Permit[1]

Environmental Protection Act 1994

Environmental authority

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

Permit[1] number: EPPR00427513

Environmental authority takes effect 3 March 2015

The anniversary date of this environmental authority remains the 16 April. An annual return and the payment of the annual fee which is currently $3,547.50 will be due each year on this day.

Environmental authority holder(s)

Name	Registered address
GFB Developments Pty Ltd	233 Flinders Street East TOWNSVILLE QLD 4810

Environmentally relevant activity and location details

Environmentally relevant activities	Location
1 - 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 1 – Aquaculture – 2 - cultivating or holding marine, estuarine or freshwater organisms, other than crustaceans, in enclosures that are on land and have a total area of (b) more than 10ha but not more than 100ha 27 - Seafood processing – processing, in a year, 500t or more of seafood or seafood products	22354 Bruce Highway, Bowen Lot 21 Plan CP882855

Additional information for applicants

Environmentally relevant activities

The description of any environmentally relevant activity (ERA) for which an environmental authority is issued is a restatement of the ERA as defined by legislation at the time the approval is issued. Where there is any inconsistency between that description of an ERA and the conditions stated by an environmental authority as to

[1] Permit includes licences, approvals, permits, authorisations, certificates, sanctions or equivalent/similar as required by legislation

the scale, intensity or manner of carrying out an ERA, then the conditions prevail to the extent of the inconsistency.

An environmental authority authorises the carrying out of an ERA and does not authorise any environmental harm unless a condition stated by the authority 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 if an owner or occupier of land becomes aware a notifiable activity (as defined in Schedule 3 and Schedule 4) is being carried out on the land, or that the land has been, or is being, contaminated by a hazardous contaminant, the owner or occupier must, within 22 business days after becoming so aware, give written notice to the chief executive.

JA Mackenzie	3 - MAR - 2015.
Signature	Date

James Mackenzie
Department of Environment and Heritage Protection
Delegate of the administering authority
Environmental Protection Act 1994

Enquiries:
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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)

Location: 22354 Bruce Highway, Guthalungra

Lot 21 CP882855

Relevant activities:

1 - 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

1 – Aquaculture – 2 - cultivating or holding marine, estuarine or freshwater organisms, other than crustaceans, in enclosures that are on land and have a total area of (b) more than 10ha but not more than 100ha

27 - Seafood processing – processing, in a year, 500t or more of seafood or seafood products

The environmentally relevant activities conducted at the location as described above must be conducted in accordance with the following site specific conditions of approval.

Agency interest: General	
Condition number	**Condition**
A1	A copy of the conditions of this environmental authority must be kept in a location readily accessible to personnel carrying out the activity.
A2	Any record or document required to be kept by a condition of this environmental authority must be kept at the licensed place for a period of at least five years and be available for examination by an authorised person. For daily and weekly records, the record retention requirements of this condition will be satisfied if any daily and weekly records are kept for a period of at least three (3) years and these records are then kept in the form of annual summaries after that period.
A3	Copies of any records required to be kept by a condition of this environmental authority must be provided to any authorised person or the administering authority on request.
A4	No change, replacement or operation of any plant or equipment is permitted if the change, replacement or operation of the plant or equipment increases, or is likely to substantially increase, the risk of environmental harm above that expressly provided by this environmental authority. An example of a substantial increase in the risk of environmental harm is an increase of 10% or more in the quantities of the contaminant to be released into the environment.
A5	All instruments and devices used for the measurement or monitoring of any parameter under any condition of this environmental authority must be calibrated, and appropriately operated and maintained.
A6	Notwithstanding any other condition of this environmental authority, this environmental authority does not authorise any release of contaminants which causes or is likely to cause an environmental nuisance beyond the boundaries of the licensed place.
A7	This environmental authority applies to the operation of: (i) an aquaculture hatchery facility; and (ii) prawn growout ponds and fish raceways having a combined total area of not greater than 50ha (consisting of a maximum of 1.2ha of raceways and 48.8ha of growout ponds); and, (iii) an on-farm wastewater treatment system, of at least 8ha surface area, designed to remove particulates suspended in and nutrients dissolved in water releases from the prawn growout ponds, fish raceways and hatchery facility.
A8	Notwithstanding the effect of condition A7, ponds and raceways to be used for the purpose of aquaculture must be sited above the level of Highest Astronomical Tide

A9	The licensee shall ensure that the operation and maintenance of the aquaculture facility is carried out by or under the supervision of person(s) competent to operate and maintain the aquaculture facility.
A10	All determinations of the quality of contaminants released to the environment and all measurement and reporting of noise levels that are required by this environmental authority must be undertaken by a person or body possessing appropriate experience and qualifications to perform the required determinations and the required measurements.
A11	The holder of this environmental authority must develop an Integrated Environmental Management System (IEMS) which provides for the effective and appropriate management by the holder of this environmental authority of the actual and potential environmental impacts resulting from the carrying out of the environmentally relevant activities of Aquaculture (ERA 1(b) and 2(b)) and Seafood Processing (ERA 27).

A12	The Integrated Environmental Management System must provide for at least the following functions: (i) The monitoring of releases of contaminants into the environment, for example measurement of the quantities and concentrations of releases of contaminants to the environment as required under this environmental authority; (ii) The assessment of the environmental impacts of any releases of contaminants into the environment, for example any ambient environmental quality monitoring, noise monitoring or complaints monitoring required under this environmental authority; and (iii) The training of all relevant staff, agents and contractors ("staff") to competent levels in at least the following: a. The environmental policy of the holder of the environmental authority so that staff are aware of any relevant commitments to environmental management; and b. Any relevant environmental objectives and targets so that all staff are aware of the relevant performance objectives and can work towards these; and c. Control procedures for routine operations for day to day operational activities to prevent or minimise environmental harm, however occasioned or caused; and d. Contingency plans and emergency procedures for non-routine situations to deal with foreseeable risks and hazards including corrective responses to prevent and mitigate environmental harm (including any necessary site rehabilitation); and e. Organisational structure and responsibility to ensure that roles, responsibilities and authorities are appropriately defined to manage environmental issues effectively; and f. Effective communication to ensure two-way communication on environmental matters between operational staff and management as well as communications with the administering authority; and g. Documentation systems so that appropriate records of environmental matters are kept to satisfy the holder of this environmental authority, the administering authority and the community that the applicant is meeting environmental commitments; and h. Responsibilities of the holder of this environmental authority and staff under the Act so that these can be met; and (iv) The implementation of an effective and appropriate Waste Management Plan, as required by condition G2.
A13	The holder of this environmental authority must not implement an Integrated Environmental Management System or amend the Integrated Environmental Management System where such implementation or amendment would result in a contravention of any condition of this environmental authority.
A14	A copy of the Integrated Environmental Management System must be kept at the licensed place.

A15	The holder of this environmental authority must submit details of any amendment to the Integrated Environmental Management System to the administering authority with the Annual Return which immediately follows the enactment of any such amendment.
A16	A copy of the Integrated Environmental Management System must be provided to the administering on request.
Agency interest: Air	
Condition number	**Condition**
	Nil conditions
Agency interest: Water	
Condition number	**Condition**
C1	Contaminants must not be directly or indirectly released from the licensed place to any waters or the bed and banks of any waters except as permitted under the water schedule or the stormwater management schedule, or to a sewer as permitted or otherwise agreed from time to time by the relevant Local Government.
C2	The only releases permitted from the licensed place are from the release points: W1 - waters originating from the hatchery facility, raceways, prawn growout ponds and seafood processing systems, thence released via the drainage and wastewater treatment system. W2 - washdown and backwash waters originating from the broodstock area, thence released via the retention treatment pond.
C3	Contaminants must not be directly or indirectly released from any source on the licensed place to any waters at any location other than the contaminants and sources at the locations listed below: Release Point W1 - Aquaculture wastes from the discharge structure at the distal end of the wastewater drainage and management system to Plain Creek, upstream from Saltwater Creek, at a point downstream from settlement and treatment pond(s). GPS coordinates 19.939328°S: 147.934647° E Release Point W2 - Aquaculture (washdown and backwash) wastes from the discharge structure at the distal end of the retention pond to Saltwater Creek. GPS coordinates 19.939433°S: 147.928867° E
C4	Irrespective of any other condition of this environmental authority, the wastes must be directed from the discharge structure in a manner which does not erode or otherwise disturb mangrove vegetation, the stream bed, the stream banks or the habitat in general.

<table>
<tr><td>C5</td><td>The total quantity of contaminants released from release point W1 during any day must not exceed 188 000 cubic metres. The total quantity of contaminants released from release point W1 during one calendar year shall not exceed 26 000 000 cubic metres, being an average of 68 000 cubic metres per day. The total quantity of contaminants released from release point W2 during one calendar year shall not exceed 120 000 cubic metres.</td></tr>
<tr><td>C6</td><td>On any day, the release of contaminants from release point W1 must only occur starting after the time of a local high water and cease before the time of the next local low water.</td></tr>
<tr><td>C7</td><td>The release of contaminants to waters must comply, at the sampling and in-situ measurement point specified in Schedule H - Table 1, with each of the limits specified in Schedule C - Table 1 for each quality characteristic.

Schedule C - Table 1 – Release Quality Characteristic Limits
<table><tr><th>Quality Characteristics</th><th>Release Point</th><th>Discharge Limit</th><th>Limit type</th></tr><tr><td>Suspended solids (mg/L)</td><td>W1, W2</td><td>25 / 100</td><td>Mean* / Maximum</td></tr><tr><td>pH (pH units)</td><td>W1, W2</td><td>6.5 – 8.5</td><td>Range</td></tr><tr><td>Dissolved Oxygen (mg/L)</td><td>W1, W2</td><td>4.0</td><td>Minimum</td></tr><tr><td>Total Nitrogen (mg/L)</td><td>W1, W2</td><td>2.5 / 3.0</td><td>Mean* / Maximum</td></tr><tr><td>Chlorophyll a (µg/L)</td><td>W1, W2</td><td>25 / 100</td><td>Mean* / Maximum</td></tr><tr><td>Total Phosphorus as P (mg/L)</td><td>W1, W2</td><td>0.2 / 0.3</td><td>Mean* / Maximum</td></tr><tr><td>Free Residual Chlorine (mg/L)</td><td>W1, W2</td><td>0.1</td><td>Maximum</td></tr></table>(* - limit calculated from 12 consecutive samples)</td></tr>
<tr><td>C8</td><td>For all parameters in Schedule C Table 1, except dissolved oxygen concentration, where a mean and/or maximum limit is specified, the datum or data describing the release quality characteristics must have a mean lower in value than the mean limit and a maximum lower in value than the maximum limit.</td></tr>
<tr><td>C9</td><td>For dissolved oxygen concentration, the datum or data describing the release quality characteristics must have a median higher in value than the median limit and a minimum higher in value than the minimum limit.</td></tr>
<tr><td>C10</td><td>Notwithstanding any other condition of this environmental authority, releases 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>
</table>

Agency interest: Stormwater	
Condition number	**Condition**
D1	Stormwater Management Plan The holder of this environmental authority must: (i) develop and implement a Stormwater Management Plan which provides for the following functions: a. avoidance and minimisation of contaminated stormwater; and b. reuse, treatment and disposal of contaminated stormwater; and (ii) have completed and implemented the Stormwater Management Plan. This Plan must be updated to faciliate any changes to operations or infrastructure that may impact on potential stormwater contamination.
D2	A copy of the Stormwater Management Plan must be kept at the licensed place.
D3	All chemical tank storages must be within a spillage control compound sufficient to contain at least 100% of the largest storage tank plus 10% of the second largest tank within the compound.
D4	All spillage control compounds must be constructed and maintained so as to be sufficiently impervious to allow retention and recovery of any materials being stored within the compound.
D5	All chemical package storage and handling areas must be within a spillage control compound sufficient to contain at least 100% of the capacity of the largest package plus 25% of the storage capacity up to 10 000 L, together with 10% of the storage capacity beyond 10 000 L
D6	Notwithstanding condition D5, floors forming part of the spillage control compound for the chemical package storage and handling areas must be impervious and not liable to degradation
D7	Washing, degreasing, servicing or other maintenance of vehicles, plant, or other equipment must not occur on the licensed place in any area where resulting contaminants will or may be released to any stormwater drain, land or waters.
D8	Runoff from pond sediment conditioning areas must be directed in such a manner as to be retained within the licensed premises or in such other manner as to ensure that runoff does not directly enter natural waterways
D9	Materials likely to have the properties of potential acid sulfate soils must be treated and/or placed in such a state and/or condition such that the pH value of stormwater runoff and/or leachate from the material is not less than 6.0 and not greater than 9.0 and the total aluminium content of the runoff from the material does not exceed a value of 100 micrograms per litre.

Agency interest: Land	
Condition number	**Condition**
E1	The removal of pond sediment from ponds and release to land must only occur in bunded pond sediment conditioning areas.
E2	Materials likely to have the properties of Potential Acid Sulfate Soils, present on the licensed premises or exposed and/or worked during the construction of the aquaculture facility, must be managed during the operation of the licensed activity in a way which: (i) avoids exposure of potential acid sulfate soils; (ii) prevents or minimises the oxidation of sulfides; (iii) provides for treatment of acid sulfate soils; (iv) contains potential acid sulfate soils in secure areas.
E3	A Potential Acid Sulfate Soil Management Plan must be developed, implemented and submitted to the administering authority 3 months before commencement of construction of the prawn growout ponds or any associated major earthworks.
Agency interest: Noise	
Condition number	**Condition**
F1	Noise generated by the activity must not cause environmental nuisance to any sensitive place or commercial place.
Agency interest: Waste	
Condition number	**Condition**
G1	The holder of this environmental authority must not: (i) allow waste to burn or be burned at or on the licensed place; nor (ii) remove waste from the licensed place and burn such waste elsewhere.
G2	The holder of this environmental authority must develop and implement a Waste Management Plan which details how the holder will effectively and appropriately manage waste caused by the carrying out of the environmentally relevant activity.
G3	A copy of the Waste Management Plan must be kept at the licensed place.
G4	The holder of this environmental authority must not implement a Waste Management Plan or amend a Waste Management Plan where such implementation or amendment would result in a contravention of any condition of this environmental authority.

Agency interest: Self-Monitoring and Reporting	
Condition number	**Condition**
H1	All complaints received by the holder of this environmental authority relating to releases of contaminants from operations at the licensed place must be recorded and kept with the following details: (i) time, date and nature of complaint; (ii) type of communication (telephone, letter, personal etc.); (iii) name, contact address and contact telephone number of complainant (Note: if the complainant does not wish to be identified then "Not identified" is to be recorded); (iv) response and investigation undertaken as a result of the complaint; (v) name of person responsible for investigating complaint; (vi) and action taken as a result of the complaint investigation and signature of responsible person.
H2	A record must be maintained of events including but not limited to: (i) the time date and duration of equipment malfunctions where failure of such equipment may result in environmental contamination; (ii) any shut-downs of treatment systems; (iii) any disease outbreak in any tank, pond or raceway.
H3	As soon as practicable after becoming aware of any emergency or incident which results in the release of contaminants not in accordance, or reasonably expected to be not in accordance, with the conditions of this environmental authority including those listed in condition H2, the holder of this environmental authority must notify the administering authority of the release by telephone, facsimile.

H4	The notification of emergencies or incidents as required by condition number H3 must Include but not be limited to the following: (i) the holder of the environmental authority; (ii) the location of the emergency or incident; (iii) the number of the environmental authority; (iv) the name and telephone number of the designated contact person (v) the time of the release; (vi) the time the holder of the environmental authority became aware of the release; (vii) the suspected cause of the release; (viii) the environmental harm and or environmental nuisance caused, threatened, or suspected to be caused by the release; and (ix) actions taken to prevent further any release and mitigate any environmental harm and or environmental nuisance caused by the release.
H5	Not more than 3 months following the initial notification of an emergency or incident, the holder of the environmental authority must provide written advice of the information supplied in accordance with condition number H4 in addition to: (i) proposed actions to prevent a recurrence of the emergency or incident, (ii) outcomes of actions taken at the time to prevent or minimise environmental harm and or environmental nuisance, and (iii) the results of any environmental monitoring performed
H6	A draft transitional environmental program dealing with the activity submitted to the administering authority for approval fulfills the requirements of condition number H5(i).
H7	Monitoring the quality of contaminants released to waters must include, but not be limited to, samples taken at a time when maximum flow rate Is occurring at W1 and W2 and at a time when and a point where release quality characteristics from the licensed premises are not affected by tidal waters.
H8	The holder of this environmental authority is responsible for the making of determinations and keeping of records of the details of sampling and the quality of the contaminants released for the release points, quality characteristics and at the frequency specified in Schedule H Table 1.

<table>
<tr><td>H9</td><td>Determinations of the quality of contaminants released to waters to check conformity with the release quality characteristics specified in the Water Schedule of this environmental authority must be undertaken at the sampling and measurement point(s) described as:

W1 - the discharge structure to Plain Creek, tributary of Saltwater Creek, at a point described as downstream of settlement treatment pond.

GPS coordinates 19.939328°S: 147.934647° E

W2 - the discharge structure to Saltwater Creek at a point described as at the distal end of the retention pond.

GPS coordinates 19.939433°S: 147.928867° E

Schedule H – Table 1
<table>
<tr><th>Quality Characteristic Determination</th><th>Measurement Point</th><th>Frequency</th></tr>
<tr><td>Total Suspended Solids</td><td rowspan="4">W1, W2</td><td rowspan="4">Once per month, in each month that a release occurs, sampled no closer than 1 week apart</td></tr>
<tr><td>Total Nitrogen as N</td></tr>
<tr><td>Chlorophyll a</td></tr>
<tr><td>Total Phosphorus as P</td></tr>
<tr><td>Turbidity</td><td rowspan="3">W1, W2</td><td rowspan="3">On each day that a release occurs</td></tr>
<tr><td>pH</td></tr>
<tr><td>Dissolved Oxygen</td></tr>
<tr><td>Free Residual Chlorine</td><td>W1, W2</td><td>On each day that a release of chlorine-treated water occurs</td></tr>
</table></td></tr>
<tr><td>H10</td><td>Samples for determination of quality of contaminants released must be taken, at least, in duplicate. The duplicate sample must be stored appropriately and analysed if:

(i) the primary sample is destroyed or otherwise rendered unsuitable for analysis before an accurate analytical result is obtained; or

(ii) the analysis of the primary sample is not considered to be accurate.</td></tr>
<tr><td>H11</td><td>All determinations of the quality of contaminants released to waters must be made in accordance with methods prescribed in the most recent version of the Department of Environment and Heritage Protection Water Quality Sampling Manual.</td></tr>
<tr><td>H12</td><td>All determinations of the quality of contaminants released must be performed by a person or body possessing appropriate experience and qualifications to perform the required measurements.</td></tr>
</table>

H13	The daily quantity pf contaminants released must be determined by a method which is accurate to within 5% of the actual amount released.
H14	Records must be kept of the results of all determinations of the daily quantity of contaminants released to waters.
H15	The holder of this environmental authority must keep photographic evidence of discharge locations W1 and W2. Photographs of the creek must be taken at least every 3 months and clearly show upstream and downstream areas adjacent to W1 and W2.
H16	The holder of this environmental authority must ensure that the results of all monitoring performed in accordance with this environmental authority for the period covered by the return are submitted with the Annual Return.
H17	The holder of this environmental authority must notify the administering authority in writing of any monitoring result which indicates an exceedance of any licence limit within 28 days of completion of analysis.
H18	The written notification required by condition number H17 above must include: (i) The full analysis results, and (ii) Details of investigation or corrective actions taken, and (iii) Any subsequent analysis.

Definitions

Key terms and/or phrases used in this document are defined in this section and **bolded** throughout this document. Applicants should note that 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.

I1 "Act" means the *Environmental Protection Act 1994*

I2 "Administering Authority" means the Department of Environment and Heritage Protection or its successor

I3 "Land" means land excluding waters and the atmosphere

I4 "Total; Nitrogen" means the sum of Organic Nitrogen, Ammonia Nitrogen, Nitrite plus Nitrate Nitrogen

I5 "mg/L" means milligrams per litre

I6 "µg/L" means micrograms per litre

I7 "median" means the middle value of a set of data covering a 12 month period, where half the data are smaller, and half the data are larger. If the number of samples is even, the median is the arithmetic average of the 2 middle values.

I8 "maximum" means that the measured value of the quality characteristic or contaminant must not be greater than the release limit stated

I9 "minimum" means that the measured value of the quality characteristic or contaminant must not be less than the limit stated.

I10 "range" means the measured value of the quality characteristic or contaminant must not be higher than the higher release limit or lower than the lower release limit stated.

I11 "compound" means an area bounded by natural ground contours or by a bund, sufficiently impervious to retain spillage or leakage pending recovery.

I12 "bund" means an embankment or wall which may form part or all of the perimeter of a compound.

I13 "$L_{Amax\ adj,T}$" means the average maximum A-weighted sound pressure level, adjusted for noise character and measured over a time period of not less than 15 minutes, using Fast response.

I14 "Background noise level" means either:

$L_{A90,T}$ being the A-weighted sound pressure level exceeded for 90 percent of the time period of not less than 15 minutes, using Fast response, or

$L_{Abg,T}$ being the arithmetic average of the minimum readings measured in the absence of the noise under investigation during a representative time period of not less than 15 minutes, using Fast response.

I15 "$MaxL_{pA,T}$" means the maximum A-weighted sound pressure level measured over a time period of not less than 15 minutes, using Fast response.

I16 "noise sensitive place" means:

A dwelling, mobile home or caravan park, residential marina or other residential premises; or

A motel, hotel or hostel; or

A kindergarten, school, university or other educational institution; or

A medical centre or hospital; or

A protected area; or

A public place or gardens.

I17 "commercial place" means a place used as an office or for business or commercial purposes.

I18 "details of sampling" means, at the time of sampling, accurately recording information relating to and including the place, date, time of day, antecedent rainfall, weather description and the time and height of the local high water prior to sampling.

END OF PERMIT