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: EPPR01681613

Environmental authority takes effect on the day the environmental authority is issued.

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

The anniversary date of this environmental authority is the same day each year as the effective date. An annual return and the payment of the annual fee which is currently $6,169.50 will be due each year on this day.

Environmental authority holder(s)

Name	Registered address
The Baptist Union of Queensland	53 Prospect Road GAYTHORNE QLD 4051

Environmentally relevant activity and location details

Environmentally relevant activity	Location(s)
63-(1a)(i) Sewage treatment >21 to 100EP - IT or IR	249-253 Beacon Road TAMBORINE MOUNTAIN - Lot 11 Plan RP97304

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.

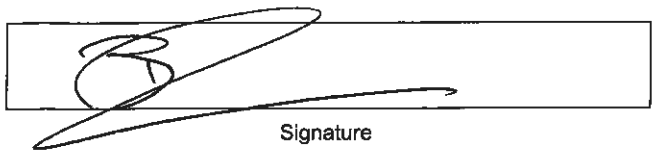
An environmental authority authorises the carrying out of an ERA and does not authorise any environmental harm unless a condition stated by the authority specifically authorises environmental harm.

A person carrying out an ERA must also be a registered suitable operator under the *Environmental Protection Act 1994* (EP Act).

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

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

08/01/2014

Date

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

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Obligations under the *Environmental Protection Act 1994*

In addition to the requirements found in the conditions of this environmental authority, the holder must also meet their obligations under the EP Act, and the regulations made under the EP Act. For example, the holder must comply with the following provisions of the Act:

- general environmental duty (section 319)
- duty to notify environmental harm (section 320-320G)
- offence of causing serious or material environmental harm (sections 437-439)
- offence of causing environmental nuisance (section 440)
- offence of depositing prescribed water contaminants in waters and related matters (section 440ZG)
- offence to place contaminant where environmental harm or nuisance may be caused (section 443)

Conditions of environmental authority

Location: 255 Beacon Road, North Tamborine, QLD

Lot 11 RP97304

Relevant activity/ies:

63-(1a)(i) Sewage treatment >21 to 100EP - IT or IR

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

Agency interest: General	
Condition number	**Condition**
G1	Any breach of a condition of this environmental authority must be reported to the administering authority as soon as practicably possible, or at most, within 24 hours of becoming aware of the breach. Records must be kept including full details of the breach and any subsequent actions taken.
G2	All reasonable and practicable measures must be taken to minimise the likelihood of environmental harm being caused.
G3	The activity must be undertaken in accordance with written procedures that: • identify potential risks to the environment from the activity during routine operations and emergencies • establish and maintain control measures that minimise the potential for environmental harm • ensure plant, equipment and measures are maintained in a proper and effective condition • ensure plant, equipment and measures are operated in a proper and effective manner • ensure that staff are trained and aware of their obligations under the *Environmental Protection Act 1994* • ensure that reviews of environmental performance are undertaken at least annually
G4	All information and records that are required by the conditions of this environmental authority must be kept for a period of at least 5 years and provided to the administering authority upon request

G5	All analysis and tests required under this approval must be carried out by a laboratory that has NATA or equivalent certification for such analysis and tests.
G6	An appropriately qualified person must design and conduct a receiving environment monitoring program to monitor the effects of the activity on the land to which treated sewage effluent is released.
G7	The receiving environment monitoring program must include at least the following: Monitoring required shall include the taking of top soil and sub-soil samples from at least five (5) representative sites for the quality characteristics and at the frequency specified in *Table 1- Receiving Environment Monitoring* **Table1. Receiving Environment Monitoring**

Quality Characteristics	Monitoring Frequency
pH Units	Every two years.
Total Nitrogen (as Nitrogen) (mg/kg)	Every two years.
Total Phosphorous (as Phosphorous) (mg/kg)	Every two years.
Sodium Adsorption Ratio	Every two years.
Specific Conductance or electrical conductivity µS/cm	Every two years.
Potassium (mg/kg)	Every two years.
Total Calcium (mg/kg)	Every two years.
Total Magnesium (mg/kg)	Every two years.
Total Sodium (mg/kg)	Every two years.

G8	Storage of chemicals and fuels in bulk or in containers of greater than 15 litres must be within a secondary containment system and releases from the containment system controlled in a manner that prevents environmental harm.
G9	The registered operator of this environmental authority must: a) install all plant, equipment and measures necessary to ensure compliance with the conditions; and b) maintain such plant, equipment and measures in a proper and efficient condition; and; c) operate such plant, equipment and measures in a proper and efficient manner. In this condition, 'plant and equipment' includes: (i) plant and equipment used to prevent and/or minimise the likelihood of environmental harm being caused (ii) devices and structures to contain foreseeable escapes of contaminants and wastes; (iii) vehicles used to transport waste; (iv) devices and structures used to store, handle, treat and dispose of waste; (v) monitoring equipment and associated alarms; and (vi) backup systems that act in the event of failure of a primary system
G10	**Display of Environmental Authority** A copy of this environmental authority must be kept in a location readily accessible to personnel carrying out the activity.

G11	**Alterations** 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 ten precent (10%) or more in the quantity of the contaminant to be released into the environment.
G12	**Calibration** 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.
G13	**Site Based Management Plan (SBMP)** The registered operator of this environmental authority must develop an effective and appropriate SBMP which details how the registered operator of this environmental authority will manage the actual and potential environmental impacts resulting from the carrying out of the environmentally relevant activity
G14	The Site Based Management Plan must address at least the following matters: (i) routine operating procedures to prevent or minimise environmental harm, however occasioned or caused during normal operations; (ii) maintenance practices and procedures; (iii) contingency plans and emergency procedures to deal with foreseeable risks and hazards including corrective responses to prevent and mitigate environmental harm (including any necessary site rehabilitation); (iv) monitoring of the release of contaminants into the environment including procedure, methods, record keeping and notification of results; (v) assessment of the environmental impact of any release of contaminants into the environment including procedures, method, record keeping and notification of results; (vi) handling of environmental complaints; (vii) keeping and production of environmental records and reports; (viii) lines and methods of communication to be utilised for communication of procedures, plans, incidents, potential environmental problems and results, including a feedback mechanism to ensure that management is made aware of potential environmental problems and any failure of procedures adopted; and (ix) Staff training and awareness of environmental issues related to the operation of the environmentally relevant activities, including responsibilities under the Environmental Protection Act.
G15	**Complaint recording** All complaints received by the holder of this environmental authority relating to releases of contaminants from operations at the licensed place must be recorded and kept with the following details: (i) time, date and nature of complaint; (ii) type of communication (telephone, letter, personal etc.); (iii) name, contact address and contact telephone number of complainant (Note: if the complainant does not wish to be identified then "Not identified" is to be recorded); (iv) response and investigation undertaken as a result of the complaint; (v) name of person responsible for investigating complaint; and (vi) action taken as a result of the complaint investigation and signature of responsible person.

Agency interest: Air	
Condition number	**Condition**
A1	Odours or airborne contaminants which are noxious or offensive or otherwise unreasonably disruptive to public amenity or safety must not cause nuisance to any nuisance sensitive place or commercial place.
A2	Contaminants must not be released to air from any point source.

Agency interest: Noise	
Condition number	**Condition**
N1	Noise from the activity must not occur from blasting or include substantial low frequency noise components and must not exceed the levels identified in *Table 2 – Noise Limits* and the associated requirements at any nuisance sensitive place or commercial place.

Table 2 – Noise Limits

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

Agency interest: Water	
Condition number	**Condition**
W1	Other than as permitted within this authority, contaminants must not be released from the site to any waters or the bed and banks of any waters.
W2	Contaminants must not be released to groundwater.

W3	Contaminants must not be released to surface waters.
W4	**Pumps** Pumps whose failure would or would be likely to result in a direct or indirect release of contaminants to waters must be fitted with stand-by pumps and pump-failure alarms. Pumps and pump failure alarms must be able to operate without mains if such power failure occurs and, when in operation, must be detectable to those responsible for remedial action.
W5	**Monitoring of groundwater** The registered operator of this environmental authority must conduct an ongoing Groundwater Monitoring Program to monitor the quality of groundwater affected, or likely to be affected, by the indirect discharge of treated sewage wastewater to the groundwater. It is recommended to undertake every 2 years.

Agency interest: Waste	
Condition number	**Condition**
WS1	Waste must only be removed from the site by a transporter lawfully able to transport it to a place lawfully able to receive it.
WS2	**Off-site Movement** Where regulated waste is removed from the licensed place (other than by a release as permitted under another schedule of this environmental authority), the holder of this environmental authority must monitor and keep records of the following: (i) the date, quantity and type of waste removed; and (ii) the name of the waste transporter and/or disposal operator that removed the waste; and (iii) the intended treatment/disposal destination of the waste. (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.)

Agency interest: Land	
Condition number	**Condition**
L1	Other than as permitted within this authority, contaminants must not be released from the site to land.

L2

The only contaminants to be released to land are treated sewage effluent in accordance with the *Table 3 – Contaminant release limits to land and monitoring frequency.*

Table 3 – Contaminants release limits to land and monitoring frequency

Quality Indicator	Units	Minimum	Maximum	Monitoring Point (MP) Name	Monitoring Frequency
5-day biochemical Oxygen Demand (inhibited)	mg/L	-	20	Outlet of final effluent storage tank	Monthly
Dissolved Oxygen	mg/L	2.0	-		Monthly
Suspended Solids	mg/L	-	30		Monthly
pH	pH scale	6.5	8.5		Monthly
Total Nitrogen	mg/L	-	30		Monthly
Total Phosphorus	mg/L	-	15		Monthly
Free Chlorine Residual	mg/L	0.5	1.0		Monthly
E.Coli	Cfu*/100mL	-	10		Monthly

*Cfu: Colony forming units/ 100mL

L3

A minimum of 360m^2 of land must be provided for the treated sewage effluent contaminant release area.

L4

Contaminant Release Location
The defined contaminant release area is described as: the Evapo-transpiration area located along the eastern boundary with frontage to Beacon Road and Keswick Road, with a total area of 360m^2 (240m^2 of ETA beds and 120m^2 of irrigation distribution).

L5

Treatment and management of acid sulfate soils must comply with the latest edition of the administering authority's manual *Instructions for the Treatment and management of acid sulfate soils, 2001.*

L6

Quantity of contaminants to be treated by the sewage treatment plant

The total quantity of raw sewage to be treated daily by the sewage treatment plant must not exceed 13,000 litres /day.

L7	When the raw sewage flow exceeds 13,000 litres/day the excess contaminants must be transported and disposed to a facility that can lawfully accept such waste, or released to sewer in accordance with an agreement with the relevant local government.
L8	**Quantity of Contaminants released to land** The total quantity of contaminants released daily to the approved land must not exceed 13,000 litres/day.
L9	**Wet Weather Storage tank** The release of contaminants to land must not be carried out if soil moisture conditions are such that surface runoff or ponding is likely to occur.
L10	When weather conditions or soil conditions preclude the release of contaminants, the contaminants must be directed to a wet weather storage tank or the contaminants must be transported and disposed of to a facility that can lawfully accept such waste.
L11	The wet weather storage tank must be designed to hold a volume equivalent to approximately 2 days storage based on 13 m^3 (13,000 litres/day) per day average wastewater generation rate and the storage tank must not be used except under wet weather conditions.
L12	**Contaminant release precautions** The contaminant release area must be maintained in a proper and efficient condition so as to provide adequate assimilation, evaporation and transpiration of the released contaminants.
L13	The contaminant release area must not be located less than 50m from the existing or future groundwater bore.
L14	Public access to any contaminant release area must be denied during the release of contaminants to land and until the release area has dried.
L15	Notices warning the public not to use or drink the release of contaminants to land must be prominently displayed and must be maintained in a visible and legible condition.
L16	Pipelines and fittings for the release of contaminants to land must be clearly identified. Standard water taps and hoses must not be fitted to contaminant release pipelines, and the contaminant release system must not be connected to other service pipelines. Lockable valves or removable handles must be fitted to the contaminant release pipelines where there is public access to the contaminant release areas

Definitions

Key terms and/or phrases used in this document are defined in this section. Applicants should note that where a term is not defined, the definition in the *Environmental Protection Act 1994*, its regulations or environmental protection policies must be used. If a word remains undefined it has its ordinary meaning.

"Act" means the Environmental Protection Act 1994.

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

"Authorised person" means a person holding office as an authorised person under an appointment under the Environmental Protection Act 1994 by the chief executive or chief executive officer of a local government.

"land" in the Land Application Schedule, means land excluding waters and the atmosphere.

"mg/L" means milligrams per litre.

"ug/l" means micrograms per litre.

"cfu" means colony forming units.

"median" means the middle value, where half the data are smaller, and half the data are larger. If the number of samples is even, the median is the arithmetic average of the two middle values.

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

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

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

"total Nitrogen" means the sum of organic nitrogen, ammonia, nitrite plus nitrate, as mg/L of nitrogen.

"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.

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

"background noise level" means either:

$L_{A90,\ T}$ being the A-weighted sound pressure level exceeded for ninety percent (90%) of the time period not less than fifteen (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 fifteen (15) minutes, using Fast response.

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

"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 and is unreasonably intrusive, regard must be had to Australian Standard 1055.2 - 1989 Acoustics - Description and Measurement of Environmental Noise Part 2 - Application to Specific Situations.

"noise sensitive place" means -

(a) a dwelling;
(b) a library, childcare centre, kindergarten, school, college, university or other educational institution;
(c) a hospital, surgery or other medical institution;
(d) a protected area, or an area identified under a conservation plan as a critical habitat or an area of major interest, under the *Nature Conservation Act 1992*;
(e) a marine park under the *Marine Parks Act 1982*;
(f) a park or garden that is open to the public (whether or not on payment of money) for use other than for sport or organised entertainment.

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

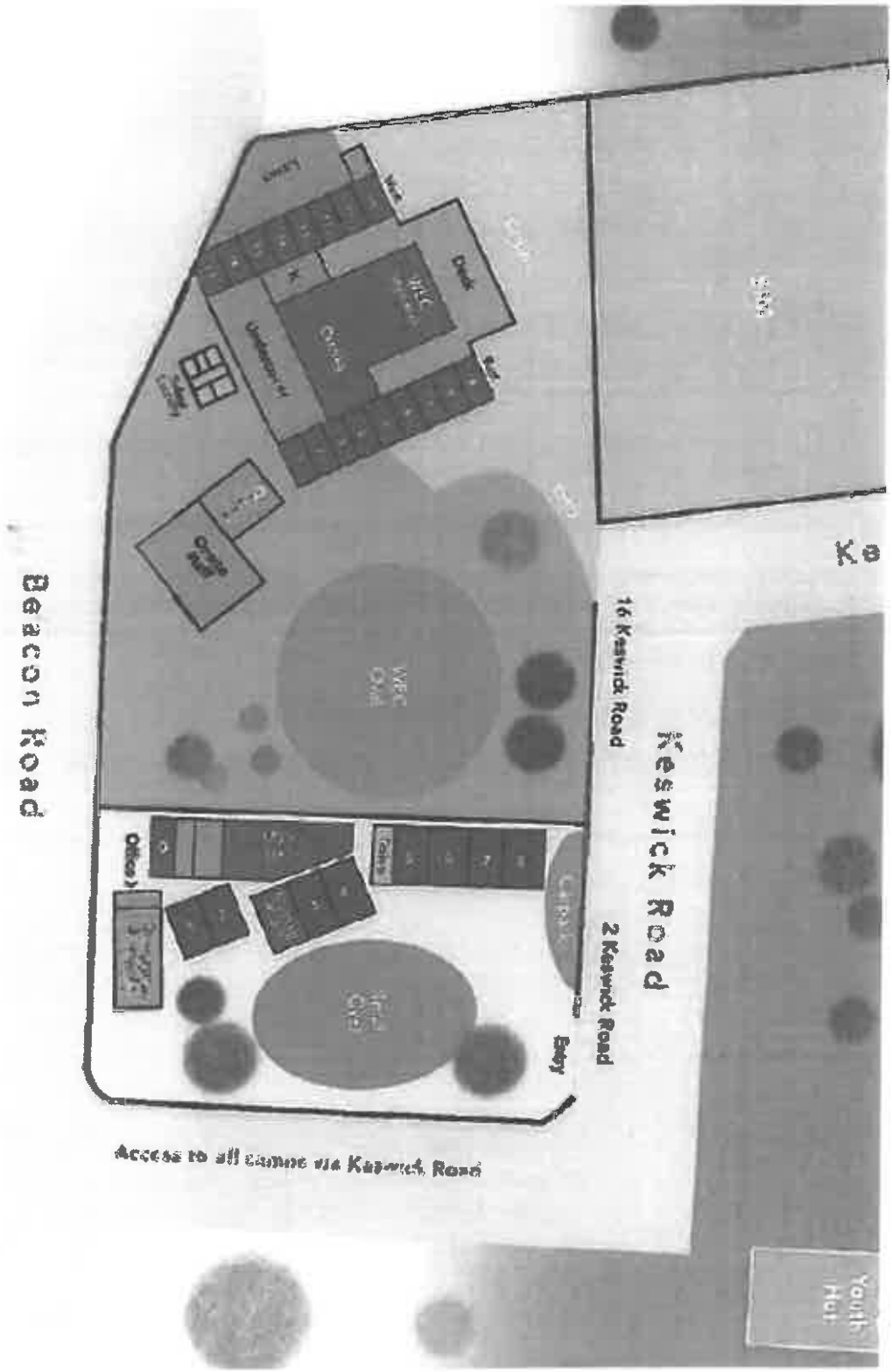
"waters" includes the bed and/or bank of any water(s), storm water runoff and any part of a river, stream, lake, lagoon, pond, dam, swamp, wetland, unconfined surface water, underground water, unconfined water, natural or artificial watercourse, non-tidal or tidal waters (including the sea), storm water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

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

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

Schedules

Schedule 1— Site Plan



END OF PERMIT