Queensland Government

Department of **Environment and Heritage Protection**

17-SEP-2014

G.I. Rural Pty Ltd
C/- Gassman Dvelopment Perspectives
PO Box 392
BEENLEIGH QLD 4207

Attention: Mr Mark Spears
Email: mspears@gassman.com.au

Our reference: 217462

**Application details**

I refer to the application that was received by the administering authority on 25-AUG-2014.

Land description: Rotary Park Road ALBERTON Lot 1 Plan RP6854, Lot 46 Plan SP106457, Lot 56 Plan W3113, Lot 45 Plan SP106457, Lot 53 Plan W3113.

**Decision**

Your application has been approved and your environmental authority (reference EPPR00486913) is attached.

Should you have any further enquiries, please contact William Inonda on telephone (07) 5583 2130.

Yours sincerely

Signature

12/09/2014
Date

Brett Glosko
Department of Environment and Heritage Protection
Delegate of the administering authority
*Environmental Protection Act 1994*

**Enclosed**

Permit - environmental authority (reference EPPR00486913)

William Inonda
ES-RSD-SER-Gold Coast
PO Box 4244
Level 1, APVC Building, 14 Edgewater Court
ROBINA TOWN CENTRE QLD 4230
Phone: (07) 5583 2130
Fax: (07) 5583 2136
Email: goldcoast.es@ehp.qld.gov.au
Web: www.ehp.qld.gov.au
ABN: 46 640 294 485

# 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: EPPR00486913

**Environmental authority takes effect: 18 September 2014**

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

The anniversary date of this environmental authority remains 17 November. 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

| Name | Registered address |
|---|---|
| G.I. Rural Pty Ltd | 528 Rotary Park Road<br>ALBERTON QLD 4207 |

### Environmentally relevant activity and location details

| Environmentally relevant activity | Location |
|---|---|
| 1-(1b) Aquaculture >10ha but <100ha land<br>27-Seafood processing >500t yr | Rotary Park Road ALBERTON - Lot 1 Plan RP6854, Lot 46 Plan SP106457, Lot 56 Plan W3113, Lot 45 Plan SP106457 and Lot 53 Plan W3113 |

### 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.



Signature

12/09/2014

Date

Brett Glosko
Department of Environment and Heritage Protection
Delegate of the administering authority
*Environmental Protection Act 1994*

**Enquiries:**
Rhoda Johanni
ES-RSD-SER-Gold Coast
PO Box 4244
Level 1, APVC Building, 14 Edgewater Court
ROBINA TOWN CENTRE QLD 4230
Phone: (07) 5583 2130
Fax: (07) 5583 2136
Email: goldcoast.es@ehp.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

### Schedule 1

**Location:** Rotary Park Road ALBERTON - Lot 1 Plan RP6854, Lot 46 Plan SP106457, Lot 56 Plan W3113, Lot 45 Plan SP106457 and Lot 53 Plan W3113

**Relevant activities:** 27-Seafood processing >500t yr (from IPDE00069404D11)

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

| Condition number | Condition |
|---|---|
| **Agency interest: General** | |
| G1 | In carrying out an ERA to which this approval relates, all reasonable and practicable measure must be taken to prevent and/or to minimise the likelihood of environmental harm being caused. |
| G2 | The operator of an ERA to which this approval relates must:<br>(a) Install all measures, plant and equipment necessary to ensure compliance with the conditions of this approval; and<br>(b) Maintain such measures, plant and equipment in a proper and efficient condition; and<br>(c) Operate such measures, plant and equipment in a proper and efficient manner. |
| G3 | From commencement of an ERA to which this approval relates, a site based management plan (SBMP) must be implemented. The SBMP must identify all sources of environmental harm, including but not limited to the actual and potential release of all contaminants, the potential impact of these sources and what actions will be taken to prevent the likelihood of environmental harm being caused. The SBMP must also provide for the review and 'continual improvement' in the overall environmental performance of all ERAs that are carried out.<br>The SBMP must address the following matters:<br>(a) Environmental commitments – a commitment by senior management to achieve specified and |

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| | relevant environmental goals.<br>(b) Identification of environmental issues and potential impacts.<br>(c) Control measures for routine operations to minimise likelihood of environmental harm.<br>(d) Contingency plans and emergency procedures for non-routine situations.<br>(e) Organisational structure and responsibility.<br>(f) Effective communication.<br>(g) Monitoring of contaminant releases.<br>(h) Conducting environmental impact assessments.<br>(i) Staff training.<br>(j) Record keeping.<br>(k) Periodic review of environmental performance and continual improvement. |
| G4 | The SBMP must not be implemented or amended in a way that contravenes any condition of this approval. |
| G5 | Record, compile and keep all monitoring results required by this approval and present this information to the administering authority when requested. |
| G6 | All records required by this approval must be kept for 5 years. |
| G7 | A record of all waste (excluding trackable waste) must be kept detailing the following information:<br>(a) Date of pickup of waste;<br>(b) Description of waste;<br>(c) Description of waste;<br>(d) Quantity of waste;<br>(e) Origin of the waste; and<br>(f) Destination of the waste.<br>Note: Trackable wastes have similar recording requirements to this condition. Therefore, records of document maintained in compliance with a waste tracking system established under the above Regulation or any other law for recording details for the transport of regulated waste satisfy this condition. |
| G8 | Telephone the EPAs Pollution Hotline or local office as soon as practicable after becoming aware of any release of contaminants not in accordance with the conditions of this approval. |
| G9 | With the exception for the chilling and packaging of any aquaculture species for live sale, the only aquaculture species permitted to be processed at the licensed place is prawns. |
| **Agency interest: Air** | |
| A1 | The release of noxious or offensive odours or any other noxious or offensive airborne contaminants resulting from the activity must not cause a nuisance at any nuisance sensitive or commercial place. |
| **Agency interest: Water** | |
| WT1 | The only contaminants permitted to be released from the authorised place is wastewater from the processing of prawns to the wastewater treatment ponds associated with the aquaculture activities conducted on Lot 1 Plan RP6854, Lot 45 Plan SP106457, Lot 46 Plan SP106457, Lot 53 Plan W3113 |

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| | and Lot 56 Plan W3113. |
| **Agency interest: Noise** | |
| N1 | Noise from the ERA must not cause an environmental nuisance at any nuisance sensitive place or commercial place. |
| N2 | All noise from activities must not exceed the levels specified in Table 1 – Noise limits at any nuisance sensitive or commercial place. |

**Table 1 – Noise limits**

| Noise level measured in dB(A) | Monday to Saturday | | | Sunday and Public Holidays | | |
|---|---|---|---|---|---|---|
| | 7am-6pm | 6pm-10pm | 10pm-7am | 9am-6pm | 6pm-10pm | 10pm-9am |
| | Noise measured at a nuisance **sensitive place** | | | | | |
| $MaxL_{pA,T}$ | **Background** +10 | **Background** +8 | **Background** +5 | **Background** +10 | **Background** +8 | **Background** +5 |
| $L_{Aeq\ adj,T}$ | **Background** +5 | **Background** +3 | **Background** +0 | **Background** +5 | **Background** + 3 | **Background** + 0 |
| | Noise measured at a **commercial place** | | | | | |
| $MaxL_{pA,T}$ | **Background** +15 | **Background** +13 | **Background** +10 | **Background** +15 | **Background** +13 | **Background** +10 |
| $L_{Aeq\ adj,T}$ | **Background** +10 | **Background** +8 | **Background** +5 | **Background** +10 | **Background** +8 | **Background** +5 |

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| N3 | When requested by the administering authority, noise monitoring must be undertaken to investigate any complaint of noise nuisance, and the results notified within 14 days to the administering authority. Monitoring must include:<br>- Background noise level;<br>- LA10, adj, 10 mins<br>- LA1, adj, 10 mins<br>- The level and frequency of occurrence of impulsive or tonal noise;<br>- Atmospheric conditions including wind speed and direction;<br>- Effects due to extraneous factors such as traffic noise; and<br>- Location, date and time of recording. |
| N4 | The method of measurement and reporting of noise levels must comply with the latest edition of the Environmental Protection Agency's Noise Measurement Manual. |
| **Agency interest: Land** | |
| L1 | Spillage of all chemicals and fuels must be contained within an on-site containment system and controlled in a manner that prevents environmental harm.<br>NOTE: All petroleum product storage's must be designed, constructed and maintained in accordance with AS1940 – Storage and handling of Flammable and Combustible Liquids. |

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| L2 | There must be no release nor likelihood of release of any contaminants to land in a manner that may cause environmental harm or contribute to contamination of such land. |
| **Agency interest: Waste** | |
| WS1 | From commencement of an ERA to which this approval relates, a Waste management Plan must be implemented. The Waste Management Plan must address at least the following matters:<br>(a) The types and amounts of waste generated by the ERA;<br>(b) How the waste will be dealt with, including a description of the types and amounts of waste that will be dealt with under each of the waste management practices mentioned in the waste management hierarchy (section 10 of the Environmental Protection (Waste management) Policy 2000);<br>(c) Procedures for identifying and implementing opportunities to improve the waste management practices employed;<br>(d) Procedures for dealing with accidents, spills and other incidents that may impact on the waste management;<br>(e) Details of any accredited management system employed, or planned to be employed, to deal with the waste;<br>(f) How often the performance of the waste management practices will be assessed (at least annually); and<br>(g) The indicators or other criteria on which the performance of the waste management practices will be assessed. |

## Schedule 2

**Location:** Rotary Park Road ALBERTON - Lot 1 Plan RP6854, Lot 46 Plan SP106457, Lot 56 Plan W3113, Lot 45 Plan SP106457 and Lot 53 Plan W3113

**Relevant activities:** 1-(1b) Aquaculture >10ha but <100ha land (from IPDE00047004C11)

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

| Condition number | Condition |
|---|---|
| **Agency interest: General** | |
| G1 | In carrying out an ERA to which this approval relates, all reasonable and practicable measure must be taken to prevent and/or to minimise the likelihood of environmental harm being caused. |
| G2 | The operator of an ERA to which this approval relates must:<br>(a) Install all measures, plant and equipment necessary to ensure compliance with the conditions of this approval; and<br>(b) Maintain such measures, plant and equipment in a proper and efficient condition; and<br>(c) Operate such measures, plant and equipment in a proper and efficient manner. |

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| G3 | Record, compile and keep all monitoring results required by this approval and present this information to the administering authority when requested. |
| G4 | All records required by this approval must be kept for 5 years. |
| G5 | A record of all waste (excluding trackable waste) must be kept detailing the following information:<br>(a) Date of pickup of waste;<br>(b) Description of waste;<br>(c) Description of waste;<br>(d) Quantity of waste;<br>(e) Origin of the waste; and<br>(f) Destination of the waste.<br><br>Note: Trackable wastes have similar recording requirements to this condition. Therefore, records of document maintained in compliance with a waste tracking system established under the above Regulation or any other law for recording details for the transport of regulated waste satisfy this condition. |
| G5 | The latest edition of the Queensland Environmental Protection Agency's INSTRUCTIONS FOR THE TREATMENT AND MANAGEMENT OF ACID SULFATE SOILS, 2001 ('the instructions') must be complied with when treating and managing acid sulfate soils. |
| G6 | Acid sulfate soils must be managed such that contaminants are not directly or indirectly released to any waters. |
| G7 | Suitable banks and/or diversion drains must be installed and maintained to exclude stormwater runoff from entering any ponds or other structures used for the storage or treatment of contaminants including acid sulfate soils or wastes. |
| G8 | Telephone the Administering Authority's Pollution Hotline or local office as soon as practicable after becoming aware of any release of contaminants not in accordance with the conditions of this approval. |
| G9 | A competent person(s) must conduct any monitoring required by this approval. |
| G10 | All instruments, equipment and measuring devices used for measuring or monitoring in accordance with any condition of this approval must be calibrated, and appropriately operated and maintained. |
| G11 | The daily operation of the waste water treatment system and pollution control equipment must be carried out by a person(s) with appropriate experience and/or qualifications to ensure the effective operation of that treatment system and control equipment. |
| G12 | A copy of this development approval must be kept in a location readily accessible to personnel carrying out the activities. |

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| G13 | Excepting any reconfiguration of wastewater treatment ponds or grow out ponds to improve wastewater treatment that does not increase grow out areas permitted under the development approval, siting of the activities is to be in accordance with the site plan attached to this development approval (Figure 1). In the event of any such reconfiguration, the holder must provide an updated site plan to the administering authority. |
| G14 | Where any new aquaculture activity other than the propagation or rearing of marine, estuarine or freshwater prawns is to be undertaken the holder of this development approval must notify the administering authority not less than twenty-eight (28) days prior to stocking the new species. |
| G15 | The holder of this development approval must keep a record of the use of all chemicals added to the prawn grow out ponds or wastewater treatment system, including those added for the control of algae, parasites and diseases and those added to prawn feed including veterinary, antibiotic and prophylactic chemicals. This information must be recorded in a table with the following details on each of the chemicals: type of chemical, date at which the chemical was added, the amount of chemical(s) added, type of receiving waters (eg. Grow out pond or wastewater treatment pond) and the date of the next water release after the chemicals have been added). |
| G16 | The maximum area of aquaculture grow out ponds permitted to be used under this environmental authority is restricted to 25 hectares. This area does not include any wastewater treatment ponds such as settlement ponds or ponds containing animal or plant species whose primary purpose is biologically treating the effluent to improve its quality. |
| G17 | From commencement of an ERA to which this approval relates, a site based management plan (SBMP) must be implemented. The SBMP must identify all sources of environmental harm, including but not limited to the actual and potential release of all contaminants, the potential impact of these sources and what actions will be taken to prevent the likelihood of environmental harm being caused. The SBMP must also provide for the review and 'continual improvement' in the overall environmental performance of all ERAs that are carried out.<br><br>The SBMP must address the following matters:<br>(a) Environmental commitments – a commitment by senior management to achieve specified and relevant environmental goals.<br>(b) Identification of environmental issues and potential impacts.<br>(c) Control measures for routine operations to minimise likelihood of environmental harm.<br>(d) Contingency plans and emergency procedures for non-routine situations.<br>(e) Organisational structure and responsibility.<br>(f) Effective communication.<br>(g) Monitoring of contaminant releases.<br>(h) Conducting environmental impact assessments.<br>(i) Staff training.<br>(j) Record keeping.<br>(k) Periodic review of environmental performance and continual improvement. |
| G18 | The SBMP must not be implemented or amended in a way that contravenes any condition of this approval. |

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| G19 | The operator of the ERA must record the following details for all complaints received and provide this information to the administering authority on request:<br>(a) Time, date, name and contact details of the complainant;<br>(b) Reasons for the complaint;<br>(c) Any investigations undertaken;<br>(d) Conclusions formed; and<br>(e) Any actions taken. |
| **Agency interest: Air** | |
| A1 | The release of noxious or offensive odours or any other noxious or offensive airborne contaminants resulting from the activity must not cause a nuisance at any nuisance sensitive or commercial place. |
| A2 | The release of dust and/or particulate matter resulting from the ERA must not cause an environmental nuisance at any nuisance sensitive or commercial place |
| A3 | Dust and particulate matter must not exceed the following levels when measured at any nuisance sensitive or commercial place:<br>(a) Dust deposition of 120 milligrams per square metre per day when monitored in accordance with Australian Standard AS3580.10.1 of 2003 (or more recent editions); OR<br>(b) A concentration of particulate matter with an aerodynamic diameter of less than 10 micrometre (PM10) suspended in the atmosphere of 150 micrograms per cubic metre over a 24 hour averaging time, at a nuisance sensitive or commercial place downwind of the site, when monitored in accordance with:<br>- Australian Standard AS3580.9.6 of 2003 (or more recent editions) 'Ambient air – particulate matter – Determination of suspended particulate PM10 high-volume sampler with size-selective inlet – Gravimetric method'; or<br>- Any alternative method of monitoring PM10 which may be permitted by the 'Air Quality Sampling Manual' as published from time to time by the administering authority. |
| **Agency interest: Water** | |
| WT1 | Contaminants must only be released to surface waters in compliance with the release limits listed in **Table 2 – Contaminant release limits to water** and the following discharge locations.<br>Discharge Location W1 – namely release of treated aquaculture wastewater from the discharge structure to the Logan River at the location labelled "final Treated Water (Discharge) W1" on Figure 1 as attached to this development approval. |
| WT2 | Monitoring must be undertaken and records kept of contaminant release to waters from the discharge location for the quality characteristics and not less frequently than specified in **Table 2 – contaminant release limits to water**. All determinations of the quality of contaminants released must be:<br>(a) Made in accordance with methods prescribed in the latest edition of the Environment Protection Agency's Water Quality Sampling Manual; and<br>(b) Carried out on samples that are representative of the discharge. |

WT3

Determinations of the quality of contaminants released to waters to check compliance with the release characteristics specified in Table 2 must be undertaken at the sampling and inflow monitoring point(s) described as:

M1 samples are to be taken on the prawn farm side of the discharge structure, as marked on the site plan included in this development approval (figure 1).

M2 samples are to be taken from the Logan River, from a position representative of waters drawn into the facility.

**Table 2 – Contaminant release limits to water**

| Monitoring Point | Discharge location | Quality characteristics | units | Release limit | Monitoring frequency |
|---|---|---|---|---|---|
| M1 | W1 | pH | pH units | 6.5 – 9 | Weekly while discharging |
| M1 | W1 | Dissolved Oxygen | mg/L | 4.0 minimum | Weekly while discharging |
| M1 | W1 | Suspended solids | mg/L | 30 average<br>50 maximum | In the first and third week of each month while discharging |
| M1 | W1 | Total Nitrogen | mg/L | 3 plus ambient median value | In the first and third week of each month while discharging |
| M1 | W1 | Total Phosphorus | mg/L | 0.3 plus ambient median value | In the first and third week of each month while discharging |
| M1 | W1 | Free Chlorine Residual | Mg/L | 0.01 | Daily while discharging chlorinated wastewaters. Applies only if chlorine is used |

**Notes to table 2**
Ambient median total nitrogen and total phosphorus means the respective values of these parameters in mg/L as calculated from the long-term median results obtained from EPA ambient water quality monitoring near the facility provided in Table 4. As an alternative, the holder may elect in writing to utilise inlet water quality monitoring data provided that it is demonstrably representative of ambient receiving water quality and administering authority agrees to such in writing.

WT4

Determinations of the quality of contaminants released to waters must be undertaken at a time when it is estimated that maximum flow rate is occurring from the outlet and must include sampling during drainage of ponds contents at least twice.

WT5

The daily net load (in kilograms) of the contaminants suspended solids, total nitrogen and total phosphorus released to waters per day shall be determined or calculated and records kept of such determinations or calculations.

WT6

Where reasonable and practicable, the release of contaminants to waters must only occur from local high water until two (2) hours before local low water.

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| WT7 | Notwithstanding condition "WT6", if the release is an overflow from an effluent settlement or treatment pond due to heavy or prolonged rainfall at the licensed place, the release may only be continuous provided the release does not adversely affect other users of Logan river waters. This condition does not apply in circumstances of floods causing overflows or overtopping of ponds. |
| WT8 | The release of contaminants to waters from the discharge location must be carried out in such a manner that does not adversely impact on marine plants, mangrove vegetation, the banks or bed of the waterway or the habitat in general. This condition includes ensuring ongoing stabilisation of the discharge drain to ensure that no disturbance to marine plants, mangrove vegetation, the banks or bed of the waterway or the habitat in general occurs. |
| WT9 | No release of contaminants from either the prawn grow out ponds or the wastewater treatment system where the release is directly or indirectly derived from *Penaeid* prawn grow out ponds is permitted between 1 June and 14 October in any year, excluding any contaminant release:<br>(a) For the purpose of maintaining stocks of *Penaeus japonicus* later than 1 June for later sale or other purpose;<br>(b) For the sole purpose of maintaining during the non grow out season, a stock of organisms to effect biological treatment of waste waters; and<br>(c) Due to an emergency circumstance caused by inadvertent intake of contaminated river water and providing the release does not aggravate the contamination problem or affect other aquaculture operations. |
| WT10 | The holder of this development approval is responsible for ensuring the determination and keeping of records of the total daily volume of water drawn into the prawn farm at the intake point and the total daily volume of water released from the discharge point as depicted in the site plan contained within the development approval. The system used to calculate the required volumes must be accurate to +/- 5% and the operator must be able to certify this required accuracy. |
| WT11 | The total nitrogen release limit is calculated over the 210 day prawn growing season. Release of nitrogen outside of the grow out season is subject to approval from the Administering Authority. |
| WT12 | The total quantity of contaminants release from the authorised release point must not, either alone or in aggregate with any other releases from environmentally relevant activities associated with the activities carried out at the authorised place, exceed any of the load limits for each contaminant specified in Table **3**. |

**Table 3 – Release load limits**

| Contaminant | Release load limit | Limit type |
|---|---|---|
| Suspended Solids | 120 kg/day | Average of daily net loads released over the prawn growing season. |
| Suspended Solids | 25,200 kg/annual season | Total of daily net loads released over the annual prawn growing season. |
| Total Phosphorus | 1 kg/day | Average of daily net loads released over the prawn growing season. |
| Total Phosphorus | 210kg/annual season | Total of daily net loads released over the annual prawn growing season. |
| Total Nitrogen | 10 kg/day | Average of daily net loads released over the prawn growing season. |
| Total Nitrogen | 2100 kg/annual season | Total of daily net loads released over the annual prawn growing season. |

**Notes to table 3**

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- Average of daily net loads as calculated in accordance with the load calculation conditions contained within this development approval.
- Total of daily net loads released over the annual prawn growing season means the sum of the daily loads, as calculated under Load Calculation Condition "Water 13", over the annual prawn growing season of 210 days.
- Development approval conditions such as nitrogen load will be reviewed upon consideration of the results of the findings of the Research Project as agreed to by the Environmental Protection Agency and the Australian Prawn Farmers Association.
- An exceedance of release load limits constitutes a non-compliance.

WT13

The net kilograms of contaminant released each day shall be calculated for each day according to the following formula:

Daily Net Load (kg) = (Dis. Conc. – Intake Conc.) x Dis. Vol

Where: Dis. Conc. = discharge waste water contaminant concentration (in mg/L) measured that day or on the most recent sampling occasion if not measured that day.

Intake Conc. = corresponding long term median ambient intake water concentration provided in Table 4 or the contaminant concentration (in mg/L) measured that day or on the most recent sampling occasion if the holder elects to monitor inlet water in accordance with this development approval.

Dis. Vol = the volume (in mega litres) of wastewater discharged that day.

<table>
<tr><td>WT14</td><td>The data to be used in calculating net loads of suspended solids, total nitrogen and total phosphorus is the corresponding median result listed in Table 4 from long term ambient water quality monitoring conducted at Administering Authority site "LOG-7.8" in the Logan River near the facility unless the holder:<br>(a) In accordance with the conditions of this approval, elects to determine and keep records of suspended solids, total nitrogen and total phosphorus in inlet waters. If the holder operates under this option, the holder must advise the administering authority of this election in writing and carry out monitoring of all quality characteristics in Table 5; or<br>(b) Carries out a long term monitoring program over at least two years to determine representative quality of waters in the main channel of the Logan River opposite the farm, in accordance with the Australian and New Zealand Environment and Conservation Council's "Australian Water Quality Guidelines for Fresh and Marine Waters", December 20000 to incorporate an amendment of the relevant values specified in this environmental authority and such amendment is made.</td></tr>
<tr><td>WT15</td><td>Table 4 – Logan River long-term ambient water quality monitoring results<br><table><tr><th>Quality characteristics</th><th>Intake Water Concentration* (mg/L)</th></tr><tr><td>Suspended solids</td><td>15 mg/L</td></tr><tr><td>Total Nitrogen</td><td>0.65 mg/L</td></tr><tr><td>Total Phosphorus</td><td>0.16 mg/L</td></tr></table>* As calculated from long-term median results obtained from EPA ambient water quality monitoring conducted at Environmental Protection Agency site "LOG-7.8" in the Logan River near the facility.</td></tr>
<tr><td>WT16</td><td>From the calculations of daily loads, calculations must be made and records kept of the following:<br>(a) Average of daily net loads released over the annual prawn growing season;<br>(b) Total of daily net loads released per month;<br>(c) Total of daily net loads released over the annual prawn growing season.</td></tr>
<tr><td>WT17</td><td>Records must be kept of all data used to calculate mass loads, including volumes of wastewater released, dates releases occur and discharge water quality.</td></tr>
<tr><td>WT18</td><td>Release of contaminants (either alone or in aggregate with other releases mentioned above) to waters must comply with the following qualitative characteristics:<br>(a) The release 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.<br>(b) The release must not produce any plume or other visible evidence of the release of suspended solids or other contaminants which adversely affects the values of the receiving environment.</td></tr>
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| WT19 | Notwithstanding attainment of the release limits for total nitrogen and total phosphorus, the holder must implement a Water Quality Release Continual Improvement Program (WQRCIP) by implementing all reasonable and practicable measures to reduce the mass load of total nitrogen and total phosphorus released per day into the receiving environment, as such measures become practicable to implement in prawn farming operations. Such measures may include but not be limited to increased recycling of effluent, additional or more effective effluent treatment, bioremediation ponds, improved food conversation ratios and use of lower protein feeds.<br>"Practicable to implement in prawn farming operations" in this condition shall mean practicable on an ongoing basis with good environmental management and shall exclude low nutrient outcomes achieved due to poor survival rates and infrequent exceptional results. |
| WT20 | Measures implemented under the WQRCIP must be described and submitted to the administering authority with each annual return. |
| WT21 | The WQRCIP must include the following information for each species cultivated, for the year addressed in the report:<br>(a) Number of hectares stocked;<br>(b) Stocking rated used;<br>(c) Survival rate;<br>(d) Production (kg/ha);<br>(e) Feed conversation ratio;<br>(f) Proportion of wastewater recycled versus discharge;<br>(g) Comparison of preceding years stocking rate, survival rate, production, feed conversion ratio, and waste water recycling rate and the number of hectares stocked with the current year<br>(h) The net loads and concentrations of Total Nitrogen and Total phosphorus released as measured and calculated under this authority, compared with the relevant limits and targets specified in this authority and with the previous year's results;<br>(i) Practices and procedures undertaken during the preceding twelve (12) months to reduce the net load of Total Nitrogen and Total Phosphorus discharged into the receiving environment;<br>(j) Practices and procedures that will be implemented to further reduce the net load of Total Nitrogen and total Phosphorus released into the receiving environment for the following year where necessary, ie. in cases where net loads are greater than industry benchmarks achieved using best practice environmental management. |
| WT22 | The requirement for a WQRCIP does not apply in the case that the ERA is carried out:<br>(a) By recycling effluent during the whole of the prawn grow out season and the only contaminant released to waters that occur (excluding any stage end of season pond drainage) are overflow of storm water runoff and waste waters from grow out and treatment ponds that are solely caused by rainfall causing overtopping of such ponds; or<br>(b) Such that concentration limits for total nitrogen and total phosphorus are complied with and the average net load of total environmental authority is zero or less. |
| WT23 | Water may only be drawn into the aquaculture facility from the intake point(s) described as "Pump Station Intakes" as depicted in the site plan contained within this development approval. |

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| WT24 | There must be no release of stormwater runoff that has been in contact with any contaminants at the site to any waters, roadside gutter or stormwater drain unless previously treated to prevent environmental harm. |
| WT25 | All ponds, including the grow out ponds and settlement ponds, must be installed and maintained to ensure the stability of the pond-s construction including measures to minimise erosion of the pond walls, for example, maintenance of the banks in a vegetated state. |
| WT26 | Erosion protection measures and sediment control measures must be implemented and maintained to minimise erosion and the release of sediment from the premises. |
| WT27 | Samples of intake water quality to be used for calculation of net loads must be taken on an incoming tide within two (2) hours of local high water when intake pumps are running. |
| WT28 | The holder of this development approval is responsible for the making of determinations of the quality of the waters drawn into the prawn farm at the intake sampling point M2 for the quality characteristics in Table 5. In relation to suspended solids, total nitrogen and total phosphorus, this condition applies subject to condition WT14. |
| WT29 | The holder must implement a Receiving Environment Monitoring Program (REMP) to gauge the extent of the initial mixing zone and monitor the effects for the release of contaminants on the receiving environment to effectively determine whether environmental values potentially affected by the contaminant releases are being protected. These values are protection of a modified aquatic ecosystem and primary industries (protection of cultured fish, molluscs and crustaceans).<br>"Receiving environment" for the purpose of the REMP means the Logan River opposite and in the vicinity where contaminant releases occur.<br>For the purposes of this condition, environmental values are considered to be harmed and not protected if the water quality guidelines for the indicators for environmental values prescribed in the Environmental Protection (Water) Policy 1997 are not being met, including any water quality objectives adopted pursuant to Section 12 of that Policy. |
| WT30 | **Table 5 – Quality characteristics for intake water monitoring** |

| Quality characteristics | Sampling method | Intake monitoring point number | Frequency |
|---|---|---|---|
| pH (pH units) | In flow sample | M2 | Weekly whilst discharging |
| Dissolved Oxygen (mg/L) | In flow sample | M2 | Weekly whilst discharging |
| Suspended Solids (mg/L) | Grab sample | M2 | In the first and third week of each month whilst in-taking |
| Total nitrogen (mg/L) | Grab sample | M2 | In the first and third week of each month whilst in-taking |
| Total Phosphorus (mg/L) | Grab sample | M2 | In the first week and third of each month whilst in-taking |

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| WT31 | The REMP must include monitoring of:<br>(a) Total nitrogen, total phosphorus, chlorophyll 'a', dissolved oxygen, temperature, water clarity and salinity (at one site opposite the release point in receiving waters fortnightly during the grow out season and two weeks following cessation of discharge); and<br>(b) An annual survey of an appropriate bio-indicator such as one mentioned in the Aquaculture CRC Limited Final Scientific Report on "Project E1: Pond and Effluent Management" to monitor the approximate extent of potential adverse effects of the release. |
| WT32 | For the purposes of ensuring usefulness and comparison with other waterway results, sampling protocols such as position in river, depth and state of tide that are used as part of the REMP must comply with those followed in Regional programs that monitor southeast Queensland waterways. |
| WT33 | At twelve (12) monthly intervals from the date of commencement of the REMP, the holder carrying out an equivalent study or an alternative study must report to the administering authority the data and findings of the receiving environment monitoring program carried out. |
| WT34 | The report on the REMP must address at least the following:<br>(a) A detailed description of the methodology used in the REMP;<br>(b) A detailed description and analysis of the results of the REMP; and<br>(c) An assessment of the quality of waters monitored and whether relevant environmental indicator values are complied with or exceeded: and<br>(d) An assessment of the estimated spatial impact of contaminant release upon the receiving environment based upon monitoring of bio-indicators; and<br>(e) A summary of recommendations that can be drawn from the findings of the REMP with respect to the prevention or minimisation of the impacts of the contaminant releases on receiving environment. |
| WT35 | To remove any doubt, it is declared that the holder may use the results of ambient water quality monitoring for the purposes of calculating inlet water quality and discharge limits for total nitrogen and total phosphorus as required by the conditions of this development approval. Samples taken from inlet works not complying with the REMP monitoring protocols are not equivalent for REMP monitoring. |
| WT36 | As an alternative to carrying out the REMP specified in this schedule, the holder may become and remain a "participating member" in the following regional water quality and ecosystem health monitoring studies or any equivalent program:<br>(a) The Southeast Queensland Regional Water Quality management Strategy; and<br>(b) The Ecosystem Health Monitoring Program |

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| WT37 | The holder is deemed by the Administering Authority to be a "participating member" in regional studies in the following situations:<br>(a) The holder is a "contributing member", to the regional studies of water quality and ecosystem health; and<br>(b) The holder is identified as a "contributing member" in a written statement to the administering authority from the authority carrying out the regional studies; and<br>(c) The holder continues to be a "contributing member" of such regional studies.<br>(d) "Contributing member" means that the holder contributes towards the reasonable cost of environmental monitoring studies undertaken relevant to potential impacts of the ERA whereby the amount is agreed to between the holder and the authority carrying out the regional studies and the formula used in determining reasonable cost takes into account the number of grow out ponds stocked and whether or not the farms fully recycle effluent throughout the grow out season. |
| **Agency interest: Noise** | |
| N1 | Noise from an ERA must not cause an environmental nuisance at any nuisance sensitive place or commercial place. |
| N2 | All noise from activities must not exceed the levels specified in Table 1 – Noise limits at any nuisance sensitive or commercial place. |

**Table 1 – Noise limits**

| Noise level measured in dB(A) | Monday to Saturday | | | Sunday and Public Holidays | | |
|---|---|---|---|---|---|---|
| | 7am-6pm | 6pm-10pm | 10pm-7am | 9am-6pm | 6pm-10pm | 10pm-9am |
| | Noise measured at a nuisance **sensitive place** | | | | | |
| $MaxL_{pA,T}$ | **Background** +10 | **Background** +8 | **Background** +5 | **Background** +10 | **Background** +8 | **Background** +5 |
| $L_{Aeq\ adj,T}$ | **Background** +5 | **Background** +3 | **Background** +0 | **Background** +5 | **Background** + 3 | **Background** + 0 |
| | Noise measured at a **commercial place** | | | | | |
| $MaxL_{pA,T}$ | **Background** +15 | **Background** +13 | **Background** +10 | **Background** +15 | **Background** +13 | **Background** +10 |
| $L_{Aeq\ adj,T}$ | **Background** +10 | **Background** +8 | **Background** +5 | **Background** +10 | **Background** +8 | **Background** +5 |

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| N3 | When requested by the Administering Authority, noise monitoring must be undertaken to investigate any complaint of noise nuisance, and the results notified within 14 days to the administering authority. Monitoring must include:<br>- Background noise level;<br>- LA10, adj, 10 mins<br>- LA1, adj, 10 mins<br>- The level and frequency of occurrence of impulsive or tonal noise;<br>- Atmospheric conditions including wind speed and direction;<br>- Effects due to extraneous factors such as traffic noise; and<br>- Location, date and time of recording |

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| N4 | The method of measurement and reporting of noise levels must comply with the latest edition of the Administering Authority's Noise Measurement Manual. |
| **Agency interest: Land** | |
| L1 | Spillage of all chemicals and fuels must be contained within an on-site containment system and controlled in a manner that prevents environmental harm.<br>NOTE: All petroleum product storage's must be designed, constructed and maintained in accordance with AS1940 – Storage and Handling of Flammable and Combustible Liquids. |
| L2 | Contaminants must not be released to land, with the exception of pond sludge that is used beneficially at the authorised place. |
| **Agency interest: Waste** | |
| WS1 | From commencement of the activity, a Waste Management Plan (WMP) must be implemented. The WMP must address at least the following matters:<br>(a) The types and amounts of waste generated by the ERA;<br>(b) How the waste will be dealt with, including a description of the types and amounts of waste that will be dealt with under each of the waste management practices mentioned in the Waste Management Hierarchy (section 10 of the Environmental Protection (Waste Management) Policy 2000);<br>(c) Procedures for identifying and implementing opportunities to improve the waste management practices employed eg. opportunities for beneficial reuse of biosolids;<br>(d) Procedures for dealing with accidents, spills and other incidents that may impact on the waste management;<br>(e) Details of any accredited management system employed, or planned to be employed, to deal with the waste;<br>(f) How often the performance of the waste management practices will be assessed or at least annually); and<br>(g) The indicators or other criteria on which the performance of the waste management practices will be assessed. |

## 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.

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

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

**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.

**Background** means noise, measured in the absence of the noise under investigation, as $L_{A90,T}$ being the A-weighted sound pressure level exceeded for 90 percent of the time period of not less than 15 minutes, using Fast response.

**Boundary** means within 1m of the cadastral **boundary** of the approved place.

**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.

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

**Environmental value** as defined under Chapter 1 of the *Environmental Protection Act 1994*.$L_{Aeq\ adj,T}$ means the adjusted A weighted equivalent continuous sound pressure level **measures** on fast response, adjusted for tonality and impulsiveness, during the time period T, where T is measured for a period no less than 15 minutes when the **activity** is causing a steady state noise, and no shorter than 1 hour when the approved **activity** is causing an intermittent noise.

**General waste** means waste other than regulated waste.

$L_{Aeq\ adj,T}$ means the adjusted A weighted equivalent continuous sound pressure level measures on fast response, adjusted for tonality and impulsiveness, during the time period T, where T is measured for a period no less than 15 minutes when the activity is causing a steady state noise, and no shorter than one hour when the approved activity is causing an intermittent noise.

**Liquid** means any substance that:

1. has an angle of repose of less than five degrees; or
2. becomes free flowing at or below 60 degrees Celsius or when it is transported; or
3. is not generally capable of being picked up by a spade or shovel.

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

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

**NATA** means National Association of Testing Authorities.

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

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

**Prescribed contaminants** means contaminants listed within Schedule 9 of the Environmental Protection Regulation 2008.

**Release of a contaminant into the environment** means to:

4. deposit, discharge, emit or disturb the contaminant; and
5. cause or allow the contaminant to be deposited, discharged, emitted or disturbed; and
6. fail to prevent the contaminant from being deposited, discharged emitted or disturbed; and
7. allow the contaminant to escape; and
8. fail to prevent the contaminant from escaping.

**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 1992* or a World Heritage Area; or
6. a public thoroughfare, park or gardens; or
7. for noise, a place defined as a sensitive receptor for the purposes of the Environmental Protection (Noise) Policy 2008.

**Substantial low frequency noise** means a noise emission that has an unbalanced frequency spectrum shown in a one-third octave band measurements, with a predominant component within the frequency range 10 to 200 Hz. It includes any noise emission likely to cause an overall sound pressure level at a noise sensitive place exceeding 55 dB(Z).

**Waste operations area** means the following areas:

1. waste receiving
2. sorting
3. treating
4. recycling
5. disposal.

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

**You** means the holder of the environmental authority.

## END OF PERMIT

**Attachments**

Figure 1 – Site plan

