

Permit¹

Environmental Protection Act 1994

Environmental authority

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

Permit¹ number: EPPR00497013

Environmental authority takes effect on 27-AUG-2014.

The anniversary date of this environmental authority remains 28 April.

An annual return and the payment of the annual fee will be due each year on this day.

Environmental authority holder(s)

Name	Registered address
Fortune Island Holding Company Limited	15F Kingdom Power Commercial Building 32-36 Des Voeux Road West, HONG KONG

Environmentally relevant activity and location details

Environmentally relevant activity(ies)	Location(s)
63-(1a)(i) Sewage treatment >21 to 100EP - IT or IR	Double Island - STP - Lot 19 Plan NR4445

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.

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,

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



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

27/082014

Date

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

Enquiries:

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 include

Schedule of conditions

The aforementioned description of the ERA for which this authority is issued is simply a restatement of the activity as prescribed in the legislation at the time of issuing the authority. Where there is any conflict between the above description of the ERA 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, then such conditions prevail to the extent of the inconsistency.

This licence incorporates the following schedules of conditions relevant to various issues:

- Schedule A - General conditions
- Schedule B - Air
- Schedule C - Water
- Schedule D - Stormwater management
- Schedule E - Land application
- Schedule F - Noise
- Schedule G - Waste management
- Schedule H - Self monitoring and reporting
- Schedule I - Definitions
- Schedule J - Site plans

Schedule A - General conditions

The following conditions are prescribed:

Access to Copy of Environmental Authority

- (A1) A copy of this environmental authority must be kept in a location readily accessible to personnel carrying out the activity.

Records

- (A2) Any record or document required to be kept by a condition of this environmental authority must be kept at the licensed place for a period of at least five (5) years and be available for examination by an authorised person. For daily and weekly records, the record retention requirements of this condition will be satisfied if any daily and weekly records are kept for a period of at least three (3) years and these records are then kept in the form of annual summaries after that period.

Alterations

- (A3) 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.

Monitoring and Measurements

- (A4) All determinations of the quality of contaminants released to the environment that are required by this environmental authority must be undertaken by a person or body possessing appropriate experience and qualifications to perform the required determinations and the required measurements.
- (A5) All instruments and devices used for the measurement or monitoring of any parameter under any condition of this environmental authority must be calibrated, and appropriately operated and maintained.

Site-Based Management Plan

- (A6) The holder of this environmental authority must ensure that the sewage treatment plant is operated in accordance with the Site-Based Management Plan submitted to the administering authority on the 17 March 2000.

END OF CONDITIONS FOR SCHEDULE A

Schedule B - Air

The following conditions are prescribed:

- (B1) In the event of a complaint made to the administering authority (which is neither frivolous or vexatious) about odour generated on the licensed place, and the odour is considered by the administering authority to be an unreasonable release, the holder of this environmental authority must take action to mitigate the odour to ensure that it is no longer an unreasonable release.

END OF CONDITIONS FOR SCHEDULE B

Schedule C - Water

The following conditions are prescribed:

- (C1) The environmentally relevant activity must be carried out in a manner that prevents:
- (a) the contact of incident rainfall and stormwater runoff with sewage sludge or grease trap wastes; and
 - (b) the release of any stormwater contaminated by sewage effluent, sewage sludge or grease trap wastes to any stormwater drain or waters or the bed or banks of any such waters.

END OF CONDITIONS FOR SCHEDULE C

Schedule D - Stormwater management

The following conditions are prescribed:

- (D1) Any spillage during pumping out of sewage sludge or grease trap wastes must be cleaned up as quickly as practicable and by the use of appropriate methods to prevent such spills from contaminating stormwater or groundwater.

END OF CONDITIONS FOR SCHEDULE D

Schedule E - Land application

The following conditions are prescribed:

Effluent Generation Rate

- (E1) The total quantity of effluent released from the sewage treatment plant on the licensed place to either the effluent irrigation area or the wet weather storage tanks during any day must not exceed fifteen (15) cubic metres.

Irrigation of Treated Sewage Effluent to Land

- (E2) The holder of this environmental authority must not discharge any treated sewage effluent to land other than to an effluent irrigation area consisting of properly constructed and maintained garden beds on the licensed place.

- (E3) The irrigation of treated sewage effluent to land must be carried out in a manner so as to ensure that:
- (a) runoff to surface waters does not occur;
 - (b) vegetation is not damaged;
 - (c) soil erosion and soil structure damage is minimised;
 - (d) there is no surface ponding of effluent;
 - (e) there is no spray drift or overspray or effluent runoff outside the effluent irrigation area approved under this Schedule;
 - (f) the effluent is evenly distributed on the irrigation area;
 - (g) the infiltration of effluent beyond the plant root zone is minimised by the use of soil moisture probes; and
 - (h) the risk of exposure of resort guests to pathogens in treated sewage effluent is minimised by such means as:
 - (i) selection of irrigators with low exposure risk;
 - (ii) appropriate timing of irrigation; and
 - (iii) restriction of access to areas either being irrigated or that are freshly irrigated.
- (E4) Notices must be prominently displayed on any treated sewage effluent irrigation area on the licensed place warning the public that the area is irrigated with treated sewage effluent and not to use or drink the wastewater. These notices must be maintained in a visible and legible condition.

Quality Characteristics of Release to Land

- (E5) The release of contaminants to the effluent irrigation system must comply, at the sampling and in situ monitoring point/s specified in condition number (E7), with each of the limits specified in Schedule E - Table 1 for each quality characteristic.

Schedule E - Table 1

QUALITY CHARACTERISTIC	RELEASE LIMIT	LIMIT TYPE
5-Day Biochemical Oxygen Demand (mg/L)	20 60	50th percentile maximum
Suspended Solids (mg/L)	30 90	50th percentile maximum
Faecal Coliforms (Organisms/100 ml)	150 600	median ⁽¹⁾ 80th percentile ⁽²⁾
Total Phosphorus (mg/L)	12 24	80th percentile maximum
Total Nitrogen (mg/L)	25 50	80th percentile maximum
pH Units	6.5 - 8.5	range

- Notes: (1) Median must be based on the results of at least five (5) consecutive samples, individual samples may be collected at intervals of not less than thirty (30) minutes for the purpose of measuring licence compliance. However, the minimum frequency of testing required to be carried out by the holder of this environmental authority is not less frequently than quarterly.
- (2) "80th percentile" for this quality characteristic means that the measured values of the quality characteristic must not be greater than the release limit for any more than one out of five (5) consecutive samples.

Identification of Pipelines and Fittings

- (E6) Pipelines and fittings for the land disposal of sewage effluent must be clearly identified. Wherever possible, standard water taps, hoses and cocks should not be fitted to effluent irrigation system pipelines, and lockable valves or removable handles should be fitted to the effluent irrigation pipelines where there is public access to the contaminant release areas. The irrigation system must not be connected to other service pipelines.

Sampling Point

- (E7) The holder of this environmental authority must provide and maintain a sampling point for the treated sewage at the discharge to the irrigation system. This sampling point must be maintained so as to be readily accessible to authorised officers at any reasonable time.

Wet Weather Effluent Storage

- (E8) When weather conditions or soil conditions preclude the irrigation of effluent, the treated effluent must be stored in an effluent storage tank(s).
- (E9) The holder of this environmental authority must construct and maintain an effluent storage tank(s) with a minimum holding capacity of forty-five (45) cubic metres.
- (E10) The effluent storage tank must be operated so as to be empty at all times except in the period after wet weather when it has been filled to capacity and before the stored effluent can be disposed of by irrigation.

END OF CONDITIONS FOR SCHEDULE E

Schedule F - Noise

No conditions are prescribed under this schedule.

END OF CONDITIONS FOR SCHEDULE F

Schedule G - Waste management

The following conditions are prescribed:

General

- (G1) Grease traps must be inspected and emptied as often as is necessary to ensure effective operation of the traps, and to avoid overflows.
- (G2) The lids of all grease traps must be kept closed except for maintenance or checking of operating efficiency.

Sludge Handling and Disposal

- (G3) The removal of sludges from the sewage treatment plant and grease traps must be carried out in a manner that minimises the risk of spillage of sludge or any other release of contaminants to the environment.
- (G4) Sludges from the sewage treatment plant and grease traps must only be removed by an operator licensed under the *Environmental Protection Act 1994* to transport such wastes.

Off Site Movement

- (G5) The holder of this environmental authority must keep and maintain permanent records for every load of sewage sludge and grease trap wastes transported off the premises, and must include the following information:

- (a) date of transport;
- (b) description of waste;
- (c) cross reference to relevant waste transport documentation;
- (d) quantity of waste;
- (e) destination of the waste;
- (f) results of analysis (where applicable); and
- (g) method of waste treatment, reprocessing or disposal to be used (where applicable).

Note: Records of documents maintained in compliance with a waste tracking system established under the *Environmental Protection Act 1994* or any other law for regulated waste will be deemed to satisfy this condition.

Notification of Improper Disposal of Regulated Waste

- (G6) If the holder of this environmental authority becomes aware that a person has removed waste from the licensed place and disposed of that waste in a manner which is not authorised by this environmental authority, or improper or unlawful, then the holder of this environmental authority must, as soon as practicable, notify the administering authority of all relevant facts, matters and circumstances known concerning the disposal.

END OF CONDITIONS FOR SCHEDULE G

Schedule H - Self monitoring and reporting

The following conditions are prescribed:

Complaint Recording

- (H1) All complaints received by the holder of this environmental authority relating to releases of contaminants from operations at the licensed place must be recorded and kept with the following details:
- (a) time, date and nature of complaint;
 - (b) type of communication (telephone, letter, personal etc.);
 - (c) 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);
 - (d) response and investigation undertaken as a result of the complaint;
 - (e) name of person responsible for investigating complaint; and
 - (f) action taken as a result of the complaint investigation and signature of responsible person.

Sewage Treatment Plant

- (H2) The sewage treatment plant must be visually inspected at least monthly to check its condition and determine if a sludge pump-out is required and, if such a pump-out is required, the holder of this environmental authority must arrange for such works to be done as soon as is practicable.
- (H3) Records shall be made of the results of the inspection program referred to in condition number (H2) and of any remedial works undertaken.

Monitoring of Contaminants Released to Land

- (H4) The holder of this environmental authority is responsible for the making of determinations of the quality of the contaminants released to land by determining those quality characteristics specified in Schedule H, Table 1. Samples must be taken from the sampling point specified in condition number (E7) and not less frequently than quarterly.

Schedule H - Table 1

QUALITY CHARACTERISTICS
5 Day Biochemical Oxygen Demand (mg/L)
pH Units
Faecal Coliforms (organisms/100mL)
Suspended Solids (mg/L)
Total Phosphorus (mg/L)
Total Nitrogen (mg/L)
Total Oxidised Nitrogen (mg/L)

Exception Reporting

- (H5) The holder of this environmental authority must, unless a program notice in accordance with Section 101 of the Act is submitted, notify the administering authority in writing within twenty-eight (28) days of completion of analysis of any result of a monitoring program required by a condition of this environmental authority which indicates an exceedance of any limit specified in this environmental authority.
- (H6) The written notification required by condition number (H5) above must include:
- (a) the full analysis results; and
 - (b) details of investigation or corrective actions taken; and
 - (c) any subsequent analysis.
- (H7) If a program notice has been submitted under Section 101 of the Act, condition numbers (H5) and (H6) will have been complied with if the required information is submitted by the date specified in a Section 103 notice requiring submission of a draft Environmental Management Program.

Report Submission

- (H8) The holder of this environmental authority must ensure that the results of the effluent irrigation monitoring performed in accordance with this environmental authority for the period covered by the return are submitted with the Annual Return.

Monitoring of Volume of Release

- (H9) The daily quantity of contaminants released to the effluent irrigation area or the wet weather storage tanks must be determined by a method accurate to within ten (10) percent and a record kept of the daily amounts.
- (H10) The holder of this environmental authority must ensure that the record of the volume of sewage effluent released in accordance with this environmental authority for the period covered by the return are submitted with the Annual Return.

Monitoring of Groundwater Quality

- (H11) Prior to commencement of the effluent irrigation area the holder of this environmental authority must install a monitoring bore for the purpose of sampling and analysing groundwater.
- (H12) The monitoring bore referred to in condition number (H11) must be installed down gradient of the effluent irrigation area to intercept any aquifer likely to be affected by the wastewater irrigation.
- (H13) The holder of this environmental authority is responsible for ensuring groundwater monitoring is performed in accordance with the following requirements:
- (a) standing water levels in the monitoring bore must be measured and recorded at least once a month and on each occasion that samples are obtained. Such measurement must be undertaken prior to any disturbance by sampling.

- (b) a sample of groundwater must be taken from the bore referred to in condition number (H11) on at least a quarterly basis; and
- (c) any samples obtained in accordance with condition number (H13)(b) must be analysed for all the quality characteristics listed in Schedule H, Table 1.

Report Submission

- (H14) The results of all groundwater monitoring performed in accordance with this environmental authority must be submitted to the administering authority in writing within twenty-eight (28) days of completion of analysis.

Annual Report Submission

- (H15) The holder of this environmental authority must submit a report to the administering authority with the annual return which must include but not be limited to:
- (a) a summary of the previous twelve (12) month's monitoring results obtained under any monitoring programs required under this environmental authority; and
 - (b) an evaluation/explanation of the data from the monitoring programs; and
 - (c) a summary of any record of quantities of effluent irrigated required to be kept under this environmental authority; and
 - (d) a summary of the record of equipment failures or events recorded for the licensed place under condition number (H16); and
 - (e) an outline of actions taken or proposed to minimise the environmental risk from any deficiency identified by the monitoring or recording programs.

Environmental Event Recording

- (H16) The holder of this environmental authority must keep a record, in the form of a log, of any equipment failures or events likely to have adversely affected the environmental performance of the licensed place whilst still complying with this environmental authority. This log must include at least the following details:
- (a) time, date and nature of event;
 - (b) response and investigation undertaken to deal with the event;
 - (c) name of person responsible for investigating the event;
 - (d) action taken as a result of the event investigation, and signature of responsible person; and
 - (e) must be made available upon request to any authorised person who must be permitted to make copies thereof.

Notification of Emergencies and Incidents

- (H17) Where the holder of this environmental authority has not given notification to the administering authority under section 37 of the Environmental Protection Act, as soon as practicable after becoming aware of any emergency or incident which results in the release of contaminants not in accordance, or reasonably expected to be not in accordance with the conditions of this environmental authority, the holder of this environmental authority must notify the administering authority of the release by telephone or facsimile.
- (H18) Where the holder of this environmental authority has not given notification to the administering authority under section 37 of the Environmental Protection Act, the notification of emergencies or incidents as required by condition number (H17) must include but not be limited to the following:
- (a) the holder of this environmental authority;
 - (b) the location of the emergency or incident;
 - (c) the number of the environmental authority;
 - (d) the name and telephone number of the designated contact person;

- (e) the time of the release;
 - (f) the time the holder of this environmental authority became aware of the release;
 - (g) the suspected cause of the release;
 - (h) the environmental harm and or environmental nuisance caused, threatened, or to be caused by the release; and
 - (i) actions taken to prevent further any release and mitigate any environmental harm and or environmental nuisance caused by the release.
- (H19) Where the holder of this environmental authority has not given notification to the administering authority under section 37 of the Environmental Protection Act, not more than fourteen (14) days following the initial notification of an emergency or incident, the holder of this environmental authority must provide written advice of the information supplied in accordance with condition number (H18) in addition to:
- (a) proposed actions to prevent a recurrence of the emergency or incident; and
 - (b) outcomes of actions taken at the time to prevent or minimise environmental harm and or environmental nuisance.

Monitoring

- (H20) All environmental monitoring determinations must be made in accordance with methods prescribed in the Environmental Protection Agency Water Quality Sampling Manual, 3rd Edition, December 1999, or more recent additions or supplements to that document as such become available.

END OF CONDITIONS FOR SCHEDULE H

Schedule I - Definitions

Words and phrases used throughout this licence.

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

- (I1) "administering authority" means the Environmental Protection Agency or its successor.
- (I2) "mg/l" means milligrams per litre.
- (I3) "maximum" means that the measured value of the quality characteristic or contaminant must not be greater than the release limit stated.
- (I4) "licensed place" means Lot19, NR4445, Parish of Dulanban, County of Nares located at Double Island, East of Palm Cove Qld 4879.
- (I5) "the holder of this environmental authority" means Sean Howard Martin.
- (I6) "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.
- (I7) "Total Nitrogen" means the sum of Organic Nitrogen, Ammonia Nitrogen, Nitrite plus Nitrate Nitrogen
- (I8) "quarterly" means at least once in February, May, August and November of each year.
- (I9) "the Act" means the *Environmental Protection Act 1994*.
- (I10) "80th percentile" means that the measured values of the quality characteristic must not be greater than the release limit for any more than one out of five (5) consecutive samples.

END OF CONDITIONS FOR SCHEDULE I

Schedule J - Site plans

There are no attachments to this schedule.

END OF CONDITIONS FOR SCHEDULE J

END OF ENVIRONMENTAL AUTHORITY

END OF PERMIT



Department of
**Environment and
Heritage Protection**

27-AUG-2014

Fortune Island Holding Company Limited
15F Kingdom Power Commercial Building
32-36 Des Voeux Road West
HONG KONG

Our reference: 242234

Application details

I refer to the application that was received by the administering authority on 21-AUG-2014.

Land description: Double Island - STP Lot 19 Plan NR4445.

Decision

Your application has been approved and your environmental authority (reference EPPR00497013) is attached.

Additional comments or advice

You are advised that if you are not the owner of the land to which the environmental authority relates, you have 10 business days from receipt of this environmental authority to give each owner of the land, written notice that you have been issued this environmental authority.

Should you have any further enquiries, please contact Veronica Lightfoot on telephone 1300130372 (Option 4).

Yours sincerely

A handwritten signature in black ink, appearing to read "AS", enclosed within a rectangular box.

Signature

27/08/2014

Date

Anthony Schmid
Department of Environment and Heritage Protection
Delegate of the administering authority
Environmental Protection Act 1994

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