum	Mean	Maximum	
Licensed Intake Point IP1	pH	-	-	-	Daily
	Dissolved Oxygen	-	-	-	
	Total Nitrogen (mg/L)	-	-	-	Monthly
	Ammonia (mg/L)	-	-	-	
	Oxidised Nitrogen (mg/L)	-	-	-	
	Total Phosphorus (mg/L)	-	-	-	
	Filtered reactive phosphorus (FRP) (mg/L)	-	-	-	
	Total Suspended Solids (mg/L)	-	-	-	

[1]Intake point is monitor only for all quality indicators specified, release limits do not apply.

Associated requirements

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1. Monitoring must be in accordance with the methods prescribed in the current edition of the Department of Environment and Science Monitoring and Sampling Manual.
2. Water samples must be representative of the general condition of the water body.
3. All determinations must employ analytical practical quantification limits of sufficient sensitivity to enable comparisons to be made against water quality objectives/triggers/limits relevant to the particular water or sediment quality characteristic.
4. All monitoring devices must be calibrated and maintained according to the manufacturer's instruction manual.
5. Ammonia, NOx and Filterable Reactive Phosphorus (FRP) must be measured whenever TN and TP are monitored.

WT4	The monitoring locations and discharge points must be situated and maintained in accordance with Appendix 1, Figure 1 – Site Map.
WT5	In addition to achieving compliance with WT2, the release to **waters** must not produce any slick or other visible evidence of oil or grease, nor contain visible floating oil, grease, scum, litter or other visually objectionable matter
WT6	The release of contaminants to waters described as Saltwater Creek from BR7 in accordance with *Table 1 - Contaminant monitoring and discharge locations and release limits* must only occur from ½ hour after local high water until 1 hour before local low water.
WT7	The **Annual Mass Load** of **Total Nitrogen** and **Total Phosphorus** released to waters from discharge point BR7 must comply with the release limits listed in *Table 3 – Contaminant Release to Waters – Annual Mass Load Limits*.

Table 3 — Contaminant Release to Waters – Annual Mass Load Limits

Discharge Point Name	Indicator	Limit Type	Release Limit
BR7	**Total Nitrogen** (TN) Annual Mass Load	Maximum	**2.38t/yr**
	Total Phosphorus (TP) Annual Mass Load	Maximum	**290kg/yr**

WT8	**You** must calculate and report on the yearly sum of Daily Release Volume (ML) and **annual mass load** of **Total Nitrogen** and **Total Phosphorus** released to **waters** in accordance with condition WT7 quarterly for the first two (2) years of operation.
WT9	The total quantity of contaminants released from BR7 during any day must not exceed 44ML. The total quantity of contaminants released from BR7 during one calendar year must not exceed 4,677ML.
WT10	The daily quantity of water released from BR7 must be determined by use of a method with an accuracy of +5% of the actual amount released.
WT11	Contaminants must not be released to **groundwater** or at a location where they are likely to release to **groundwater**.

Definitions

Key terms and/or phrases bolded in this environmental authority are defined in this section. Where a term is not defined, the definition in the *Environmental Protection Act 1994*, its regulations or environmental protection policies must be used. If a word remains undefined it has its ordinary meaning.

Activity means the environmentally relevant activities, whether resource activities or prescribed activities, to which the environmental authority relates.

Acid sulphate Soils means a soil, sand, mud or clay containing significant levels of pyrite (iron sulphide), which on exposure to oxidising conditions has resulted in or has the capacity to result in the generation of sulphuric acid in quantities greater than the inherent buffer capacity of the soil.

Administering authority means the Department of Environment and Heritage Protection or its successors or predecessors.

Annual Mass Load is calculated as follows:

Annual Mass Load TN (kg) = Yearly sum of Daily Release Volume (ML) x 365 x Yearly Long Term **Mean** TN Concentration (mg/L)

Annual Mass Load TP (kg) = Yearly sum of Daily Release Volume (ML) x 365 x Yearly Long Term **Mean** TP Concentration (mg/L)

Note: calculations should be undertaken on a rolling basis based on nutrient sampling.

OR can be calculated as the sum of the **Annual Mass Load** minus a **nutrient offset.**

Appropriately qualified person(s) means a person or persons who has professional qualifications, training, skills or experience relevant to the nominated subject matter and can give authoritative assessment, advice and analysis to performance relative to the subject matter using the relevant protocols, standards, methods or literature.

Commercial place means a place used as a workplace, an office or for business or commercial purposes and includes a place within the curtilage of such a place reasonably used by persons at that place.

Contaminant(s) as defined in Section 11 of the *Environmental Protection Act 1994.*

Day means any 24 hour period.

Environmental authority means an environmental authority granted in relation to an environmentally relevant activity under the *Environmental Protection Act 1994*.

Environmental harm as defined in Section 14 of the *Environmental Protection Act 1994.*

Environmental nuisance as defined in Chapter 1 of the Environmental Protection Act 1994.

Groundwater means water that occurs naturally in, or is introduced artificially into, an aquifer.

Growout pond means a pond, tank, enclosure or other container for the feeding and growing of aquaculture species.

Land does not include **waters**.

Maximum means that the measured value of the quality characteristic of contaminant must not be greater than the release limit stated.

Measures have the broadest interpretation and includes plant, equipment, physical objects, monitoring, procedures, actions, directions and competency.

mg/L means milligrams per litre

NATA means National Association of Testing Authorities.

Noxious means harmful or injurious to health or physical well-being.

Nutrient offset means projects in accordance with the *Point Source Water Quality Offsets Policy 2019* or more recent additions or supplements to the document that become available, as agreed to with the **administering authority**.

Offensive means causing offence or displeasure; is unreasonably disagreeable to the sense; disgusting, nauseous or repulsive.

Receiving environment monitoring program means a monitoring program designed to monitor and assess the potential impacts of controlled and/or uncontrolled releases of contaminants to the environment from the activity.

Records include breach notifications, written procedures, analysis results, monitoring reports and monitoring programs required under a condition of this authority.

Release of a contaminant into the environment means to:

- deposit, discharge, emit or disturb the contaminant
- cause or allow the contaminant to be deposited, discharged, emitted or disturbed
- fail to prevent the contaminant from being deposited, discharged emitted or disturbed
- allow the contaminant to escape
- fail to prevent the contaminant from escaping.

Reuse means using treated effluent for beneficial purposes such as agricultural and landscape irrigation, industrial processes, toilet flushing and other non-potable applications provided those uses comply with relevant legislative requirements.

Secondary containment system means a system designed, installed and operated to prevent any release of contaminants from the system, or containers within the system, to land, or surface waters.

Sensitive place includes the following and includes a place within the curtilage of such a place reasonably used by persons at that place:

1. a dwelling, residential allotment, mobile home or caravan park, residential marina or other residential premises; or
2. a motel, hotel or hostel; or
3. a kindergarten, school, university or other educational institution; or
4. a medical centre or hospital; or
5. a protected area under the *Nature Conservation Act 1992*, the *Marine Parks Act 2004* or a World Heritage Area; or
6. a public thoroughfare, park or garden; or
7. for noise, a place defined as a sensitive receptor for the purposes of the *Environmental Protection (Noise) Policy 2008*.

Total Nitrogen (TN) means the sum total of Organic Nitrogen, Ammonia, Nitrite plus Nitrate, as mg/L of Nitrogen.

Total Phosphorous (TP) means the sum total of the reactive phosphorous, acid-hydrolysable phosphorous and organic phosphorous, as mg/L of phosphorous. This includes both the organic and inorganic fraction of phosphorous.

Waters includes river, stream, lake, lagoon, pond, swamp, wetland, unconfined surface water, unconfined water, natural or artificial watercourse, bed and bank of any waters, dams, non-tidal or tidal waters (including the sea), stormwater channel, stormwater drain, roadside gutter, stormwater run-off, and groundwater and any part thereof.

Wet Weather Day means a day which is not a dry weather day.

Year means anniversary date to anniversary date.

You means the holder of the environmental authority.

Appendix 1

Figure 1 – Site Map

