Queensland Government

Department of
Environment and Heritage Protection

30-SEP-2015

To: Mr Murray Zipf
PO Box 1779
OXENFORD QLD 4210

Attention: Mr Murray Zipf

Our reference: 266583

Application details

I refer to the application that was received by the administering authority on 29-SEP-2015.

Land description: Rocky Point Road Steiglitz Lot 1 Plan RP6959, Lot 1 Plan WD3691, Lot 21 Plan SP134109, Lot 2 Plan WD3762, Lot 20 Plan SP134109; Cnr Rocky Point Road and Holmstead Road Steiglitz Lot 50 Plan SP233762, Lot 276 Plan WD130, Lot 1 Plan RP6959.

Decision

Your application has been approved and your environmental authority (reference EPPR00325713) is attached.

Should you have any further enquiries, please contact Annemarie Lewis on telephone 1300 130 372 (option 4).

Yours sincerely

Signature	Date
	30 September 2015

Jodie Brackenbury
Department of Environment and Heritage Protection
Delegate of the administering authority
Environmental Protection Act 1994

Annemarie Lewis
Permit and Licence Management
Department of Environment and Heritage Protection
GPO Box 2454
BRISBANE QLD 4001
Phone: 1300 130 372
Fax: (07) 3330 5875
Email: palm@ehp.qld.gov.au
Website **www.ehp.qld.gov.au**
ABN 46 640 294 485

Enclosed

Permit - environmental authority (reference EPPR00325713)

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: EPPR00325713

Environmental authority takes effect on 30-SEP-2015.

The anniversary date of this environmental authority remains 31 October. An annual return and the payment of the annual fee will be due each year on this day.

Environmental authority holder

Name	Registered address
Mr Murray Zipf	4 Rocky Point Road WOONGOOLBA QLD 4207

Environmentally relevant activity and location details

Environmentally relevant activity(ies)	Location(s)
1-(2a) Aquaculture >100m2 but <10ha land 1-(2b) Aquaculture >10ha but <100ha land 27-Seafood processing >500t yr	Cnr Rocky Point Road and Holmstead Road Steiglitz - Lot 50 Plan SP233762, Lot 276 Plan WD130 and Lot 1 Plan RP6959 Rocky Point Road Steiglitz - Lot 1 Plan RP6959, Lot 1 Plan WD3691, Lot 21 Plan SP134109, Lot 2 Plan WD3762 and Lot 20 Plan SP134109

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

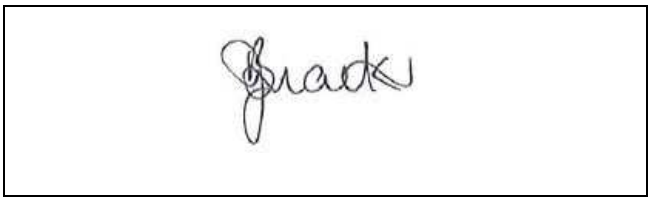
An environmental authority authorises the carrying out of an ERA and does not authorise any environmental harm unless a condition stated by the authority specifically authorises environmental harm.

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

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

30 September 2015

Date

Jodie Brackenbury
Department of Environment and Heritage Protection
Delegate of the administering authority
Environmental Protection Act 1994

Enquiries:
Annemarie Lewis
Permit and Licence Management
Department of Environment and Heritage Protection
GPO Box 2454
BRISBANE QLD 4001
Phone: 1300 130 372
Fax: (07) 3330 5875
Email: palm@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

The conditions of approval for this environmental authority are site-specific and are listed below.

The conditions of this environmental authority are the conditions of the attached Development Approval ref SR2231, as they relate to the licenced activities, where any references to the holder of the development approval are taken to refer to the holder of this environmental authority.

Attachments

- Development approval permit.

END OF PERMIT

ENVIRONMENTAL PROTECTION ACT 1994

Queensland Government
Environmental Protection Agency
Queensland **Parks and Wildlife Service**

Southern Regional Office (Brisbane)
GPO Box 2771 BRISBANE QLD 4001
Phone: (07) 3224 5641 Fax: (07) 3225 8723
www.env.qld.gov.au ABN: 87221158786

Integrated Authority No. SR2231

Section 311 *Environmental Protection Act 1994*

This integrated authority, issued in accordance with section 311 of the Environmental Protection Act 1994 *(the EP Act), provides for the carrying out of different Environmentally Relevant Activities or Environmentally Relevant Activities at different places managed in an integrated way. This integrated authority comprises of one or more types of environmental authority(ies) in accordance with sections 86, 93, 95, 104, 113 and 311, of the EP Act, and this integrated authority details the conditions that are relevant to each stated type of environmental authority.*

Under the provisions of the *Environmental Protection Act 1994* this integrated authority is issued to:

Murray Trevor Zipf, Trevor William Zipf and Keith Noel Zipf
Cnr Holmstead Road and Rocky Point Road
WOONGOOLBA QLD 4207

in respect of carrying out the Environmentally Relevant Activities (ERAs) at the same place and under the types of environmental authorities described in Table 1.

This integrated authority is subject to the conditions set out in the attached schedules.

The anniversary date of this licence is 31 October.

This integrated authority takes effect from 13 December 2002.

Signed

13 December 2002
Date

Ian Yarroll
Director, Integrated Assessment Branch
Delegate of Administering Authority
Environmental Protection Act 1994

Note: This integrated authority document is not proof of the current status of the integrated authority. The current status of the integrated authority may be ascertained by contacting the Environmental Protection Agency.

Table 1: This integrated authority consists of the following part(s):

Part 1: Licence/s (with development approval) (Section 86)

Applicable Part & Schedule(s)	ERA No.	ERA name	Lot	Plan	Location
1A and 1B.	1(c)	Aquaculture – cultivating or holding marine, estuarine or freshwater organisms (other than molluscs) in ponds or tanks or enclosures in waters ('impoundments') – if the total area of the impoundments is 5 ha or more but less than 10 ha and wastes are released to waters.	1&2	RP6959	Rocky Point Road WOONGOOLBA QLD 4207
			1	WD3691	
			2	WD3762	
			Part of Lot 1 on RP6894 (see Plan 1517-98-S)	RP6894	

Part 2: Licence/s (without development approval) (Section 93)

Applicable Part & Schedule(s)	ERA No.	ERA name	Lot	Plan	Location
2A, 2B, 2C, 2D, 2E, 2F, 2G, 2H, 2I, and 2J.	1(d)	Aquaculture – cultivating or holding marine, estuarine or freshwater organisms (other than molluscs) in ponds or tanks or enclosures in waters ('impoundments') – if the total area of the impoundments is 10 ha or more but less than 20 ha and wastes are released to waters.	Lot 459	WD11, Parish of Albert	Cnr Rocky Point Road and Holmstead Road WOONGOOLBA QLD 4207
			Lot 276	WD130, Parish of Albert	
2A, 2B, 2C, 2D, 2E, 2F, 2G, 2H, 2I and 2J.	34	Seafood processing – commercially processing seafood, including removing the scales, gills, intestines or shells, filleting, chilling, freezing or packaging seafood in works having a design production capacity of more than 100 t per year.	Lot 1	RP6959, Parish of Albert	Cnr Rocky Point Road and Holmstead Road WOONGOOLBA QLD 4207

The aforementioned description of the ERA(s) for which this authority is issued is simply a restatement of the ERA(s) as prescribed in the legislation at the time of issuing the authority. Where there is any conflict between the above description of the ERA(s) for which this authority is issued and the conditions as specified in this authority as to the scale, intensity or manner of carrying out of the ERA(s) then such conditions prevail to the extent of the inconsistency.

This integrated authority incorporates the following parts:

Part 1 - Licence/s (with development approval)
Part 2 - Licence/s (without development approval)

Each part consists of conditions relevant to various issues.

PART 1 - LICENCE(S) (WITH DEVELOPMENT APPROVAL) (Section 86)

This part and its conditions must be considered in conjunction with any conditions imposed on your development approval(s) granted under the Integrated Planning Act 1997 *or its equivalent for the activities under this part.*

Schedule 1A - General conditions

(1A1) The holder of this environmental authority must implement and maintain an Integrated Environmental Management System (IEMS) which provides for the effective management by the holder of the actual and potential environmental impacts resulting from the carrying out of the activities and that provides for at least the following functions:

(a) monitoring of the release of contaminants into the environment including procedures, methods, record keeping and notification of results;
(b) staff training and awareness of environmental issues related to carrying out the activities;
(c) conducting assessment of the environmental impact of any release of contaminants into the environment;
(d) periodic conduct of energy audits and review of environmental performance and procedures adopted, not less frequently than after each season for reviewing environmental performance and once every five years for energy audits; and
(e) waste prevention, treatment and disposal; and
(f) a program for continuous improvement.

Note: Implementing a relevant environmental management system that is accredited to the international standard ISO 14000 is one way of meeting the requirements of this condition. Relevant environmental issues, as a minimum, include issues mentioned in the Environmental Code of Practice for Australian Prawn Farmers.

(1A2) An up to date copy of the IEMS must be kept at the licensed place where the activities are carried out with a further copy provided to the administering authority, including provision of any amendments within 30 days of completion.

(1A3) The holder of this environmental authority must not implement or amend an IEMS (including any environmental management plan) that contravenes any condition of this environmental authority or any development condition imposed by the administering authority that is applicable to carrying out the activities.

END OF CONDITIONS FOR SCHEDULE 1A

Schedule 1B - Definitions

(1B1) "Development Condition" has the meaning given the term in the *Environmental Protection Act 1994*.

(1B2) "Environmental Code of Practice for Australian Prawn Farmers" means the "Environmental Code of Practice for Australian Prawn Farmers, September 2001" produced by the Australian Prawn Farmers Association or more recent editions or supplements to that document as such become available.

END OF CONDITIONS FOR SCHEDULE 1B

END OF PART 1

PART 2 - LICENCE(S) (WITHOUT DEVELOPMENT APPROVAL) (Section 93)

This part is for the carrying out of a level 1 environmentally relevant activity without a development approval, under chapter 4, part 3, division 2, subdivision 1 of the Environmental Protection Act 1994.

Schedule 2A - General conditions

(2A1) In carrying out the environmentally relevant activities, you must take all reasonable and practicable measures to prevent and / or to minimise the likelihood of environmental harm being caused. Any environmentally relevant activity, that, if carried out incompetently, or negligently, may cause environmental harm, in a manner that could have be prevented, shall be carried out in a proper manner in accordance with the conditions of this environmental authority.

NOTE: This environmental authority authorises the environmentally relevant activity. It does not authorise environmental harm unless a condition contained within this authority explicitly authorises that harm. Where there is no condition or the authority is silent on a matter, the lack of a condition or silence shall not be construed as authorising harm. Without limiting the measures which may be applied, examples of reasonable and practicable measures include those mentioned in the Environmental Code of Practice for Australian Prawn Farmers.

(2A2) The licensee must 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.

(2A3) Where any new aquaculture species other the propagation or rearing of marine, estuarine or freshwater prawns is to be undertaken the holder of this environmental authority must notify the administering authority not less than twenty-eight (28) days prior to stocking the new species.

Note: This licence condition does not apply to species propagated or reared as a means of biologically treating effluent from the prawn farm.

(2A4) Excepting any reconfiguration of waste water treatment ponds to improve waste water treatment, siting of the activities is to be in accordance with the site maps and plans included in Schedule 2K.

(2A5) With the exception of the chilling and packaging of any aquaculture species for live sale, the only aquaculture species permitted to be processed at the licensed place are prawns and fish.

(2A6) The environmentally relevant activities must be carried in compliance with the "*Environmental Code of Practice for Australian Prawn Farmers, September 2001*" produced by the Australian Prawn Farmers Association or more recent editions or supplements to that document as such become available.

Maintenance of measures, plant and equipment

(2A7) The holder must:

- install all measures, plant and equipment necessary to ensure compliance with the conditions of this environmental authority; and
- maintain such measures, plant and equipment in a proper and efficient condition; and
- operate such measures, plant and equipment in a proper and efficient manner.

Display of Environmental Authority

(2A8) A copy of this environmental authority must be kept in a location readily accessible to personnel carrying out the activities.

Records

(2A9) 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 (5) years and be available for examination by an authorised person. Excluding any environmental monitoring results, 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.

(2A10) Copies of any record or document required to be kept by a condition of this environmental authority must be provided to any authorised person or the administering authority on request. Where the administering authority requires this data to be provided in a specified format, for example, a designated spreadsheet and charts, then the data must be provided in that format.

Calibration

(2A11) All instruments and devices used for the measurement or monitoring of any parameter under any condition of this environmental authority must be appropriately calibrated, operated and maintained.

Alterations

(2A12) 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 quantity of the contaminant to be released into the environment.

Grow out Pond Area

(2A13) The maximum area of aquaculture grow out ponds permitted to be used under this environment authority is 14 hectares, excepting where any operation of additional grow out ponds creates total grow out pond area less than 20 hectares, does not constitute assessable development for the Integrated Planning Act 1997, the holder provides written evidence of this and the expanded activity is carried out in full compliance with all the other conditions of this authority. This area does not include any waste water 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.

Agreements for Intake, Treatment, Discharge and Monitoring

(2A14) The holder of this environmental authority must (except when the holder is the owner) enter into and maintain a written agreement with the owner(s) of Lots 1 & 2 on RP6959 and Lot 1 on WD3691 and Lot 153 on WD 3645, all in the Parish of Albert, to permit intake of water, treatment of waste water and discharge of waste water, including all necessary maintenance, as necessitated by the carrying out of environmentally relevant activities of aquaculture and seafood processing on Lot 459 WD 11, Lot 276 RP130 and Lot 1 RP 6959, Parish of Albert.

(2A15) The holder of this environmental authority must (except when the holder is the owner) enter into and maintain a written agreement with the owner(s) of Lots 1 & 2 on RP6959, Lot 2 on WD 3762, Lot 1 on WD3691, all in the Parish of Albert, to take joint responsibility for intake of water, treatment of waste water and discharge of waste water, including all necessary maintenance, as necessitated by any carrying out of environmentally relevant activity on Lots 1 & 2 on RP6959, Lot 2 on WD 3762, Lot 1 on WD3691, all in the Parish of Albert.

(2A16) Where the holder of this environmental authority is required to carry out monitoring that duplicates monitoring required to be carried out by the person carrying out development for the environmentally relevant activity of aquaculture on Lots 1 & 2 on RP6959, Lot 2 on WD 3762, Lot 1 on WD3691 (all in the Parish of Albert), for example quality of intake waters of Sandy Creek, then joint monitoring that serves both purposes is permitted.

Integrated Environmental Management System (2IEMS)

(2A17) The holder of this environmental authority must implement and maintain an Integrated Environmental Management System (IEMS) which provides for the effective management by the holder of the actual and potential environmental impacts resulting from the carrying out of the activities and that provides for at least the following functions:

(a) monitoring of the release of contaminants into the environment including procedures, methods, record keeping and notification of results;
(b) staff training and awareness of environmental issues related to carrying out the activities;
(c) conducting assessment of the environmental impact of any release of contaminants into the environment;
(d) periodic conduct of energy audits and review of environmental performance and procedures adopted, not less frequently than after each season for reviewing environmental performance and once every five years for energy audits; and
(e) waste prevention, treatment and disposal; and
(f) a program for continuous improvement.

Note: Implementing a relevant environmental management system that is accredited to the international standard ISO 14000 is one way of meeting the requirements of this condition. Relevant environmental issues, as a minimum, include issues mentioned in the Environmental Code of Practice for Australian Prawn Farmers.

(2A18) An up to date copy of the IEMS must be kept at the licensed place where the activities are carried out with a further copy provided to the administering authority, including provision of any amendments within 30 days of completion.

(2A19) The holder of this environmental authority must not implement or amend an IEMS (including any environmental management plan) that contravenes any condition of this environmental authority or any development condition imposed by the administering authority that is applicable to carrying out the activities.

END OF CONDITIONS FOR SCHEDULE 2A

Schedule 2B - Air

Dust Control

(2B1) In the event of a complaint about an environmental nuisance caused by release of dust beyond the boundaries of the licensed place, dust minimisation systems must be installed and operate to the extent that any environmental nuisance is prevented e.g. water sprays, vehicle adherence to restricted speed limits.

(2B2) Notwithstanding any other condition of this environmental authority, no release of contaminants from the licensed place is to cause a noxious or offensive odour beyond the boundaries of the licensed place at any odour sensitive place.

END OF CONDITIONS FOR SCHEDULE 2B

Schedule 2C - Water

Release of Contaminants to Waters

(2C1) The only contaminants permitted to be released from the licensed place at the release point(s) are aquaculture effluents, namely:

(i) treated effluent from the aquaculture grow out ponds;
(ii) treated effluent from the wastewater treatment system(s); and
(iii) treated waste water from the processing of seafood.

Intake Points

(2C2) Water may only be drawn into the aquaculture facility from the intake point(s) described below:

Intake Point I1 - Water from Sandy Creek via inlet drain on Part of Lot 153 on WD 3645, thence via tidal basin and inlet channels on Lot 1 on WD 3691 and Lots 1 and 2 on RP6959 to northeast corner of Lot 459 on WD11 (all in the Parish of Albert) as shown on Plan 1515-98-S and map 1 in Schedule 2K.

Intake Point I2 (for use in emergency situations) - Water from the Brehmer Haven Drain may only be drawn for the purpose of carrying out the environmentally relevant activity from the channel located in the south eastern corner of Lot 276 on WD 130, Parish of Albert. As shown on the untitled map numbered Map 1, submitted by the applicant with the original application for an environmental authority. This intake point may only be used as an emergency backup in the event that water drawn from intake point I1, due to reasons other than release of wastewater from the this facility and the related aquaculture development, would detrimentally affect aquaculture operations.

Release Points

(2C3) The contaminants specified in 2C1 may only be released either directly or indirectly from the licensed place to any waters, at the release point(s) described below:

Release Point W1 Aquaculture effluent from north east corner of Lot 459 on WD11 via settlement ponds and tidal basin on Lots 1 and 2 on RP6959, Lot 1 on WD 3691, thence to Part of Lot 153 on WD 3645 and via drain into Sandy Creek (all lots in the Parish of Albert), as shown on Plan 1517-98-S and Map1 in Schedule 2K.

Release point W2 (for use in emergency situations)
Aquaculture effluent from the wastewater channel located in the south western corner of Lot 276 on WD 130, Parish of Albert, adjacent to Rocky Point Sugar Mill, as shown on the untitled map, numbered Map 1, submitted with the application for an environmental authority. Discharge from this release point is released into the Brehmer Haven Drain that eventually flows into the Logan River. This release point may only be used on in emergency situations on condition that the release does not cause flooding or detrimentally affect other downstream land uses or uses of Brehmer Haven drain waters.

(2C4) The release of contaminants to waters from the outfalls must be carried out in such a manner which does not erode or otherwise disturb marine plants, mangrove vegetation, the banks or bed of the waterway or the habitat in general. The maximum rate of discharge of waste waters containing the contaminants specified in 2C1, from Release Point W1 is $0.30m^3/s$ (either alone or in aggregate with any other aquaculture/seafood processing waste water releases, but excluding any storm water run off not arising from the aquaculture facilities).

Water Quality Release Continual Improvement Plan

(2C5) Notwithstanding the release limits for total nitrogen, the holder must implement all reasonable and practicable measures to reduce the mass load of Total Nitrogen per day released 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 conversion ratios and use of lower protein feeds.

"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".

(2C6) Measures implemented under this continual improvement program must be described and submitted to the administering authority with each annual return or in annual reporting of environmental performance under any relevant environmental management system for the activities that is accredited to the international standard ISO 14000.

(2C7) The Water Quality Release Continual Improvement Report must include the following information for each species cultivated, for the year addressed in the report:

(i) number of hectares stocked;
(ii) stocking rate used;
(iii) survival rate;
(iv) production (kg/ha);
(v) feed conversion ratio;
(vi) proportion of waste water recycled versus discharged;
(vii) comparison of preceding years stocking rate, survival rate, production, feed conversion ration, and waste water recycling rate and the number of hectares stocked with the current year;
(viii) 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 years results;
(ix) 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;
(x) 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, i.e. in cases where net loads are greater than industry benchmarks achieved using best practice environmental management.

(2C8) The requirement for a Water Quality Release Continual Improvement Report does not apply in the case that the environmentally relevant activity is carried out:

(i) by recycling effluent during the whole of the prawn grow out season and the only contaminant releases to waters that occur are overflows 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
(ii) such that concentration limits for total nitrogen and complied with and the average net load of total nitrogen released to waters as calculated under this environmental authority is zero or less.

Quantity of Contaminants Released

(2C9) The total quantity of contaminants released from release point W1 and W2 during any time, alone or in aggregate with other releases from the carrying out of environmentally relevant activities on Lots 1 & 2 on RP6959, Lot 1 on WD3691, lot 2 on WD762 and part of lot 1 on RP6894, must not exceed any of the load limits for each contaminant specified in the following Tables:

(a) For an interim period of three years until the end of the 2004 to 2005 prawn growing season - Schedule 2C Table 1 and thereafter;
(b) Schedule 2C Table 2.

SCHEDULE 2C TABLE 1 – INTERIM RELEASE QUANTITY LIMITS UNTIL END OF 2004/2005 PRAWN GROWING SEASON

CONTAMINANT	RELEASE LOAD LIMIT kg	LIMIT TYPE
Suspended Solids (kg/day)	168 kg/day	Average of daily net loads released over the prawn growing season.
Suspended Solids (kg/year)	35280 kg/annual season	Total of daily net loads released over the annual prawn growing season.
Total Phosphorus (kg/day)	1.4 kg/day	Average of daily net loads released over the prawn growing season.
Total Phosphorus (kg/year)	294 kg/annual season	Total of daily net loads released over the annual prawn growing season.
Total Nitrogen (kg/day)	11.2 kg/day with a desired target of 7 kg/day	Average of daily net loads released over the prawn growing season.
Total Nitrogen (kg/year)	2352 kg/annual season with a desired target of 1470 kg/annual season	Total of daily net loads released over the annual prawn growing season.

Notes to Schedule 2C Table 1.

- *Average of daily net loads as calculated under the load calculation conditions in schedule 2H.*
- *Total of daily net loads released over the annual prawn growing season means the sum of the daily loads, as calculated under the load calculation conditions in schedule 2H and definitions in schedule 2I, over the annual prawn growing season.*
- *Schedule 2C Table 1 ceases to have force and effect after the 2004/2005 prawn growing season. Upon expiry of this Table, Schedule 2C Table 2 applies.*
- *Desired target means the standard that all reasonable and practicable measures must be undertaken to meet. If the target is not met in these circumstances, this does not constitute non-compliance. The release load limit still applies.*
- *These loads are calculated on the basis of the historical grow out pond area of 14 hectares. Any expansion within this time frame may utilise these loads as a commissioning limit until Schedule 2C Table 2 applies.*

SCHEDULE 2C TABLE 2 – FINAL RELEASE QUANTITY LIMITS

CONTAMINANT	RELEASE LOAD LIMIT kg	LIMIT TYPE
Suspended Solids (kg/day)	168 kg/day	Average of daily net loads released over the prawn growing season.
Suspended Solids (kg/year)	35280 kg/annual season	Total of daily net loads released over the annual prawn growing season.
Total Phosphorus (kg/day)	1.4 kg/day	Average of daily net loads released over the prawn growing season.
Total Phosphorus (kg/year)	294 kg/annual season	Total of daily net loads released over the annual prawn growing season.
Total Nitrogen (kg/day)	7 kg/day	Average of daily net loads released over the prawn growing season.
Total Nitrogen (kg/year)	1470 kg/annual season	Total of daily net loads released over the annual prawn growing season.

Notes to Schedule 2C Table 2.

- *Average of daily net loads as calculated under the load calculation conditions in schedule 2H.*
- *Total of daily net loads released over the annual prawn growing season means the sum of the daily loads, as calculated under the load calculation conditions in schedule 2H and definitions in schedule 2I, over the annual prawn growing season.*
- *These loads are calculated on the basis of the historical grow out pond area of 14 hectares. Any expansion must meet these total nitrogen loads.*

(2C10) The release of contaminants to waters must comply, at the sampling and in flow monitoring point(s) specified in condition 2H12, with each of the limits specified in Schedule 2C, Table 3 for each quality characteristic. These limits apply to releases that arise from carrying out environmentally relevant activities at the licensed place and also any aggregate releases from elsewhere.

SCHEDULE 2C TABLE 3 - RELEASE QUALITY CHARACTERISTIC LIMITS

QUALITY CHARACTERISTICS	RELEASE POINT NUMBER	RELEASE LIMITS	LIMIT TYPE
pH. (pH Units)	W1, W2	6.5 - 9	Range
Dissolved Oxygen. (mg/L)	W1, W2	4.0 or 90% of background value, which ever is greater	Minimum
Suspended Solids. (mg/L)	W1, W2	30	Average over prawn growing season.
Suspended Solids. (mg/L)	W1, W2	50	Maximum
Total Nitrogen (mg/L)	W1, W2	3 plus ambient Total Nitrogen (mg/L)	Maximum
Total Phosphorus. (mg/L)	W1, W2	0.3 plus ambient Total Phosphorus (mg/L)	Maximum
Free Chlorine Residual (mg/L)	W1, W2	0.01	Maximum

Notes to Schedule 2C Table 3

- *Dissolved oxygen measurements must be taken at the discharge and intake sample points within one hour of each other on the same day to determine 90% of background.*

- *Ambient 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 mentioned in schedule 2H of this part. As an alternative, whilst in-taking, the holder may elect in writing to utilise inlet water quality monitoring data taken that same day, provided that it is demonstrably representative of ambient receiving water quality and administering authority agrees to such in writing.*

(2C11) The release of contaminants to waters (either alone or in aggregate with other releases mentioned above) must comply with the following qualitative characteristics:

(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.
(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.

Pond Conditions

(2C12) 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.

Times of Release

(2C13) The release of wastewaters containing the contaminants specified in condition 2C1, from release point W1, described in condition 2C4, to waters is only permitted 30 minutes after local high water until two (2) hours before local low water.

Penaeid Prawn Cultivation

(2C14) Excluding any contaminant releases for the sole purpose of maintaining during the non-grow out season, a stock of organisms to effect biological treatment of waste waters, 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 (excluding *Penaeus japonicus)* grow out ponds is permitted between 14 June and 1 November in any year.

END OF CONDITIONS FOR SCHEDULE 2C

Schedule 2D - Storm water Management

Spillage Control

(2D1) Any spillage of wastes, contaminants or other materials must be cleaned up as quickly as practicable. Such spillage must not be cleaned up by hosing, sweeping or otherwise releasing such wastes, contaminants or material to any external storm water drainage system, roadside gutter or waters.

Storage of Chemicals and Fuels

(2D2) Any liquids stored on site that may cause environmental harm, including all chemicals, and fuels must be stored in an effective on-site containment system (including base and walls) that is impervious to the materials stored and sized to contain at least:

- 110% of the tank's volume if a single tank storage;
- 100% of the largest storage tank plus 10% of the second largest tank if a multiple tank storage; or
- at least 25% of the maximum design storage volume if a drum storage.

(2D3) All containment systems must be roofed where practicable.

(2D4) Where it is impractical to completely roof a containment system area the holder of this environmental authority must ensure that any storm water captured within the bund is free from contaminants or wastes prior to any release.

(2D5) All un-washed empty drums must be stored on a concrete hardstand area with their closures in place.

(2D6) 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 external storm water drain, land or waters.

Contaminant Releases Caused by Rainfall

(2D7) Diversion drains, appropriate grades or equivalent must be installed to ensure surface waters from disturbed areas, including operational or trafficable areas and pond walls, are diverted to either the wastewater treatment system or grow out ponds.

(2D8) Drainage through and from all trafficable areas and production activities must be designed to minimise surface flow velocities.

Pond Sludge Conditioning areas

(2D9) Diversion drains, appropriate grades or equivalent must be installed to ensure that runoff from pond sludge conditioning areas, areas containing pond sludge (including areas where pond sludge has been used as fill), and any leachate derived from these areas must be diverted to either grow out ponds or the wastewater treatment system.

Acid Sulfate Soil Management

(2D10) At least twenty-eight days prior to the commencement of disturbing, extracting or unearthing or drain maintenance of any soils below 5 metres AHD for the purposes of carrying out the environmentally relevant activities, an Acid Sulfate Soil Investigation must be completed and an Acid Sulfate Soil Investigation Report on this investigation provided to the administering authority.

(2D11) The Acid Sulfate Soil Investigation report must provide information relating to the extent of any acid sulfate soils potentially affected or disturbed by the activities, any if any such soils are detected, the proposed management procedures, which must provides for the effective and appropriate environmental management of the Acid Sulfate Soils.

(2D12) Acid sulfate soil investigations and tests are to be carried out in the manner prescribed in the "Instructions for the Treatment and Management of Acid Sulfate Soils 2001".

(2D13) The management of the acid sulfate soils must:

(i) comply with "Instructions for the Treatment and Management of Acid Sulfate Soils 2001"; and
(ii) be such that contaminants are not be directly or indirectly released, as a result of the activity, to any waters or the bed and banks of any waters.

(2D14) Records must be kept of the results of all testing of acid sulfate material for at least the following details:
(i) date soil sample collected;
(ii) location of soil sample;
(iii) laboratory where soil sample analysis undertaken; and
(iv) results of soil sample analysis.

(2D15) Receiving waters must not be used as a neutralisation agent for the treatment of acid sulfate soils or low pH waters.

Erosion Protection Measures and Sediment Controls

(2D16) Prior to any site clearing or construction, erosion protection measures and sediment controls must be installed and thence maintained to effectively minimise any likelihood of erosion and release of sediments from the premises during all site clearing, construction and operation. Procedures must be implemented to check and, if necessary, repair or replace the erosion control and sediment control structures after each rain event likely to adversely affect the efficiency of those structures.

(2D17) The erosion control and sediment control structures must operate to prevent any material loss of sediment from the premises to any storm water drain, roadside gutter or waters and limit quality of storm water runoff to less than 50 mg/L suspended solids.

END OF CONDITIONS FOR SCHEDULE 2D

Schedule 2E - Land Application

Release of Contaminants to Land

(2E1) 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.

END OF CONDITIONS FOR SCHEDULE 2E

Schedule 2F - Noise

Emission of Noise

(2F1) In the event of a complaint about noise that constitutes unreasonable intrusive noise being made to the administering authority, that the administering authority considers is not frivolous or vexatious, then the emission of noise from the licensed place must not result in levels greater than those specified in Table 1 of the Noise Schedule.

SCHEDULE F TABLE 1

NOISE LIMITS AT A NOISE SENSITIVE PLACE	
Period	***Noise Level at a Noise Sensitive Place Measured as the Adjusted Maximum Sound Pressure Level*** $L_{Amax\ adj,\ T}$
7 am - 6 pm	Background noise level plus 5 dB(A)
6 pm - 10 pm	Background noise level plus 5 dB(A)
10 pm - 7 am	Background noise level plus 3 dB(A)
NOISE LIMITS AT A COMMERCIAL PLACE	
Period	***Noise Level at a Commercial Place measured as the Adjusted Maximum Sound Pressure Level*** $L_{Amax\ adj,\ T}$
7 am - 6 pm	Background noise level plus 10 dB(A)
6 pm - 10 pm	Background noise level plus 10 dB(A)
10 pm - 7 am	Background noise level plus 8 dB(A)

(2F2) The use of noise generating equipment such as scare guns or firearms must not cause unreasonable intrusive noise at any noise sensitive or commercial place.

END OF CONDITIONS FOR SCHEDULE 2F

Schedule 2G - Waste Management

General

(2G1) The holder of this environmental authority must not:

(i) burn waste at or on the licensed place; nor
(ii) allow waste to burn or be burnt at or on the licensed place; nor
(iii) remove waste from the licensed place and burn such waste elsewhere.

(2G2) Waste must not be released to the environment, stored, transferred or disposed of contrary to any condition of this environmental authority.

On Site Disposal

(2G3) The holder of this environmental authority must keep and maintain records for all waste disposed of on the premises, including aquaculture pond sludge other than that sludge which is used in the maintenance of ponds. The records must include the following information:

(a) date of disposal of the material;
(b) description of the material;
(c) quantity of the material;
(b) the location where the material is disposed; and
(c) the method used to dispose the material.

Off Site Movement

(2G4) The holder of this environmental authority must keep and maintain permanent records for every load of regulated waste and aquaculture pond sludge transported off the premises. The records must include the following information:

(a) date of transport;
(b) description of waste;
(c) quantity of waste;
(d) destination of any aquaculture pond sludge, including the owner of the property/land on which the sludge is disposed; and
(e) the purpose or proposed use of the sludge.

END OF CONDITIONS FOR SCHEDULE 2G

Schedule 2H - Self Monitoring And Reporting

Complaint Recording

(2H1) All complaints received by the holder of this environmental authority relating to operations at the licensed place must be recorded in a log book 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; and
(vi) action taken as a result of the complaint investigation and signature of responsible person.

Monitoring of Waters

(2H2) All determinations of all quality of waters must be made in accordance with methods prescribed in the Environmental Protection Agency's Water Quality Sampling Manual, 3rd Edition, December 1999, or more recent editions or supplements to that document as such become available.

(2H3) All determinations of the quality of waters must be performed by a person or body possessing appropriate experience and qualifications to perform the required measurements.

(2H4) For the purposes of this licence any determination or result recorded as less than the limit of detection is taken as at the limit of detection for that particular determination method.

Monitoring of Volume of Intake and Release to Waters

(2H5) The holder of this environmental authority 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(s) specified in condition 2C2.

(2H6) The holder of this environmental authority is responsible for ensuring the determination and keeping of records of the total daily volume of water released for the release point(s) specified in condition 2C3.

Monitoring of Quality of Intake and Release to Waters

(2H7) Monitoring the quality of water drawn into the prawn farm must be limited to samples taken on the incoming tide at a time within two hours of local high water when the intake pumps are operating.

(2H8) Samples of intake water quality and release quality must be taken at the discharge and intake sampling points on the same day.

(2H9) Monitoring 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.

(2H10) The holder of this environmental authority is responsible for the making of determinations of the quality the contaminants released at the release point described in 2C3, for the quality characteristics, at the sample points described in condition 2H12, and at the frequency specified in Schedule 2H Table 1.

Schedule 2H - Table 1 Release Quality Characteristics

QUALITY CHARACTERISTIC DETERMINATION	SAMPLING METHOD	SAMPLE AND INFLOW MONITORING POINTS	FREQUENCY
Suspended Solids. (mg/L)	Grab Sample	SW2 and *SW4	In the first and third week of each month whilst discharging.
pH.	In flow sample	SW2 and *SW4	Weekly whilst discharging.
Free Chlorine Residual (mg/L)	Grab Sample	SW2 and *SW4	Applies only if chlorine is used. Daily, whilst discharging chlorinated wastewaters.
Dissolved Oxygen. (mg/L)	Inflow sample	SW2 and *SW4	Weekly whilst discharging.
Total Nitrogen as N, as the sum of Organic Nitrogen, Ammonia Nitrogen, Nitrite plus Nitrate Nitrogen. (mg/L)	Grab Sample	SW2 and *SW4	In the first and third week of each month whilst discharging.
Total Phosphorus as P. (mg/L)	Grab Sample	SW2 and *SW4	In the first and third week of each month whilst discharging.

*** Note: Sampling and monitoring of SW4 applies only in the event that this emergency release is used.**

(2H11) The holder of this environmental authority is responsible for the making of determinations of the quality of the waters drawn into the prawn farm at the intake sampling point(s) SW1 for the quality characteristics in Schedule 2H Table 2. In relation to suspended solids, total nitrogen and total phosphorus, this condition applies subject to condition 2H13.

Schedule 2H – Table 2 – Intake Quality Characteristics

QUALITY CHARACTERISTICS	SAMPLING METHOD	INTAKE MONITORING POINT NUMBER	FREQUENCY
pH. (pH Units)	In flow sample	SW1, SW3*	Weekly whilst discharging
Dissolved Oxygen. (mg/L)	In flow sample	SW1, SW3*	Weekly whilst discharging
Suspended Solids (mg/L)	Grab sample	SW1, SW3*	In the first and third week of each month whilst in taking
Total Nitrogen (mg/L)	Grab sample	SW1, SW3*	In the first and third week of each month whilst in taking
Total Phosphorus. (mg/L)	Grab sample	SW1, SW3*	In the first week and third of each month whilst in taking

*** Note: Sampling and monitoring of SW3 applies only in the event that this emergency intake is used.**

Sampling and In flow Monitoring Point Details

(2H12) Determinations of the quality of contaminants released to waters to check compliance with the release characteristics and loads specified in schedule C of this environmental authority must be undertaken at the sampling and in flow monitoring point(s) described as:

To be used when in-taking from Sandy Creek via intake I1

SW1
Samples are to be taken during intake from Sandy Creek from a position representative of waters drawn into the facility prior to entry into the inlet structure, as shown on plan 1517-98-S & Map 1 in Schedule 2K

To be used when releasing effluent via Sandy Creek via release point W1

SW2
Samples are to be taken during discharge to Sandy Creek from the outlet of the final settlement pond that flows into Sandy Creek, prior to mixing in tidal drain, as shown on Plan 1517-98-S & Map 1 in Schedule 2K.

To be used when in-taking from Brehmer Haven Drainage Channel via intake I2 (emergency release point)

SW3
Samples are to be taken from the middles of the intake channel, located in the south-eastern corner of Lot 276 on WD 130, Parish of Albert. As shown on the untitled map numbered Map 1, submitted by the applicant with the original application for an environmental authority.

To be used when releasing via Brehmer Haven Drainage Channel via release point W2 (emergency release point)

SW4
Samples are to be taken from the middle of the wastewater channel located in the south western corner of Lot 276 on WD 130, Parish of Albert, as shown on the untitled map, numbered Map 1, submitted by the applicant with the original application for an environmental authority.

(2H13) The data to be used in calculating net loads of total nitrogen, total phosphorus and suspended solids is the corresponding median result listed below from long term ambient water quality monitoring conducted at Environmental Protection Agency site "SMB-m" in the Logan River near the facility unless the holder:

(a) in accordance with the conditions of this authority, 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 Schedule H Table 2. or;

(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 & New Zealand Environment & Conservation Council's "Australian Water Quality Guidelines for Fresh and Marine Waters", December 2000 to incorporate an amendment of the relevant values specified in this environmental authority and such amendment is made.

Calculation of the loads of total nitrogen, total phosphorus and total suspended solids released to waters

(2H14) The daily net load (in kilograms) of the contaminants total nitrogen, total phosphorus and suspended solids released to waters per day shall be determined or calculated and records kept of such determinations or calculations.

(2H15) 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 wastewater contaminant concentration (in milligrams per litre) 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 tabulated hereunder. If the holder elects to monitor inlet water quality in accordance with the option in condition H13, "intake conc." is the contaminant concentration (in milligrams per litre) measured that day or on the most recent sampling occasion if not measured that day.
Dis. Vol. = the volume (in megalitres) of wastewater discharged that day.

Quality Characteristic	Intake Water Concentration* (mg/L)
Suspended Solids	5 mg/L
Total Nitrogen	0.2 mg/L
Total Phosphorus	0.04 mg/L

* As calculated from long-term median results obtained from EPA ambient water quality monitoring conducted at Environmental Protection Agency site "SMB-m" in southern Moreton Bay near the facility

(2H16) From the calculations of daily loads, calculations must be made and records kept of the following:

for suspended solids, total nitrogen and total phosphorus:

(a) average of daily net loads released over the annual prawn growing season;
(b) total of daily net loads released per month;
(c) total of daily net loads released over the annual prawn growing season.

(H217) Records must be kept of all data used to calculate mass loads, including volumes of waste water released, dates releases occur, discharge water quality and intake water quality.

Receiving Environment Monitoring Program

(2H18) The holder must implement a Receiving Environment Monitoring Program (REMP) to gauge the extent of the initial mixing zone and monitor the effects of 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).

"Receiving environment" for the purpose of the Receiving Environment Monitoring Program means the Southern Moreton Bay opposite and in the vicinity where contaminant releases occur.

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.

(2H19) The REMP must include monitoring of:

(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
(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.

(2H20) For the purposes of ensuring usefulness and comparison with other waterway results, sampling protocols such as position in river, depth and state of tide must comply with those followed in Regional programs that monitor southeast Queensland waterways.

(2H21) All determinations of the quality of waters under the REMP must be made in accordance with methods prescribed in the Environmental Protection Agency's Water quality Sampling Manual, 3rd Edition, December 1999, or more recent editions or supplements to that document as such become available.

(2H22) All determination of the quality of waters and bio-indicators must be performed by a person or body possessing appropriate experience and qualifications to perform the required determinations.

(2H23) Records must be kept of the results of all determinations and monitoring carried out under the REMP for a period of at least 5 years.

(2H24) 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.

(2H25) The report on the receiving environment monitoring program (REMP) must address at least the following:

(i) a detailed description of the methodology used in the REMP; and
(ii) a detailed description and analysis of the results of the REMP; and
(iii) an assessment of the quality of waters monitored and whether relevant environmental indicator values are complied with or exceeded; and
(iv) an assessment of the estimated spatial impact of contaminant release upon the receiving environment based upon monitoring of bio-indicators; and
(v) 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 the receiving environment.

(2H26) 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 under this schedule and in calculating discharge limits for total nitrogen and total phosphorus under schedule 2C Table 3. Samples taken from inlet works not complying with the REMP monitoring protocols are not equivalent for REMP monitoring.

Involvement in Regional Monitoring Studies Constitutes Compliance

(2H27) As an alternative to carrying out the Receiving Environment Monitoring Program specified in this schedule (excluding contingency monitoring specified in the event of a major disease outbreak or quarantine issue), the holder may become and remain a "participating member" in the following regional water quality and ecosystem health monitoring studies, or any equivalent studies:

(i) the Southeast Queensland Regional Water Quality Management Strategy; and
(ii) the Ecosystem Heath Monitoring Program

(2H28) The holder is deemed by the administering authority to be a "participating member" in regional studies in the following situations:

(a) The holder is a 'contributing member', to the regional studies of water quality and ecosystem health; and
(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
(c) The holder continues to be a 'contributing member', of such regional studies.

"Contributing member" means that the holder contributes towards the reasonable cost of environmental monitoring studies undertaken relevant to potential impacts of the environmentally relevant activities whereby the amount is agreed to between the holder and the authority carrying out the regional studies. For example, the formula used in determining reasonable cost may take into account the number of grow out ponds stocked and whether or not the farms fully recycle effluent throughout the grow out season.

Chemical usage

(2H29) 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 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 receival waters (e.g. grow out pond or wastewater treatment pond) and the date of the next water release after the chemicals have been added.

Noise Monitoring

(2H30) For the purposes of checking compliance with condition F1 and for investigation of any complaint of unreasonable intrusive noise, monitoring and recording of the noise levels from the activities must be undertaken for the following descriptors, characteristics and conditions:

(i) $L_{Amax, Adj\ T}$;
(ii) $L_{Abg, T}$ or $L_{A90, T}$;
(iii) $L_{AN, T}$ (where N equals statistical levels of 1, 10, 50, 90 and 99);
(iv) Max $L_{pA\ T}$;
(v) $L_{Aeq, T}$;
(vi) The level and frequency of occurrence of impulsive or tonal noise;
(vii) Atmospheric conditions including temperature, relative humidity and wind speed and direction; and
(viii) Effects due to extraneous factors such as traffic noise.

(2H31) In the event of a complaint about noise that constitutes unreasonable intrusive noise being made to the administering authority that the administering authority considers is not frivolous or vexatious, the holder of this development approval must undertake monitoring to investigate such a complaint upon written request from the administering authority.

(2H32) The method of measurement and reporting of noise levels must comply with the Department of Environment and Heritage Noise Measurement Manual, Third Edition, 1 March 2000, or more recent editions or supplements to that document as become available.

(2H33) The measurement and reporting of noise levels must be undertaken by a person or body possessing appropriate experience and qualifications to perform the required measurements.

Report Submission

(2H34) The holder of this development approval must ensure that the results of all monitoring performed in accordance with this development approval are submitted with the initial Annual Return. Each subsequent Annual Return must include details of the results of monitoring performed during the 12 months preceding that Annual Return.

Notification of Emergencies and Incidents

(2H35) 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 development approval, the holder of this development approval must notify the administering authority of the release by telephone or facsimile.

(2H36) The notification of emergencies or incidents as required by condition 2H35 must include but not be limited to the following:

(i) the holder of the development approval;
(ii) the location of the emergency or incident;
(iii) the number of the development approval;
(iv) the name and telephone number of the designated contact person;
(v) the time of the release;
(vi) the time the holder of the development approval became aware of the release;
(vii) the suspected cause of the release;
(viii) the environmental harm caused, threatened, or suspected to be caused by the release; and
(ix) actions taken to prevent further any release and mitigate any environmental harm caused by the release.

NOTE: Any relevant notification given under Section 320 or Section 350 of the Act that contains the information specified in condition 2H36 is also notification under Condition 2H35.

(2H37) Not more than fourteen (14) days following the initial notification of an emergency or incident, the holder of the development approval must provide written advice of the information supplied in accordance with condition 2H36 in addition to:

(i) proposed actions to prevent a recurrence of the emergency or incident; and
(ii) outcomes of actions taken at the time to prevent or minimise environmental harm and or environmental nuisance.

Exception Reporting

(2H38) The holder of this development approval must notify the administering authority within twenty-eight (28) days of completion of analysis of any result of a monitoring program required by a condition of this development approval which indicates an exceedance of any limit specified in this development approval.

(2H39) The written notification required by condition 2H38 above must include:

(i) the full analysis results;
(ii) details of investigation or corrective actions taken; and
(iii) any subsequent analysis.

NOTE: Any relevant notification given under Section 320 or Section 350 of the Act that contains the information specified in condition 2H39 is also notification under Condition 2H38.

(2H40) The holder of this development approval must ensure that the results of all monitoring performed in accordance with this development approval for the period covered by the return are submitted with the Annual Return.

END OF CONDITIONS FOR SCHEDULE 2H

Schedule 2I - Definitions

For the purposes of this environmental authority the following definitions apply:

(2I1) **"Act"** means the *Environmental Protection Act 1994*.

(2I2) "**administering authority**" means the Environmental Protection Agency or its successor.

(2I3) **"AHD"** means Australian Height Datum, which has been adopted by the National Mapping Council as the datum to which all vertical control for mapping is to be referenced.

(2I4) "**aquaculture sludge**" means the solids or sludges which accumulate or deposit on the bottom of a pond as a result of propagation of prawns.

(2I5) "**land**" means land excluding waters and the atmosphere.

(2I6) "**composite sample**" means a sample consisting of equal volumes of individual samples collected under the conditions specified in the licence which are sent to the laboratory for analysis as one sample.

(2I7) "**disease**" means a disease or notifiable event that is listed on a Declared Disease List prepared by the Department of Primary Industries under the *Fisheries Act 1994*.

(2I8) "**in flow sample**" means an instantaneous readout from an electronic probe immersed in the flow of liquid, at a location that is representative of the characteristics of the flow.

(2I9) "**grab sample**" means a single instantaneous sample which is collected in a manner that ensures that it is a representative sample.

(2I10) "**mg/L**" means milligrams per litre.

(2I11) "**maximum**" means that the measured value of the quality characteristic or contaminant must not be greater than the release limit stated.

(2I12) "**minimum**" means that the measured value of the quality characteristic or contaminant must not be less than the release limit stated.

(2I13) "**range**" means that the measured value of the quality characteristic or contaminant must not be greater than the higher release limit stated nor lower than the lower release limit stated.

(2I14) "**The holder**" means the holder of this environmental authority.

(2I15) **"total Nitrogen"** means the sum of Organic Nitrogen, Ammonia, Nitrite plus Nitrate, as mg/L of Nitrogen.

(2I16) "**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.

(2I17) "**Average of daily net loads released over the prawn growing season**" means the arithmetic average of the daily net loads of total nitrogen released per day, where the daily net loads are calculated in accordance with the load calculation conditions of schedule H and the averaging period commences on the first day on which grow out pond waste water is released and continues until the last day of the growing season on which waste water is released, for example, drainage of the last grow out pond holding water. In addition, the growing season for the purpose of this calculation commences no earlier than 1 November each year and continues until no later than 14 June the following calendar year.

(2I18) "**Total of daily net loads released over the prawn growing season**" means the sum of the daily net loads of total nitrogen released per day, where the daily net loads are calculated in accordance with the load calculation conditions of schedule H commencing from the first day on which grow out pond waste water is released and continuing until the last day on which waste water is released, for example, drainage of the last grow out pond holding water.

(2I19) "**Development Condition**" has the meaning given the term in the *Environmental Protection Act 1994*.

(2I20) "**Average over prawn growing season**" means the arithmetic average of water quality results obtained for monitoring of the quality characteristic, where the monitoring is undertaken at approximately equal time intervals, for example fortnightly, and the averaging period commences on the first day on which grow out pond waste water is released and continues until the last day of the growing season on which waste water is released, for example, drainage of the last grow out pond holding water.

(2I22) "**Environmental Code of Practice for Australian Prawn Farmers**" means the "Environmental Code of Practice for Australian Prawn Farmers, September 2001" produced by the Australian Prawn Farmers Association or more recent editions or supplements to that document as such become available.

(2I23) "**grow out pond**" means a pond, tank, enclosure or other container for the feeding and growing of aquaculture species.

(2I24) **"waters"** includes the bed and/or banks of any water(s), storm water runoff and any part of a river, stream, lake, lagoon, pond, dam, swamp, wetland, unconfined surface water, underground water, unconfined water, natural or artificial watercourse, non tidal or tidal waters (including the sea), storm water channel, storm water drain, roadside gutter.

(2I25) "**watercourse**" includes land on which rainwater or storm water runoff concentrates and land on or over which rainwater or storm water runoff usually or occasionally flows in concentration in a defined channel, whether

(a) a natural channel;

(b) a natural channel artificially improved; or

(c) an artificial channel that has changed the course of a natural channel:

The term does not include a closed conduit conveying storm water.

Acid Sulphate Soils definitions

(2I26) "**acid sulphate soil**" means a soil, sand, mud or clay containing significant levels of pyrite (iron sulphide), which on exposure to oxidising conditions has resulted in or has the capacity to result in the generation of sulphuric acid in quantities greater than the inherent buffer capacity of the soil.

(2I27) "**soil**" means sand, silt, mud, clay, or gravel material and for the purposes of this licence does not include aquaculture pond sludge.

(2I28) "**Instructions for the Treatment and Management of Acid Sulfate Soils 2001**" means the document "Instructions for the Treatment and Management of Acid Sulfate Soils 2001", produced by the Queensland Environmental Protection Agency in consultation with the Department of Natural Resources and Mines and the Department of Primary Industries, or more recent additions or supplements to that document as such become available

Noise Definitions

(2I29) "$L_{Amax\ adj,\ T}$" 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.

(2I30) "**background noise level**" means either:

$L_{A90,\ T}$ being the A-weighted sound pressure level exceeded for 90 percent of the time period 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.

(2I31) "**Max$L_{pA\ T}$**" means the absolute maximum instantaneous A-weighted sound pressure level measured over a time period of not less than 15 minutes, using Fast response.

(2I32) "**noise sensitive place**" means -

(a) a dwelling, 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; or
(f) a park or gardens.

(2I33) **"intrusive noise"** means noise that, because of its frequency, duration, level, tonal characteristics, impulsiveness or vibration -

(a) is clearly audible to, or can be felt by, an individual; and
(b) annoys the individual.

In determining whether a noise annoys an individual, regard must be had to *Australian Standard 1055.2 - 1989 Acoustics - Description and Measurement of Environmental Noise Part 2 Application to Specific Situations*.

(2I34) "**commercial place**" means a place used as an office or for business or commercial purposes.

(2I35) "**protected area**" means -

(a) a protected area under the Nature Conservation Act 1992; or
(b) a marine park under the Marine Parks Act 1982; or
(c) a World Heritage Area.

Dust and Odour definitions

(2I36) "**noxious**" means harmful or injurious to health or physical well-being.

(2I37) "**offensive**" means causing offence or displeasure; is disagreeable to the sense; disgusting, nauseous or repulsive.

(2I38) **"odour sensitive place"** means—

- a dwelling, mobile home or caravan park, residential marina or other residential place;
- a motel, hotel or hostel;
- a kindergarten, school, university or other educational institution;
- a medical centre or hospital;
- a protected area;
- a park or gardens; or
- a place used as an office or for business or commercial purposes.

and includes the curtilage of any such place.

END OF CONDITIONS FOR SCHEDULE 2I

SCHEDULE 2J - DISEASE MANAGEMENT

Pond Conditions

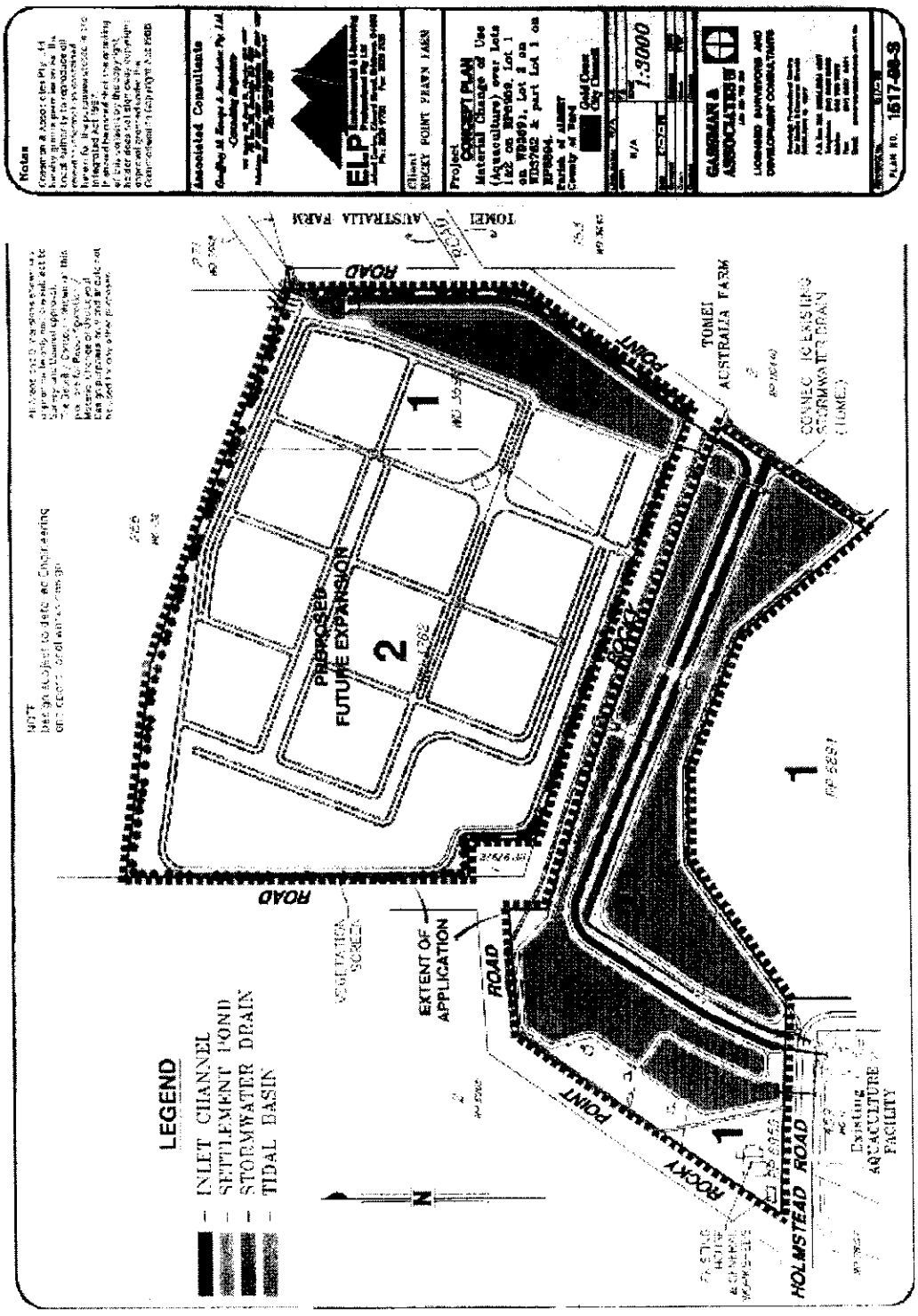
(2J1) The holder of this environmental authority must notify the administering authority of any declared disease or unexplained mortality outbreak requiring treatment and possible drainage of pond contents.

(2J2) Disposal of any diseased organisms as specified in condition 2J1 or water which has come into contact with diseased organisms must only be undertaken with the prior agreement of the Administering Authority.

END OF CONDITIONS FOR SCHEDULE 2J

Schedule 2K - Site Plans

Plan 1517-98-S showing inflow of water and treatment/release pathway of effluent from north east corner of Lot 459 on WD11 via Lots 1 and 2 on RP6959, Lot 1 on WD 3691, Part of Lot 153 on WD 3645 to Sandy Creek



Map 1, submitted by the applicant with the original application for an environmental authority showing pre-existing grow out ponds and location of area for proposed new ponds.



Existing Site Layout **Figure 1.2**

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END OF CONDITIONS FOR SCHEDULE 2K

END OF PART 2

END OF INTEGRATED AUTHORITY