Queensland Government

Department of
Environment and Heritage Protection

19-JAN-2016

To: Pure Land Learning College Association Inc
57 West Street
TOOWOOMBA QLD 4350

Our reference: 414179

Application details

I refer to the application that was received by the administering authority on 14-JAN-2016.

Land description: 49 Westbrook-Wyreema Road WESTBROOK QLD 4350 Lot 212 Plan SP254027.

Decision

Your application has been approved and your environmental authority (reference EPPR02024614) is attached.

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

Yours sincerely

	19 January 2016
Signature	Date

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

Kim Christeson
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 EPPR02024614)

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: EPPR02024614

Environmental authority takes effect upon commencement of the activity. Prior to the commencement of the activity the administering authority must be given written notice of the proposed date of commencement.

Please send written notification to Permit and Licence Management that the above event has occurred, or is about to occur, to the following address:

Permit and Licence Management
Department of Environment and Heritage Protection
GPO Box 2454
BRISBANE QLD 4001
Email:**palm@ehp.qld.gov.au**

The anniversary date of this environmental authority is the same day each year as the effective date. An annual return will be due each year on this day.

Environmental authority holder(s)

Name	Registered address
Pure Land Learning College Association Inc	57 West Street TOOWOOMBA QLD 4350

Environmentally relevant activity and location details

Environmentally relevant activity(ies)	Location(s)
63-(1b)(i) Sewage treatment >100 to 1500EP - IT or IR	49 Westbrook-Wyreema Road WESTBROOK QLD 4350 - Lot 212 Plan SP254027

Additional information for applicants

Environmentally relevant activities

The description of any environmentally relevant activity (ERA) for which an environmental authority is issued is a restatement of the ERA as defined by legislation at the time the approval is issued. Where there is any inconsistency between that description of an ERA and the conditions stated by an environmental authority as to

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

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

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

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

Contaminated land

It is a requirement of the EP Act that if an owner or occupier of land becomes aware a notifiable activity (as defined in Schedule 3 and Schedule 4) is being carried out on the land, or that the land has been, or is being, contaminated by a hazardous contaminant, the owner or occupier must, within 22 business days after becoming so aware, give written notice to the chief executive.



Signature

19 January 2016

Date

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

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

This environmental authority consists of the following schedules:

- Agency interest - General
- Agency interest - Air
- Agency interest - Water
- Agency interest - Noise
- Agency interest - Land
- Agency interest - Waste
- Definitions

Agency interest: General	
Condition number	**Condition**
G1	Activities conducted under this environmental authority must not be conducted contrary to following limitation: Inflows must not exceed the peak design capacity of the Design Average Dry Weather Flow (DADWF) of 108 kL/day on any day.
G2	All reasonable and practicable **measures** must be taken to minimise the likelihood of environmental harm being caused.
G3	Any breach of a condition of this environmental authority must be reported to the **administering authority** as soon as practicable, or at most, within 24 hours becoming aware of the breach. Records must be kept including full details of the breach and any subsequent actions undertaken.
G4	Other than as permitted by this environmental authority, the **release of a contaminant into the environment** must not occur.
G5	All information and records required by the conditions of this environmental authority must be kept for a minimum of five years. Environmental monitoring results must be kept until surrender of this environmental authority. All information and records required by the conditions of this environmental authority must be provided to the **administering authority** upon request.

G6 An **appropriately qualified person(s)** must monitor, record and interpret all parameters that are required to be monitored by this environmental authority and in the manner specified by this environmental authority.

G7 A receiving environment monitoring program must be designed and implemented by **appropriately qualified persons** to monitor the effects of the activity on groundwater and land.

G8 The receiving environment monitoring program required by condition G7, must include at least the following:

a) Before commencement of the approved **activities** the licensee shall develop an ambient groundwater monitoring program to monitor impacts of the licensed **activities** on the receiving environment. This program should include monitoring of groundwater, up gradient and down gradient of the irrigation area, for the parameters given in Table 1 (Ambient monitoring requirements for ground water).

TABLE 1: Ambient monitoring requirements for ground water

PARAMETERS	FREQUENCY
Water level (m)	Quarterly
pH	
Electrical Conductivity (dS/m)	
Total Nitrogen (mg/L) and its forms	
Total Phosphorus (mg/L)	
Total Coliforms (cfu/100ml)	

Note: The above frequency can be revised after initial results of first 12 months (four sets of data) have been assessed by the **administering authority**.

b) Soil monitoring must be undertaken and records kept of a monitoring program of soil characteristics in irrigation areas at the frequency, and for the parameters specified in Table 2 (Parameters for soil analysis in irrigation areas).

TABLE 2: Parameters for soil analysis in irrigation areas

PARAMETER	FREQUENCY	SOIL DEPTH
pH	a) once, prior to commencement of application of treated effluent, but no more than 6 months prior to the commencement of application; b) then every 12 months.	0 to 10cm
Electrical Conductivity (dS/m)		
Nitrate-N (mg/kg)		
Total Nitrogen (%)		
Phosphorus (available) (mg/kg)		
Phosphorus (total) (mg/kg)		
Potassium (available) (mg/kg)		
Chloride (mg/kg or %)		
Exchangeable sodium percentage (%)		
P sorption capacity (mg/kg)		
Soil organic carbon (%)		

G9 The holder of the environmental authority must ensure that the groundwater and soil monitoring data gathered according with this environmental authority is analysed and interpreted to assess the nature and extent of any environmental impact of the environmental relevant activity.

G10	The holder of this approval must report the results and analysis of groundwater monitoring to the **administering authority**: a) when any significant change in water level; and/or deterioration in groundwater quality is detected; or b) upon request.
G11	The holder of this approval must report the results and analysis of soil monitoring to the **administering authority**: a) when any significant change in soil characteristics; and/or deterioration in soil quality is detected; or b) upon request.
G12	All analyses required under this environmental authority must be carried out by a laboratory that has **NATA** certification, or an equivalent certification.
G13	An annual monitoring report must be prepared and submitted to the **administering authority** in accordance with this environmental authority for the period covered by the annual return and must submitted with each annual return.
G14	**You** must record the following details for all environmental complaints received: a) date and time complaint was received b) name and contact details of the complainant c) nature of the complaint d) investigations undertaken e) conclusions formed f) actions taken.
G15	When required by the **administering authority**, monitoring must be undertaken in the manner prescribed by the **administering authority**, to investigate a complaint that is not considered by the **administering authority** to be frivolous or vexatious, of **environmental nuisance** arising from the **activity**. The monitoring results must be provided to the **administering authority** upon request.
G16	The **activity** must be undertaken in accordance with written procedures that: 1) identify potential risks to the environment from the **activity** during routine operations, closure and an emergency 2) establish and maintain control **measures** that minimise the potential for environmental harm 3) ensure plant, equipment and **measures** are maintained in a proper and effective condition 4) ensure plant, equipment and **measures** are operated in a proper and effective manner 5) ensure that staff are trained and aware of their obligations under the *Environmental Protection Act 1994* 6) ensure that reviews of environmental performance are undertaken at least annually.

Agency interest: Air	
Condition number	**Condition**
A1	Odours or airborne contaminants must not cause nuisance at a **sensitive place** or **commercial place**.

Agency interest: Water	
Condition number	**Condition**
WT1	Other than as permitted within this authority, contaminants must not be directly or indirectly released from the licensed place to any waters or the bed and banks of any waters.
Agency interest: Noise	
Condition number	**Condition**
N1	Noise from the activity must not cause an environmental nuisance at any sensitive place.
N2	When required by the **administering authority**, noise monitoring must be undertaken to investigate any complaint of noise nuisance, and the results notified within 14 days to the administering authority. Monitoring must include: 1. $L_{\mathbf{Aeq,\ adj,\ T}}$ 2. **Background** noise (Background) as $L_{A\ 90,\ adj,\ T}$ 3. Max$L_{pA,T}$ 4. the level and frequency of occurrence of any impulsive or tonal noise 5. atmospheric conditions including wind speed and direction 6. effects due to extraneous factors such as traffic noise 7. location, date and time of recording.
N3	The method of measurement and reporting of noise levels must comply in accordance with Australian Standards.

<table>
<tr><th colspan="2">Agency interest: Land</th></tr>
<tr><th>Condition number</th><th>Condition</th></tr>
<tr><td>L1</td><td>The only contaminants to be released to land are treated effluent in accordance with the Table 3 – Treated effluent release limits to irrigation area and the associated requirements.

TABLE 3: Treated effluent release limits to irrigation area.
<table>
<tr><th>QUALITY CHARACTERISTICS</th><th>RELEASE LIMIT</th><th>LIMIT TYPE</th><th>MONITORING FREQUENCY</th><th>RELEASE POINT</th></tr>
<tr><td>pH</td><td>6.0 to 8.5</td><td>Range</td><td rowspan="8">Monthly 1st year and then quarterly</td><td rowspan="8">Outlet of the treatment system</td></tr>
<tr><td>Electrical Conductivity (µS/cm)</td><td>1600</td><td>Maximum</td></tr>
<tr><td>BOD5(mg/L)</td><td>20</td><td>Maximum</td></tr>
<tr><td>Total suspended solids (mg/L)</td><td>30</td><td>Maximum</td></tr>
<tr><td>Total phosphorous (mg/L)</td><td>15</td><td>Maximum</td></tr>
<tr><td>Total Nitrogen (mg/L)</td><td>30</td><td>Maximum</td></tr>
<tr><td>E.Coli (cfu/100mL)</td><td>10</td><td>Maximum</td></tr>
</table>
Associated requirements:
1. 10 ha total irrigation area as outlined in document 4355-131220-1.0 (30 Jan 2014).
2. Monitoring must be in accordance with the administering authority's Water Quality Sampling Manual and all monitoring devices must be effectively calibrated and maintained.
3. Releases of treated effluent must not be outside of the irrigation areas indicated in document 4355-131220-1.0 (30 Jan 2014).
4. Maximum volume of 108kL/day of treated effluent can be disposed across irrigation areas using an irrigation rate of approximately 1.07 mm/day.</td></tr>
<tr><td>L2</td><td>Treated effluent released to land must be done in accordance with documentation that ensures:
a) drainage to groundwater and subsurface flows of contaminants to surface waters are prevented
b) surface pondage and run-off of effluent is prevented
c) degradation of soil structure is minimised
d) soil sodicity and the build-up of nutrients and heavy metals in the soil and subsoil are minimised
e) spray drift or overspray does not carry beyond effluent disposal areas
f) effluent disposal areas are maintained with an appropriate crop in a viable state for transpiration and nutrient uptake
g) sufficient buffer zones are maintained between irrigation sites and sensitive environmental receptors.</td></tr>
<tr><td>L3</td><td>When weather conditions or soil conditions preclude the release of treated effluent to land, effluent must not be irrigated to land.</td></tr>
<tr><td>L4</td><td>Notices must be prominently displayed on areas undergoing effluent irrigation, warning that the area is irrigated with treated effluent and not to use or drink the treated effluent. These notices must be maintained in a visible and legible condition.</td></tr>
<tr><td>L5</td><td>Pump failure alarms must be able to operate without mains power if such power failure occurs.</td></tr>
</table>

Agency interest: Waste	
Condition number	**Condition**
W1	Only remove waste from the site by using a transporter lawfully able to transport it and to a place lawfully able to receive it.
W2	The holder of this environmental authority must not: a) allow waste to burn or be burned at or on the licensed places; nor b) remove waste from the licensed places and burn such waste elsewhere.
W3	All ponds used for the storage or treatment of effluent, sewage or wastes at or on the site to which this environmental authority relates to, must be constructed, installed and maintained to be fit for purpose, including: a) to minimise the likelihood of any release of effluent through the bed and banks of the pond to waters (including groundwater); b) a freeboard of not less than 0.5 metres is maintained at all times except in emergencies; and c) to ensure the stability of the ponds' construction.
W4	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 effluent or wastes.
W5	Screenings, grit and sludge generated by the sewage treatment process must not be: a) disposed of on-site; and b) stored at the site for any period of time longer than that necessary to dewater the screenings, grit and sludge and prepare it for transport to and disposal at a proper and appropriate licensed waste disposal/incineration facility that can lawfully accept such waste or to a facility that can lawfully and appropriately reuse, recycle or reprocess such waste.

Definitions

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

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

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

Appropriately qualified person(s) means a person or persons who has professional qualifications, training, skills or experience relevant to the nominated subject matter and can give authoritative assessment, advice and analysis to performance relative to the subject matter using the relevant protocols, standards, methods or literature.

Background means noise, measured in the absence of the noise under investigation, as L A90,T being the A-weighted sound pressure level exceeded for 90 per cent of the time period of not less than 15 minutes, using Fast response.

BOD5 means the 5 day biochemical oxygen demand determined using standard tests (e.g. those used by NATA laboratories).

Commercial place means a place used as a workplace, an office or for business or commercial purposes and includes a place within the curtilage of such a place reasonably used by persons at that place.

Day means any 24hr period.

Design Average Dry Weather Flow (DADWF) – the average dry weather flow of the treatment plant at the design horizon.

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

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

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

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

NATA means National Association of Testing Authorities.

Release of a contaminant into the environment means to:

- deposit, discharge, emit or disturb the contaminant
- cause or allow the contaminant to be deposited, discharged, emitted or disturbed
- fail to prevent the contaminant from being deposited, discharged emitted or disturbed
- allow the contaminant to escape
- fail to prevent the contaminant from escaping.

Sensitive place includes the following and includes a place within the curtilage of such a place reasonably used by persons at that place:

- 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
- for noise, a place defined as a sensitive receptor for the purposes of the Environmental Protection (Noise) Policy 2008.

Total Nitrogen means the sum of Organic Nitrogen, Ammonia Nitrogen, Nitrite plus Nitrate Nitrogen, which must be reported separately, expressed as mg/L as Nitrogen. This includes both the inorganic and organic fraction 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**.**

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.

You means the holder of the environmental authority.

END OF PERMIT