Permit

Environmental Protection Act 1994

Environmental authority P-EA-100465961

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

Environmental authority number: P-EA-100465961

Environmental authority takes effect on the date that your related development approval 2306-35016 SDA takes effect**.** This is the take effect date.

Within 5 business days of the environmental authority taking effect, the administering authority must be given written notice of the occurrence. Prior to the commencement of the activity, the administering authority must be given written notice of the proposed date of commencement.

The first annual fee is payable within 20 business days of the take effect date.

The anniversary date of this environmental authority is the same day each year as the take effect date. The payment of the annual fee will be due each year on this day.

Environmental authority holder(s)

Name(s)	Registered address
Monsoon Aquatics Pty Ltd	111 Woongarra Scenic Drive, Bagara QLD 4670

Environmentally relevant activity and location details

Environmentally relevant activity/activities	Location(s)
ERA 1 (2)(a) Cultivating or holding marine, estuarine or freshwater organisms, other than crustaceans, in enclosures that are on land and have a total area of more than 100m^2 but not more than 10ha.	145 Buss Street, Burnett Heads QLD 4670 Lot 501 Plan SP279707

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.

Queensland Government

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:

- 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	20/7/2023
Signature	Date

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

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)

Other permits required

This permit only provides an approval under the *Environmental Protection Act 1994*. In order to lawfully operate you may also require permits / approvals from your local government authority, other business units within the department and other State Government agencies prior to commencing any activity at the site. For example, this may include permits / approvals with your local Council (for planning approval), the Department of Transport and Main Roads (to access State controlled roads), the Department of Resources (to clear vegetation), and the Department of Agriculture and Fisheries (to clear marine plants or to obtain a quarry material allocation).

Development Approval

This permit is not a development approval under the *Planning Act 2016*. The conditions of this environmental authority are separate, and in addition to, any conditions that may be on the development approval. If a copy of this environmental authority is attached to a development approval, it is for information only, and may not be current. Please contact the Department of Environment and Science to ensure that you have the most current version of the environmental authority relating to this site.

Conditions of environmental authority

General	
G1	**Activities** conducted under this environmental authority must be conducted in accordance with the following: a) Figure 3 Release Location, prepared by Epic Environmental, dated 18/01/2023, reference BE210185.01, Revision B.
G2	Any contravention of a condition of this environmental authority must be reported to the **administering authority** as soon as practicable, and no more than 24 hours after becoming aware of the contravention.
G3	A report under condition G2 that relates to a release to **waters** must be submitted via **WaTERS**, unless otherwise agreed by the **administering authority**.
G4	**Records** of any contravention of this environmental authority must be made including full details of the contravention and any subsequent actions taken.
G5	All **records** required by the conditions of this environmental authority must be kept for a minimum of five years and all environmental monitoring results and underlying raw data, must be kept until surrender of this environmental authority.
G6	All **records** required by the conditions of this environmental authority must be provided to the **administering authority** upon request by the time and in the format requested.
G7	All reasonable and practicable **measures** must be taken to prevent or minimise any environmental harm caused by the **activity**.
G8	Written procedures must be developed and documented within three months of the environmental authority taking effect that: a) identify all potential risks to the environment from the **activity**, including during and outside routine operations, during closure and in an emergency; and b) identify **measures** to prevent or minimise the potential for environmental harm for each of the potential risks identified; and c) establish an inspection and maintenance program for plant and equipment including calibration and servicing that is in accordance with manufacturer's instructions; and d) establish a staff training program on obligations under this environmental authority and the *Environmental Protection Act 1994* to be conducted as part of staff inductions and at least annually; and e) establish processes to review environmental risks, incidents, performance and complaints.

G9	Written procedures required by condition G8 must be: a) implemented; and b) reviewed at least annually; and c) provided to the **administering authority** upon request at the time and in the format requested.
G10	Plant and equipment necessary to comply with the conditions of this environmental authority must be installed, operated and maintained: a) in a proper and effective manner; and b) in accordance with any written procedures developed under condition G8 for the plant and equipment.
G11	Chemicals and fuels in containers of greater than 15 litres must be stored within a **secondary containment system.**
G12	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 pH and dissolved oxygen (DO).
G13	All monitoring required by this environmental authority must be recorded.
G14	All monitoring required by this environmental authority must be carried out and interpreted by an **appropriately qualified persons(s)**.
G15	Details of all **environmental complaints** received must be recorded including: a) date and time the complaint was received; and b) name and contact details of the complainant when provided by the complainant; and c) nature and details of the complaint; and d) investigations undertaken; and e) conclusions formed; and f) actions taken.
G16	When required by the **administering authority**, monitoring must be undertaken in the manner prescribed by the **administering authority** to investigate any alleged **environmental harm** caused by the **activity**.
G17	Any report, results and underlying raw data, of monitoring required by condition G16 must be recorded.
G18	Prior to the commencement of the **activity**, a **receiving environment monitoring program**[1] for the activity must be implemented. [1] Note: The **receiving environment monitoring program** is subject to review and amendment as required by changing regulation, monitoring results or **administering authority** recommendations.

G19	The **receiving environment monitoring program** (REMP) must include at least the following: 1. Clearly stated aims and objectives of the receiving environment monitoring program. 2. Description of operation of the activity including: a. Operational procedures detailing operational rules, accountabilities, recording and reporting requirements and actions to be taken in the event of non-conformance with the procedure for the following aspects of the activity: i. Water management (stored water and discharges); ii. Organic waste (sludge) management (handling, storage and monitoring); iii. Land management (vegetation, sediment and erosion, acid sulfate soils, wildlife, weed and feral animals, fire and cultural heritage); iv. Hazardous substances and chemicals management; v. Waste management; vi. Air emissions (odour and noise); and vii. Complaints management. b. Duration and timing of the growing and harvest cycles (if applicable); c. Timing and procedure for inspecting any waste disposal area (if applicable) and drainage systems. 3. A monitoring program[1] to monitor the effects of the activity on the receiving environment regularly and while wastewater is being discharged from the site, that includes: a. Suitable test sites within the receiving waters[2] that are potentially impacted by the release; b. Control sites where relevant background or reference conditions can be established; and c. Suitable sampling frequencies. 4. A program for annual assessment and reporting that complies with the requirements of conditions G26 and G27. [1]The monitoring program should be developed using the latest version of the **administering authority's** Receiving Environment Monitoring Program Guideline (ESR/2016/2399). [2], The receiving waters are the waters of the Burnett River within the distance defined in the REMP. The REMP should encompass any sensitive receiving waters or environmental values that will potentially be affected by an authorised release from the facility.
G20	The **receiving environment monitoring program** must be submitted to the **administering authority** at least 20 business days prior to the commencement of the **activity** and amended in accordance with any comments made by the **administering authority**.
G21	If the receiving environment monitoring program is amended at any time, the amended program must be submitted to the administering authority at least 20 business days prior to commencing activities under the amended receiving environment monitoring program.
G22	Any comments made by the administering authority on the amended receiving environment monitoring program provided in accordance with condition G21 must be addressed to the satisfaction of the administering authority prior to implementing the amended receiving environment monitoring program.
G23	Condition G21 and G22 apply each time the receiving environment monitoring program is amended.

G24	An annual monitoring report must be prepared and submitted to the administering authority by 30 November each year, for the preceding financial year.
G25	The annual monitoring report required by condition G26 must include: a) Findings as a result of the receiving environment monitoring program for the period; and b) Calculation of annual mass load of both dissolved inorganic nitrogen and total suspended solids in accordance with condition WT4; and c) Details of the offset actions undertaken to comply with WT5; and d) A summary of the previous 12 months monitoring results including graphical representations identifying relevant indicator limits, if this data has not already been reported to the **WaTERS** database; and e) An outline of actions taken or proposed to minimise any environmental risk identified from, for example, monitoring and environmental complaints; and f) Calculations of the volume and frequency of wet weather storage overflows, where applicable. g) Calculation of annual mass load (offset) of dissolved inorganic nitrogen in accordance with condition WT4.
G26	Unless otherwise specified in a condition of this environmental authority, all records required to be submitted to the administering authority under this environmental authority, must be submitted to: 1300 130 372 (option 2) / pollutionhotline@des.qld.gov.au (for notifications under condition G2 that does not relate to a release to waters); or palm@des.qld.gov.au; or Permit and Licence Management Department of Environment and Science GPO Box 2454 Brisbane QLD 4001

Air	
A1	Odours or airborne contaminants from the **activity** must not cause **environmental nuisance** at any **sensitive place** or **commercial place**.
Land	
L1	Contaminants from the **activity** 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	Rehabilitation of the site is required to achieve a safe, stable and non-polluting landform.
Acoustic	
N1	Noise from the **activity** must not cause **environmental nuisance** to any **sensitive place** or **commercial place**.
Waste	
W1	Other than as permitted by this environmental authority, all waste generated by the **activity** must be lawfully reused or recycled, and/or lawfully removed to a facility that can lawfully accept the waste.
W2	The **administering authority** must be notified as soon as practicable, but no more than 24 hours after becoming aware of any disease outbreak requiring treatment and/or drainage of **ponds**.
W3	Where diseased organisms and/or **affected water** require offsite disposal the following records must be 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; c) details of suspected or confirmed disease; and d) the intended treatment and/or disposal destination of the waste.
W4	Sludge removed from any **ponds** must be stored and/or disposed of in a manner that does not cause or have the potential to cause a release of contaminants.
W5	Any diseased, or potentially diseased, organisms and **affected water** removed from the **ponds** for disposal onsite must be disposed of in a separate lined and bunded disposal area.
W6	At the end of each day that diseased, or potentially diseased, organisms and affected water have been placed in the waste disposal area, the organisms and affected water must be covered with at least 200mm of earth.
W7	If organisms and/or affected water are placed in a waste disposal area, the following records must be kept: a) date placed; and b) quantity of organism and/or affected water disposed; and

	c) suspected or confirmed disease; and d) details of any treatment applied to neutralise disease.
Water	
WT1	Other than as permitted by this environmental authority, contaminants from the **activity** must not be released to **waters**.
WT2	Contaminants must only be released to surface waters where: a) they are from the discharge locations; and b) the release limits for each indicator are met at the discharge locations; and c) monitoring at all monitoring locations and at the frequency; as per Table 1 – Contaminant monitoring, discharge location and release limits; and d) the associated requirements are complied with.

Table 1 – Contaminant monitoring, discharge location and release limits

Monitoring location	Discharge location	Indicator	Release limit		Minimum monitoring frequency
			Minimum	Maximum	
Approved Release Location	**Approved Release Location**	pH (pH units)	8.0	8.4	Daily during release
		Dissolved oxygen (% saturation)	90	105	
		Turbidity (NTU)	-	6	
		Total suspended solids (mg/L)	-	5	
		Total Nitrogen (mg/L)	-	2.8	
		Dissolved Inorganic Nitrogen (mg/L)	-	2.8	
		Total phosphorus (mg/L)	-	1.1	
		Filtered reactive phosphorus (mg/L)	-	-	

Associated requirements

1. Monitoring must be carried out 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 characteristics.
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 when total nitrogen and total phosphorus are monitored.

WT3	All water quality monitoring data collected under this authority must be provided to the administering authority annually via **WaTERS** and in the specified electronic format requested.

<table>
<tr><td>WT4</td><td>The annual mass load of dissolved inorganic nitrogen and total suspended solids released to waters from the approved release point must comply with the limits listed in Table 2 – Contaminant release to waters – annual mass load limits.

Table 2 – Contaminant release to waters – annual mass load limit
<table>
<tr><th>Release point</th><th>Indicator</th><th>Limit type</th><th>Release limit</th></tr>
<tr><td rowspan="2">Approved Release Location</td><td>Dissolved inorganic nitrogen</td><td>Annual load</td><td>3.36 kg</td></tr>
<tr><td>Total suspended solids</td><td>Annual load</td><td>6.00 kg</td></tr>
</table></td></tr>
<tr><td>WT5</td><td>The annual mass load of both dissolved inorganic nitrogen and total suspended solids must be counterbalanced by the delivery of a nutrient offset for each Financial Year, delivered by 30 December in the following financial year.</td></tr>
<tr><td>WT6</td><td>The yearly sum of daily release volume (ML) and annual mass load of dissolved inorganic nitrogen and total suspended solids released to waters must be calculated for each financial year.</td></tr>
<tr><td>WT7</td><td>The total quantity of water released from the approved release location during any day must not exceed 10 kL.</td></tr>
<tr><td>WT8</td><td>The total quantity of water released from the approved release location during any financial year must not exceed 1,200 kL.</td></tr>
<tr><td>WT9</td><td>The quantity of water released from the approved release location must be determined, using a method with an accuracy of at least +/- 10% of the actual amount released, and recorded.</td></tr>
<tr><td>WT10</td><td>Notwithstanding any other condition of this environmental authority, any release of contaminants 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 objectionable matter.</td></tr>
<tr><td>WT11</td><td>Notwithstanding any other condition of this environmental authority, wastewater must be directed from the discharge structure in a manner that does not erode or otherwise disturb mangrove vegetation, the stream banks or the habitat in general.</td></tr>
<tr><td>WT12</td><td>All ponds, channels and containment structures used for the storage, use or treatment of aquaculture waters must be constructed and maintained:
a) to minimise the likelihood of any release of water through the bed or banks of the pond, channels or containment structures to any waters; and
b) to ensure the stability of the ponds, channels or containment structures; and
c) in accordance with the relevant edition of the Queensland Government guideline titled ‘Guideline for constructing and maintaining aquaculture containment structures’.</td></tr>
<tr><td>WT13</td><td>Contaminants from the activity must not be released to groundwater or to a location where they are likely to release to groundwater.</td></tr>
</table>

Definitions

Key terms and/or phrases used in this document 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.

24 hour storm event with an average recurrence interval of 1 in 10 years means the maximum rainfall depth from a 24-hour duration precipitation event with an average recurrence interval of once in 10 years. For example, an Intensity–Frequency–Duration table for a 24-hour duration event with an average recurrence interval of 1 in 10 years, identifies a rainfall intensity of 8.2mm/hour. The rainfall depth for this event is therefore 24 hour x 8.2mm/hour = 196.8mm.

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

Acid sulfate soils means a soil, sand, mud or clay containing significant levels of pyrite (iron sulphide), which on exposure to oxidising conditions results in, or has the potential 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 Science or its successors or predecessors.

Affected water means water that has come into contact with diseased, or potentially diseased, organisms.

Alert levels means tiers in a hierarchy of increasing environmental risk and are defined by **trigger values**. Three **alert levels** (low, moderate, and high) are typically used in a management action framework to indicate adverse conditions and guide management responses that aim to prevent and minimise environmental harm.

Annual mass load is calculated as follows:

Annual mass load dissolved inorganic nitrogen (kg) = yearly sum of daily release volume (ML) x yearly long term **mean** dissolved inorganic nitrogen concentration (mg/L)

Annual mass load total suspended solids (kg) = yearly sum of daily release volume (ML) x yearly long term **mean** total suspended solids concentration (mg/L)

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

Appropriately qualified person(s) means a person or persons who has professional qualifications, training, skills and experience relevant to the environmental authority (EA) requirement and can give authoritative assessment, advice and analysis in relation to the EA requirement using relevant protocols, standards, methods or literature.

Approved release location means the end of pipe located at Lat: -24.76351, Long: 152.38382 (GDA2020).

Commercial place means a place, or part of a place, used as a workplace, an office or for business or commercial purposes.

Day means any continuous 24 hour period.

Environmental complaints means an expression of dissatisfaction, concern or report, whether written or verbal, about the activity and/or its impact on the environment.

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

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

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

Financial assurance as defined in Chapter 5 of the *Environmental Protection Act 1994*.

Financial year means a period of one year beginning on 1 July.

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

kL means kilolitre

Land does not include **waters**.

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

NATA means National Association of Testing Authorities.

Nutrient offset means the project developed in accordance with the *Point Source Water Quality Offsets Policy 2019* or more later versions, as agreed to by the **administering authority**.

Pond includes a tank, channel or containment structure:

a) used to hold, or cultivate, freshwater, marine or estuarine organisms; or

b) used for the storage, use or treatment of aquaculture waters.

Prescribed water contaminants means contaminants listed within Schedule 10 of the Environmental Protection Regulation 2019.

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, monitoring data, analysis results, monitoring reports and monitoring programs required under a condition of this authority.

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, **groundwater**, or surface waters.

Sensitive place includes places and parts of places as follows:

a) a dwelling, residential allotment, mobile home or caravan park, residential marina or other residential premises; or

b) a motel, hotel or hostel; or

c) a kindergarten, school, university or other educational institution; or

d) a medical centre or hospital; or

e) a protected area under the *Nature Conservation Act 1992*, the *Marine Parks Act 2004* or a World Heritage Area; or

f) a public park or garden; or

g) for noise, a place defined as a sensitive receptor for the purposes of the Environmental Protection (Noise) Policy 2019.

Total nitrogen means the sum of Organic Nitrogen, Ammonia Nitrogen, Nitrite plus Nitrate Nitrogen, expressed as mg/L as Nitrogen. This includes both the inorganic and organic fraction of nitrogen.

Total phosphorus means the sum of the reactive phosphorus, acid-hydrolysable phosphorus and organic phosphorus, as mg/L of phosphorus. This includes both the inorganic and organic fraction of phosphorus**.**

Trigger values are physicochemical, parameter-specific measurement values used to indicate a condition where an **environmental value** or sensitive receptor may be at low, moderate or high risk, or some other risk-related indicator.

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.

WaTERS is the Water Tracking and Electronic Reporting System (WaTERS) database formally known as the Point Source Database (PSD).

Appendices

- Figure 3 Release Location, prepared by Epic Environmental, dated 18/01/2023, reference BE210185.01, Revision B.

END OF ENVIRONMENTAL AUTHORITY



Legend

- Site boundary
- Lot 501SP279707
- Cadastre (DCDB)
- 1000L Bioremediation tank
- 100mm Grated drain channel
- 100mm Grated system drain
- 100mm Stormwater drain
- Settlement pit
- Seawater storage and bioremediation tanks
- Seawater pipeline
- 100mm Effluent drain
- 100mm Pipeline
- 300mm Stormwater / effluent
- Existing effluent and stormwater discharge pipe
- Monitoring location
- Effluent management points
- Water monitoring - intake

epic ENVIRONMENTAL

Monsoon Aquatics
145 Buss Street, Burnett Heads
Environmental Authority Application

Figure 3
Release Location

BE210185.01 Rev B 18/01/2023