COPY

Registration certificate

No: ENRE00717507

This registration certificate is issued by the administering authority and takes effect from: 21-MAR-2011.

The anniversary day for the purposes of the Annual Return remains: 25 October.

This registration certificate is a requirement of section 73F of the *Environmental Protection Act 1994* and authorises the registered operator to undertake the activity listed below at the following place; subject to the conditions set out in a development approval attached to the premises, or the relevant code of environmental compliance.

Registered Operator:-
Queensland Department of Health
Trading as Cairns & Hinterland Health Service District
Jack Street
ATHERTON QLD 4883

Place:-
Lot 26 Plan R7 Plan 25324
Located at:-
Bertha & Grace Streets,HERBERTON QLD 4887
Registered Activity: -
ERA 63 Sewage treatment Threshold 2(a) - operating sewage treatment works, other than no-release works, with a total daily peak design capacity of 21 to 100EP (i) if treated effluent is discharged to an infiltration trench or through an irrigation scheme

C. E. Birt

Cathy Birt
Delegate
Department of Environment and Resource Management
Environmental Protection Act 1994

21-MAR-2011

Department of Environment and Resource Management
www.derm.qld.gov.au ABN 46 640 294 485

Queensland Government

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DESPATCHED
22 JAN 2008
TP 38988616.

Section 3.5.15 *Integrated Planning Act 1997*

EPA Permit[1] number: IPDE00762607

EPA Permit[1] number:	IPDE00762607
Assessment Manager reference:	as above
Date application received by EPA:	18-OCT-2007
Permit[1] Type:	Development Approval for a MCU involving an ERA
Date of Decision:	22-JAN-2008
Decision:	Approved with conditions
Relevant Laws and Policies:	*Environmental Protection Act 1994* and any subordinate legislation

Development Description

Property	Lot/Plan	Aspect of Development
Bertha & Grace Streets, HERBERTON QLD 4887	Lot 26 Plan R7 Plan 25324	ERA 15(a) Sewage treatment - operating a standard sewage treatment works having a peak design capacity to treat sewage of 21 or more equivalent persons but less than 100 equivalent persons.

Additional comments or advice about the application

The frequency of monitoring for E Coli, as specified in Table 2 – Monitoring program, may be reviewed following 12 months of operation upon consideration of performance by the managing agency.

Additional information for applicants

The standard currency periods stated in section 3.5.21 of the Integrated Planning Act 1997 or the nominated currency period, apply to each aspect of development in this permit1. For information on when this permit1 takes effect and the relevant currency periods, please see point 3 in the Notice of Decision.

Contaminated Land

[1] Permit includes licences, approvals, permits, authorisations, certificates, sanctions or equivalent/similar as required by legislation administered by the Environmental Protection Agency and the Queensland Parks and Wildlife Service

Environmental Protection Agency
www.epa.qld.gov.au ABN 87 221 158 786

Queensland Government
Environmental Protection Agency
Queensland Parks and Wildlife Service

It is a requirement of the *Environmental Protection Act 1994* that if an owner or occupier of land becomes aware a Notifiable Activity (as defined by Schedule 2 of the *Environmental Protection Act 1994*) is being carried out on the land or that the land has been affected by a hazardous contaminant, they must, within 30 days after becoming so aware, give notice to the Environmental Protection Agency.

Environmentally Relevant Activities

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

This permit authorises the ERA. It does not authorise environmental harm unless a condition within this permit explicitly authorises that harm. Where there is no such condition, or the permit is silent on a matter, the lack of a condition or silence shall not be construed as authorising harm.

In addition to this permit, the person to carry out the ERA must be a registered operator under the Environmental Protection Act 1994. For the person to become a registered operator, they must apply for a registration certificate under section 73F of the Environmental Protection Act 1994.

Ingrid Fomiatti Minnesma
Delegate
Environmental Protection Agency
22-JAN-2008

CONDITIONS OF APPROVAL

Condition for: ERA 15(a) Sewage treatment - operating a standard sewage treatment works having a peak design capacity to treat sewage of 21 or more equivalent persons but less than 100 equivalent persons.

Agency Interest: General

A1G1 A copy of this approval must be maintained in a location readily accessible to personnel carrying out the activity.

A1G2 All determinations of the quality of contaminants released must be made in accordance with methods prescribed in the latest edition of the Environment Protection Agency Water Quality Sampling Manual.

A1G3 Prevent and/or minimise likelihood of environmental harm.

In carrying out an ERA to which this approval relates, all reasonable and practicable measures must be taken to prevent and / or to minimise the likelihood of environmental harm being caused.

A1G4 Maintenance Of Measures, Plant and Equipment.

The operator of an ERA to which this approval relates must:

(a) install all measures, plant and equipment necessary to ensure compliance with the conditions of this approval; and
(b) maintain such measures, plant and equipment in a proper and efficient condition; and
(c) operate such measures, plant and equipment in a proper and efficient manner.

A1G5 Site Based Management Plan.

From commencement of an ERA to which this approval relates, a site based management plan (SBMP) must be implemented. The SBMP must identify all sources of environmental harm, including but not limited to the actual and potential release of all contaminants, the potential impact of these sources and what actions will be taken to prevent the likelihood of environmental harm being caused. The SBMP must also provide for the review and 'continual improvement' in the overall environmental performance of all ERAs that are carried out.

The SBMP must address the following matters:

(a) Environmental commitments - a commitment by senior management to achieve specified and relevant environmental goals.
(b) Identification of environmental issues and potential impacts.
(c) Control measures for routine operations to minimise likelihood of environmental harm.
(d) Contingency plans and emergency procedures for non-routine situations.
(e) Organisational structure and responsibility.
(f) Effective communication.
(g) Monitoring of contaminant releases.
(h) Conducting environmental impact assessments.
(i) Staff training.
(j) Record keeping.
(k) Periodic review of environmental performance and continual improvement.

A1G6 Records.

Record, compile and keep all monitoring results required by this approval and present this information to the administering authority when requested.

A1G7 All records required by this approval must be kept for 5 years.

A1G8 Waste Records.

A record of all waste [from the sewage system] must be kept detailing the following information:

a) date of pickup of waste;
b) description of waste;
c) quantity of waste;
d) origin of the waste; and
e) destination of the waste.

Note: Trackable wastes as listed in Schedule 1 of the Environmental Protection (Waste Management) Regulation 2000 are not covered by this condition. Trackable wastes have similar recording requirements to this condition in accordance with a waste tracking system established under the above Regulation.

A1G9 Notification.

Telephone the EPA's Pollution Hotline or local office as soon as practicable after becoming aware of any release of contaminants not in accordance with the conditions of this approval.

A1G10 Information About Spills.

A written notice detailing the following information must be provided to the EPA within 14 days of any advice provided in accordance with condition A1G9:

a) the name of the operator, including their approval / registration number;
b) the name and telephone number of a designated contact person;
c) quantity and substance released;
d) vehicle and registration details;
e) person/s involved (driver and any others);
f) the location and time of the release;
g) the suspected cause of the release;
h) a description of the effects of the release;
i) the results of any sampling performed in relation to the release,
j) actions taken to mitigate any environmental harm caused by the release; and
k) proposed actions to prevent a recurrence of the release.

A1G11 Monitoring.

A competent person(s) must conduct any monitoring required by this approval.

A1G12 Equipment Calibration.

All instruments, equipment and measuring devices used for measuring or monitoring in accordance with any condition of this approval must be calibrated, and appropriately operated and maintained.

A1G13 Trained / Experienced Operator(s).

The daily operation of the waste water treatment system and pollution control equipment must be carried out by a person(s) with appropriate experience and/or qualifications to ensure the effective operation of that treatment system and control equipment.

A1G14 Spill Kit.

An appropriate spill kit, personal protective equipment and relevant operator instructions/emergency procedure guides for the management of wastes and chemicals associated with the ERA must be kept at the site.

Agency Interest: Air

A1A1 Nuisance.

The release of noxious or offensive odours or any other noxious or offensive airborne contaminants resulting from the activity must not cause a nuisance at any nuisance sensitive or commercial place.

Agency Interest: Land

A1L1 Land Disposal.

The only contaminants permitted to be released to land are treated effluent in compliance with the limits levels stated in Table 1 - Contaminant release limits to land, and the conditions of this approval.

Table 1 - Contaminant release limits to land

Quality characteristics	Release Limit				
	Minimum	50th Percentile	80th Percentile	Median	Maximum
E Coli (CFU/100mL)	-	10	-	-	100
BOD5 (mg/L)	-	-	-	20	-
Suspended Solids (mg/L)	-	-	-	30	-
TDS, mg/L or EC, µS/cm	-	-	-	1000 1600	-
pH	6	-	-	-	8.5
Dissolved Oxygen (mg/L)	2	-	-	-	-
Total Nitrogen (mg/L)	-	-	30	-	-
Total Phosphorus (mg/L)	-		10	-	-

A1L2 The irrigation of effluent must be carried out in a manner such that:

a) vegetation is not damaged;
b) soil erosion and soil structure damage is avoided;
c) there is no surface ponding of effluent;
d) percolation of effluent beyond the plant root zone is minimised;
e) the capacity of the land to assimilate nitrogen, phosphorus, salts, organic matter as measured by oxygen demand and water is not exceeded; and

f) the quality of ground water is not adversely affected.

A1L3 Notices must be prominently displayed on areas undergoing effluent irrigation, warning the public that the area is irrigated with effluent and not to use or drink the effluent. These notices must be maintained in a visible and legible condition.

A1L4 Conduct and keep records of any monitoring programs of contaminant releases from the treatment plant at the monitoring points, frequency, and for the parameters specified in Table 2 - Monitoring program.

Table 2 - Monitoring program

Monitoring point/s	Quality characteristics	Units	Frequency
Effluent discharge point	E Coli	CFU/100mL	Weekly
Effluent discharge point	BOD5	mg/L	Monthly
Effluent discharge point	Suspended Solids	mg/L	Monthly
Effluent discharge point	TDS or EC	mg/L µS/cm	Monthly
Effluent discharge point	pH	pH Units	Monthly
Effluent discharge point	Dissolved Oxygen	mg/L	Monthly
Effluent discharge point	Total Nitrogen	mg/L	Monthly
Effluent discharge point	Total Phosphorus	mg/L	Monthly
Influent point and Effluent Discharge Point	Rotavirus or Bacteriophages*	As required	Within 3 months of commencement and then annually
Influent point and Effluent Discharge Point	Campylobacter or E Coli*	As required	Within 3 months of commencement and then annually
Influent point and Effluent Discharge Point	Clostridium perfringens or Cryptosporidium parvum*	As required	Within 3 months of commencement and then annually

*Indicator organisms may be substituted for another adequately referenced indicator organism with the approval of the relevant authority.

A1L5 Monitoring must be undertaken and records kept of a monitoring program of contaminant releases to the irrigation area at the monitoring points, frequency, and for the parameters specified in Table 2 - Monitoring program.

A1L6 The daily volume of contaminants released to land must be determined or estimated by an appropriate method, for example a flow meter, and records kept of such determinations and estimates.

A1L7 When conditions prevent the irrigation of treated effluent to land (such as during or following rain events), the contaminants must be directed to a wet weather storage or alternative measures must be taken to store/lawfully dispose of effluent (such as wet weather storage or tanking off site to another treatment plant or sewer). A record must be kept of any removal or discharge off site, including

destination, transporter, dates and volumes.

A1L8 When conditions prevent the irrigation of treated effluent to land (such as during rain events), alternative measures must be taken to store/dispose of effluent (such as wet weather storage or tankering off site).

A1L9 Pipelines and fittings associated with the effluent irrigation system must be clearly identified. Lockable valves or removable handles must be fitted to all release pipes situated in public access areas.

A1L10 Spillage of all chemicals and fuels must be contained within an on-site containment system and controlled in a manner that prevents environmental harm.
NOTE: All petroleum product storage's must be designed, constructed and maintained in accordance with AS 1940 - Storage and Handling of Flammable and Combustible Liquids.

A1L12 Notwithstanding the quality characteristic limits specified in Table 1 - Contaminant release limits to land, releases of effluent must not have any properties nor contain any organisms or other contaminants in concentrations that are capable of causing environmental harm.

A1L13 Irrigation Monitoring Program.

Implement and maintain an irrigation monitoring program (IMP) for the release of contaminants to land(s). As a minimum, the IMP must include:

(a) soil and sub-soil analysis, including assessment of the soils including types, structure, phosphorus adsorption capacity, nutrient status, salinity and sodicity, cation exchange capacity and sodium absorption ratio (SAR) of the contaminant release area(s), to be carried out at no less than six representative sites on an annual basis;
(b) ground water monitoring that determines the existence and rate of infiltration of effluent that has been irrigated to land, and the potential or actual impacts on ground water from such infiltration, to be carried out on an annual basis;
(c) plant analysis to assess nutrient export to be carried out on a bi-annual basis;
(d) determination of the quantity and quality of contaminants applied;
(e) periodic re-assessment, including modelling of the water, nutrient and salt balances and irrigation rate and return period should be undertaken, if necessary, to ensure sustainable use of the contaminant release area is being achieved; and
(f) After one year of operation, conduct MEDLI modelling using nutrient information collected in the Monitoring program, to ensure the irrigation rate with the nutrient levels is sustainable.
(g) reporting of monitoring results, and an assessment of the impact of the releases on the contaminant release areas.

A1L14 Existing septic tanks and trenches are to be decommissioned. Where new irrigation lines overlay the area of disused trenches, a reduced flow irrigation line is to be installed.

A1L15 Any exceedence of the limits set out in Table 1 - Contaminant release limits to land, must be reported to the administering authority in writing within 28 days of receipt of analysis results.

A1L16 The written notification required under the above Condition must include

- The full analysis results;
- details of investigation and corrective actions taken; and

- any subsequent analysis to verify the success of any corrective actions taken.

A1L17 A minimum area of 5,775 square meters of land, excluding any necessary buffer zones, must be utilised for the irrigation of treated effluent at a maximum rate of 20mm per week. This excludes any native or remnant vegetation areas.

A1L18 A sampling point must be maintained for the treated sewage effluent immediately downstream of the final treatment point. The sampling point must be maintained so as to be readily accessible to an authorised officer at any reasonable time.

Agency Interest: Social

A1S1 Complaint Response.

The operator of the ERA must record the following details for all complaints received and provide this information to the administering authority on request:

a) Time, date, name and contact details of the complainant;
b) reasons for the complaint;
c) any investigations undertaken;
d) conclusions formed; and
e) any actions taken.

Agency Interest: Waste

A1W1 Site Control.

At all times while the ERA is operating, at least one person must be present who is responsible for the control and operation of the facility and whose duties must include but not be limited to:

a) controlling the reception, storage and removal of waste;
b) maintaining the facility;
c) controlling all employees working in the facility; and
d) supervising all persons entering the facility.

Agency Interest: Water

A1WA1 Stormwater Management.

There must be no release of stormwater runoff that has been in contact with any contaminants at the site to any waters, roadside gutter or stormwater drain.

A1WA2 Contaminant And Sewage Pump Station.

Contaminant pumping stations must be fitted with stand-by pumps and pump-failure alarms as well as high level alarms to warn of imminent pump station overflow. All alarms must be able to operate without mains power.

A1WA3 Suitable banks and/or diversion drains must be installed and maintained to exclude stormwater runoff from entering any ponds or other structures used for the storage or treatment of contaminants or wastes.

DEFINITIONS

Words and phrases used throughout this permit[1] are defined below. Where a definition for a term used in this permit[1] is sought and the term is not defined within this permit[1] the definitions provided in the relevant legislation shall be used.

"administering authority" means the Environmental Protection Agency or its successor.

"annual return" means the return required by the annual notice (under section 316 of the *Environment Protection Act 1994*) for the section 73F registration certificate that applies to the development approval.

"approval" means 'notice of development application decision' or 'notice of concurrence agency response' under the *Integrated Planning Act 1997*.

"approved plans" means the plans and documents listed in the approved plans section in the notice attached to this development approval.

"artificial waterway" means an artificial channel, lake or other body of water. Artificial waterway includes –

- an artificial channel that is formed because the land has been reclaimed from tidal water and is intended to allow boating access to allotments on subdivided land;
- other artificial channels subject to the ebb and flow of the tide; and
- any additions or alterations to an artificial waterway.

"authorised place" means the place authorised under this development approval for the carrying out of the specified environmentally relevant activities.

"canal" means an artificial waterway surrendered to the State. A canal is an artificial waterway connected, or intended to be connected, to tidal water; and from which boating access to the tidal water is not hindered by a lock, weir or similar structure.

"clinical waste" means waste that has the potential to cause disease including, for example, the following:

- animal waste;
- discarded sharps;
- human tissue waste;
- laboratory waste.

"coastal dune" means a ridge or hillock of sand or other material on the coast and built up by the wind.

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

"dredge spoil" means material taken from the bed or banks of waters by using dredging equipment or other equipment designed for use in extraction of earthen material.

"dwelling" means any of the following structures or vehicles that is principally used as a residence –

- a house, unit, motel, nursing home or other building or part of a building;
- a caravan, mobile home or other vehicle or structure on land;
- a water craft in a marina.

"Environmental Protection Agency" means the department or agency (whatever called) administering the *Coastal Protection and Management Act 1995* or the *Environmental Protection Act 1994*.

"erosion prone area" means an area declared to be an erosion prone area under section 70(1) of the *Coastal Protection and Management Act 1995*.

"high water mark" means the ordinary high water mark at spring tides.

"infectious waste" means waste containing viable micro-organisms or their toxins which are known or suspected to cause disease in animals or humans.

"intrusive noise" means noise that, because of its frequency, duration, level, tonal characteristics, impulsiveness or vibration –

- is clearly audible to, or can be felt by, an individual; and
- annoys the individual.
- In determining whether a noise annoys an individual and is unreasonably intrusive, regard must be given to Australian Standard 1055.2 – 1997 Acoustics – Description and Measurement of Environmental Noise Part 2 – Application to Specific Situations.

"$L_{A\ 10,\ adj,\ 10\ mins}$" means the A-weighted sound pressure level, (adjusted for tonal character and impulsiveness of the sound) exceeded for 10% of any 10 minute measurement period, using Fast response.

"$L_{A\ 1,\ adj,\ 10\ mins}$" means the A-weighted sound pressure level, (adjusted for tonal character and impulsiveness of the sound) exceeded for 1% of any 10 minute measurement period, using Fast response.

"$L_{A,\ max\ adj,\ T}$" means the average maximum A-weighted sound pressure level, adjusted for noise character and measured over any 10 minute period, using Fast response.

"land" in the "land schedule" of this document means land excluding waters and the atmosphere.

"median" means median of 5 consecutive samples taken at half hourly intervals.

"mg/L" means milligrams per litre.

"noxious" means harmful or injurious to health or physical well being.

"NTU" means nephelometric turbidity units.

"nuisance sensitive place" includes –

- a dwelling, residential allotment, mobile home or caravan park, residential marina or other residential premises; or
- a motel, hotel or hostel; or
- a kindergarten, school, university or other educational institution; or
- a medical centre or hospital; or
- a protected area under the *Nature Conservation Act 1992*, the *Marine Parks Act 1992* or a World Heritage Area; or
- a public thoroughfare, park or gardens; or
- a place used as a workplace, an office or for business or commercial purposes and includes a place within the curtilage of such a place reasonably used by persons at that place.

"offensive" means causing offence or displeasure; is disagreeable to the sense; disgusting, nauseous or repulsive.

"ponded pasture" means a permanent or periodic pondage of water in which the dominant plant species are pasture species used for grazing or harvesting.

"protected area" means –

- a protected area under the *Nature Conservation Act 1992*; or
- a marine park under the *Marine Parks Act 1992*; or
- a World Heritage Area.

"quarry material" means material on State coastal land, other than a mineral within the meaning of any Act relating to mining. Material includes for example stone, gravel, sand, rock, clay, mud, silt and soil, unless it is removed from a culvert, stormwater drain or other drainage infrastructure as waste material.

"regulated waste" means non-domestic waste mentioned in Schedule 7 of the *Environmental Protection Regulation 1998* (whether or not it has been treated or immobilised), and includes -

- for an element - any chemical compound containing the element; and
- anything that has contained the waste.

"site" means land or tidal waters on or in which it is proposed to carry out the development approved under this development approval.

"tidal water" means the sea and any part of a harbour or watercourse ordinarily within the ebb and flow of the tide at spring tides.

"watercourse" means a river, creek or stream in which water flows permanently or intermittently-

- in a natural channel, whether artificially improved or not; or
- in an artificial channel that has changed the course of the watercourse.

"waters" includes river, stream, lake, lagoon, pond, swamp, wetland, unconfined surface water, unconfined water natural or artificial watercourse, bed and bank of any waters, dams, non-tidal or tidal waters (including the sea), stormwater channel, stormwater drain, roadside gutter, stormwater run-off, and groundwater and any part-thereof.

"works" or "operation" means the development approved under this development approval.

"you" means the holder of this development approval or owner / occupier of the land which is the subject of this development approval.

"50th percentile" means not more than three (3) of the measured values of the quality characteristic are to exceed the stated release limit for any six (6) consecutive samples for a release/monitoring point at any time during the environmental activity(ies) works.

"80th percentile" means not more than one (1) of the measured values of the quality characteristic is to exceed the stated release limit for any five (5) consecutive samples for a sampling point at any time during the environmental activity(ies) works

END OF CONDITIONS