Permit

Environmental Protection Act 1994

Environmental authority BRID0053

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

Environmental authority number: BRID0053

Environmental authority takes effect on 12 October 2017.

Environmental authority holder

Name	Registered address
Emtom Pty Ltd	4551 Goodwood Rd, ALLOWAY QLD 4670

Environmentally relevant activity and location details

Environmentally relevant activity	Location
ERA 63-1(a)(i) - Sewage Treatment - operating sewage treatment works, other than no-release works, with a total daily peak design capacity of 21 to 100EP - if treated effluent is discharged from the works to an infiltration trench or through an irrigation scheme	4370 Goodwood Road, ALLOWAY QLD 4670 - Lot 7 Plan RP66566

Additional information for applicants

Environmentally relevant activities

The description of any environmentally relevant activity (ERA) for which an environmental authority (EA) is issued is a restatement of the ERA as defined by legislation at the time the EA is issued. Where there is any inconsistency between that description of an ERA and the conditions stated by an EA as to the scale, intensity or manner of carrying out an ERA, the conditions prevail to the extent of the inconsistency.

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

ABN 46 640 294 485

Contaminated land

It is a requirement of the EP Act that an owner or occupier of contaminated land give written notice to the administering authority if they become aware of the following:

- the happening of an event involving a hazardous contaminant on the contaminated land (notice must be given within 24 hours); or
- a change in the condition of the contaminated land (notice must be given within 24 hours); or
- a notifiable activity (as defined in Schedule 3) having been carried out, or is being carried out, on the contaminated land (notice must be given within 20 business days); or
- that is causing, or is reasonably likely to cause, serious or material environmental harm.

For further information, including the form for giving written notice, refer to the Queensland Government website www.qld.gov.au, using the search term 'duty to notify'.

Take effect

Please note that, in accordance with section 200 of the EP Act, an EA has effect:

a) if the authority is for a prescribed ERA and it states that it takes effect on the day nominated by the holder of the authority in a written notice given to the administering authority-on the nominated day; or

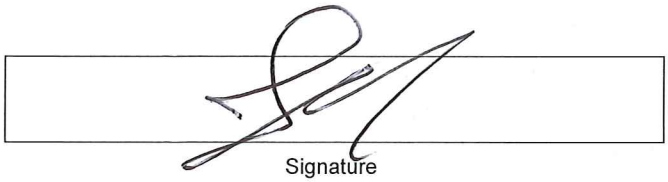
b) if the authority states a day or an event for it to take effect-on the stated day or when the stated event happens; or

c) otherwise- one the day the authority is issued.

However, if the EA is authorising an activity that requires an additional authorisation (a relevant tenure for a resource activity, a development permit under the *Planning Act 2016* or an SDA Approval under the *State Development and Public Works Organisation Act 1971*), this EA will not take effect until the additional authorisation has taken effect.

If this EA takes effect when the additional authorisation takes effect, you must provide the administering authority written notice within 5 business days of receiving notification of the related additional authorisation taking effect.

If you have incorrectly claimed that an additional authorisation is not required, carrying out the ERA without the additional authorisation is not legal and could result in your prosecution for providing false or misleading information or operating without a valid environmental authority.



Signature

12/10/2017

Date

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

Enquiries:
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BRISBANE QLD 4001
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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); and
- offence to place contaminant where environmental harm or nuisance may be caused (section 443).

Other permits required

This permit only provides an approval under the *Environmental Protection Act 1994*. In order to lawfully operate you may also require permits/approvals from your local government authority, other business units within the department and other State Government agencies prior to commencing any activity at the site. For example, this may include permits / approvals with your local Council (for planning approval), the Department of Transport and Main Roads (to access state controlled roads), the Department of Natural Resources and Mines (to clear vegetation), and the Department of Agriculture and Fisheries (to clear marine plants or to obtain a quarry material allocation).

Conditions of environmental authority

Agency interest: General	
Condition number	**Condition**
G1	**Activities** under this environmental authority must be conducted in accordance with the following limitations: 1. A maximum of 20.0 kL per day of treated effluent may be disposed of over a minimum irrigation area of 1.34 hectares shown as the hatched area in *Attachment 1 - Location of Irrigation Areas.*
G2	All reasonable and practicable **measures** must be taken to prevent or minimise environmental harm caused by the activities.
G3	Any breach of a condition of this environmental authority must be reported to the **administering authority** as soon as practicable within 24 hours of becoming aware of the breach. **Records** must be kept including full details of the breach and any subsequent actions taken.
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 with the exception of environmental monitoring results which 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 and in the format requested.

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	All analyses required under this environmental authority must be carried out by a laboratory that has National Association of Testing Authorities (**NATA**) certification, or an equivalent certification, for such analyses.
G8	**You** must record the following details of all environmental complaints received: 1. date and time the complaint was received 2. name and contact details of the complainant when provided and authorised by the complainant 3. nature of the complaint 4. investigation undertaken 5. conclusions formed 6. actions taken.
G9	When required by the **administering authority**, monitoring must be undertaken in the manner prescribed by the **administering authority** to investigate a complaint of **environmental nuisance** arising from the **activity**. The monitoring results must be provided within 10 business days to the **administering authority** upon its request.
G10	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 in and aware of their obligations under the *Environmental Protection Act 1994* 6. ensure that reviews of environmental performance are undertaken at least annually.
G11	All waste generated in carrying out the **activity** must be lawfully reused, recycled or removed to a facility that can lawfully accept the waste.
Agency interest: Air	
Condition number	**Condition**
A1	Other than as permitted within this environmental authority, odours or airborne contaminants must not cause **environmental nuisance** at a **sensitive place** or **commercial place**.
Agency interest: Water	
Condition number	**Condition**
WT1	Stormwater contaminated by the **activity** must be managed to minimise or prevent any adverse effect on the environmental values of the receiving environment.
WT2	A **receiving environment monitoring program** must be designed and implemented by an **appropriately qualified person(s)** to monitor the effects of the **activity** on **groundwater**.
WT3	The **receiving environment monitoring program** required by condition WT2, must include at least the following: (a) be able to determine the impacts of the licensed **activity** on the **groundwater** quality in the underlying aquifer; and

	(b) include, but not be limited to, a sufficient number of bores (minimum of three) monitored at locations and depths which yield representative **groundwater** samples from at least the upper-most aquifer so as to: i. establish the quality of **groundwater** that has not been affected by seepage or drainage of contaminants to **groundwater** from the **activity**; and ii. detect any seepage of contaminants to **groundwater** from the licensed place; and (c) include monitoring of background **groundwater** quality, hydraulically up-gradient of any release of **contaminants** to **groundwater**; and (d) include monitoring of downstream **groundwater** quality, hydraulically down gradient of all storage ponds, sewage treatment plant and irrigation areas; (e) include, but not limited to, six monthly monitoring of the quality of **groundwater** to detect any possible release(s) of **contaminants**; and (f) consider the potential use of **groundwater** in the vicinity.
Agency interest: Land	
Condition number	**Condition**
L1	The only **contaminants** to be released to **land** are treated effluent in accordance with *Table 1 – Treated effluent release limits to irrigation area*, and the associated requirements.

Table 1 - Treated effluent release limits to irrigation area

Quality Characteristic	Limit	Limit type	Minimum monitoring frequency
Volume (L/ha/day)	14,925	Maximum	Daily
Total Nitrogen (mg/L as N)	30	Maximum	Quarterly
Total Phosphorus (mg/L as P)	10	Maximum	
pH (pH units)	6.0 – 8.5	Range	
E coli (CFU/100ml)	10	Maximum	
Electrical Conductivity (µS/cm)	1000	Maximum	
Free Residual Chlorine (mg/L)	1.0	Maximum	

Associated requirements:

1. Monitoring must be in accordance with the **administering authority's** Water Quality Sampling Manual and all monitoring devices must be effectively calibrated and maintained.
2. Monitoring must be undertaken when treated sewage effluent is being irrigated, unless irrigation has ceased for longer than the relevant parameters specified minimum frequency (e.g. if TSS was only required to be monitored once a week, then a TSS sample would not be required after the first week following cessation of the release).
3. Volume of release must be calculated based on the total irrigation area when irrigating the maximum volume or the worked out for the area of application based on the actual volume irrigated.
4. Indicators for **TN** and **TP** are recommended to be done as grab samples.

L2	Treated effluent released to **land** must be done in accordance with documentation that ensures: 1. drainage to **groundwater** and subsurface flows of **contaminants** to surface waters are minimised 2. surface pondage and run-off of effluent is prevented 3. degradation of soil structure is minimised

	4. soil sodicity and the build-up of nutrients and heavy metals in the soil and subsoil are minimised 5. spray drift or overspray does not carry beyond effluent disposal areas 6. effluent disposal areas are maintained with an appropriate crop in a viable state for transpiration and nutrient uptake 7. sufficient buffer zones are maintained between irrigation sites and sensitive environmental receptors.
L3	When weather conditions or soil conditions preclude the release of treated sewage effluent to **land**, effluent must not be irrigated to **land**.
L4	A **receiving environment monitoring program** must be designed and implemented by an **appropriately qualified person(s)** to monitor the effects of the **activity** on **land**.
L5	The **receiving environment monitoring program** required by condition L4, must include at least the following: 1. biennial soil monitoring; and 2. soil and sub-soil analysis, including assessment of the soils from representative locations, including type, structure, pH, phosphorus adsorption level and capacity, nutrient status, salinity and sodicity, and cation exchange capacity of the irrigation release areas; and 3. determination of the quantity and quality of **contaminants** applied to the soils from the recycled water irrigation; and 4. periodic re-assessment including modelling of the water, nutrient and salt balances and irrigation rate and return period to ensure sustainable use of the irrigation area; and 5. reporting of monitoring results and an assessment of the impact of the releases on the irrigation areas.
L6	If the **land** monitoring program report indicates adverse impacts from the **activity**, you must notify the **administering authority** within 10 business days and provide a copy of the report. The report must include details of how the irrigation area will be remediated.

Definitions

Activity means the environmentally relevant activity to which this environmental authority relates. An activity may be undertaken on the whole or a part of a site.

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

Appropriately qualified person/suitably qualified person means a person who has professional qualifications, training or skills or experience relevant to the nominated subject matters and can give authoritative assessment, advice and analysis about performance relevant to the subject matters using relevant protocols, standards, methods or literature.

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.

Contaminant(s) means as defined in Section 11 of the *Environmental Protection Act 1994.*

Environmental harm means as defined in Section 14 of the *Environmental Protection Act 1994.*

Environmental nuisance means as defined in Section 15 of the *Environmental Protection Act 1994.*

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

Groundwater means water that occurs naturally in, or is introduced artificially into, an aquifer.

Land means land excluding **waters** and the atmosphere. Land includes land on the authorised place.

Measures have the broadest interpretation and include plant, equipment, physical objects, monitoring, procedures, actions, directions and competency.

Minimise means minimise by taking all reasonable and practical measures to minimise the adverse effect having regard to the following matters:

(a) the nature of the harm or potential harm
(b) the sensitivity of the receiving environment
(c) the current state of technical knowledge for the **activity**
(d) the likelihood of successful application of different measures that might be taken to minimise the adverse effects
(e) the financial implications of the different measures as they would relate to the type of activity
(f) if the adverse effect is caused by the location of the activity being carrying out, whether it is feasible to carry out the activity at another location.

NATA means National Association of Testing Authorities.

Receiving environment monitoring program means a monitoring program designed to monitor and assess the potential impacts of controlled and/or uncontrolled releases of contaminants to the environment from the **activity**.

Release of a contaminant into the environment means to:

(a) deposit, discharge, emit or disturb the contaminant
(b) cause or allow the contaminant to be deposited, discharged, emitted or disturbed
(c) fail to prevent the contaminant from being deposited, discharged emitted or disturbed
(d) allow the contaminant to escape
(e) fail to prevent the contaminant from escaping.

Sensitive place means:

(a) a dwelling (including residential allotment, mobile home or caravan park, residential marina or other residential premises, motel, hotel or hostel
(b) a library, childcare centre, kindergarten, school, university or other educational institution
(c) a medical centre, surgery or hospital
(d) a protected area
(e) a public 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.

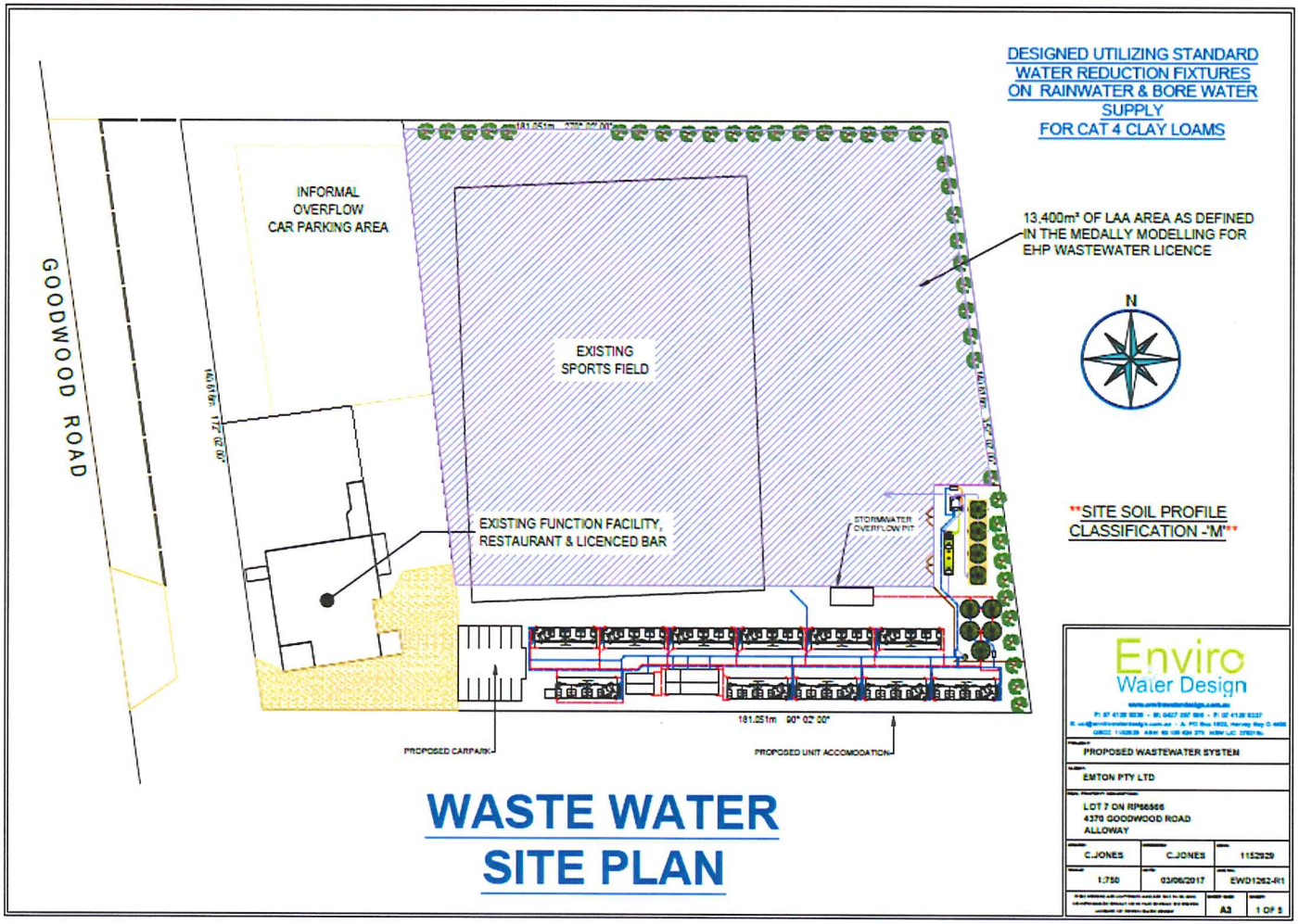
Total Nitrogen (TN) means the sum of Organic Nitrogen, Ammonia Nitrogen, Nitrite plus Nitrate Nitrogen, expressed as mg/L as Nitrogen. This includes both the inorganic and organic fraction of nitrogen.

Total Phosphorus (TP) 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 means all Queensland waters and includes rivers, streams, lakes, lagoons, ponds, swamps, wetlands, surface waters, bed and bank of any waters, dams, non-tidal or tidal waters (including the sea), any ground water and any part thereof.

You means the holder of the environmental authority.

Attachment 1 - Location of Irrigation Areas



END OF ENVIRONMENTAL AUTHORITY