Permit

Environmental Protection Act 1994

Environmental authority EPPR00686313

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

Environmental authority number: EPPR00686313

Environmental authority takes effect on 31 July 2018

Environmental authority holder(s)

Name(s)	Registered address
HN QCV Benaraby No 1 Pty Ltd	A1 Richmond Road HOMEBUSH WEST NSW 2140
QANTAC Benaraby Pty Ltd	Stanton Mienhert, 'Technology Park' Unit 14A, 107 Miles Platting Road EIGHT MILE PLAINS QLD 4113

Environmentally relevant activity and location details

Environmentally relevant activity/activities	Location(s)
Prescribed ERA, ERA 63 - Sewage Treatment, 1: Operating sewage treatment works, other than no-release works, with a total daily peak design capacity of, (b-i) more than 100 but not more than 1500EP if treated effluent is discharged from the works to an infiltration trench or through an irrigation scheme	LOT 88/SP182705
Prescribed ERA, ERA 63 - Sewage Treatment, 1: Operating sewage treatment works, other than no-release works, with a total daily peak design capacity of, (b-i) more than 100 but not more than 1500EP if treated effluent is discharged from the works to an infiltration trench or through an irrigation scheme	LOT 88/SP182705
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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.

Department of Environment and Science
www.ehp.qld.gov.au ABN 46 640 294 485

Queensland Government

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 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);

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-on 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.

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

Date issued: 31 July 2018

Enquiries:
Extraction, Energy and Chemical Industries Assessment
Department of Environment and Science
Phone: 1300 130 372
Email: palm@des.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

All environmentally relevant activities conducted at all the locations covered by this environmental authority must be conducted in accordance with the following conditions of environmental authority:

Agency Interest: General	
G1	**Activities** conducted under this environmental authority must not be conducted contrary to any of the following limitations: 1. the operation of sewage treatment works with a daily peak design capacity of 80,000 litres.
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	Record, compile and keep all monitoring results required by this approval and provide this information to the administering authority upon request.
G6	All records required by this approval must be kept for five (5) years.
G7	A Site Based Management Plan (SBMP) must be implemented and 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 include a program for the irrigation of treated effluent and 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.
G8	The SBMP must not be implemented or amended in a way that contravenes any condition of this approval.
G9	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.
G10	An annual monitoring report must be prepared and submitted to the **administering authority** by 30 November each year, for the preceding financial year.

G11	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. The only exception to this condition is for *in situ* monitoring of pH, free chlorine and electrical conductivity.
G12	**You** must record the following details for all environmental complaints received: 1. date and time complaint was received 2. name and contact details of the complainant when provided and authorised by the complainant 3. nature of the complaint 4. investigations undertaken 5. conclusions formed 6. actions taken.
Agency Interest: Air	
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: Noise	
N1	Other than as permitted within this environmental authority, noise generated by the **activity** must not cause **environmental nuisance** to any **sensitive place** or **commercial place.**
Agency Interest: Water	

<table>
<tr><td>WT1</td><td>Other than as permitted within this environmental authority, contaminants must not be released to any waters.</td></tr>
<tr><td>WT2</td><td>A groundwater monitoring network must be installed with monitoring bores at the location stated in Table 1 - Groundater Monitoring Locations.

Table 1 - Groundwater Monitoring Locations.
<table><tr><th>Bore Number</th><th>Bore Type</th><th>Description</th><th>Bore Location</th></tr><tr><td>GW1</td><td>Existing Pumped bore</td><td>North-east of existing treatment plant within 10 metres of property boundary.</td><td>Latitude: -24.0031
Longitude: 151.3373
GDA94</td></tr><tr><td>GW2</td><td>Monitoring Bore</td><td>Between Land Application Area 3 and River within 25 metres of northern boundary</td><td>Latitude: -24.0021
Longitude: 151.3388
GDA94</td></tr><tr><td>GW3</td><td>Monitoring Bore</td><td>Between Land Application Area 3 and River within 90 metres of northern boundary</td><td>Latitude: -24.0032
Longitude: 151.3391
GDA94</td></tr><tr><td>GW4</td><td>Monitoring Bore</td><td>West of dirt roadway accessing boat ramp, in south eastern corner of property.</td><td>Latitude: -24.0035
Longitude: 151.3391
GDA94</td></tr></table></td></tr>
<tr><td>WT3</td><td>Monitoring bores must be identifiable with corresponding bore number as outlined in Table 1 - Groundwater Monitoring Locations.</td></tr>
<tr><td>WT4</td><td>Monitoring must be conducted and records kept of groundwater quality characteristics for the relevant monitoring bores required by condition WT2 of the approval.</td></tr>
</table>

WT5

Groundwater monitoring must be conducted for the water quality characteristics and at the minimum frequency stated in Table 2 - Groundwater Monitoring.

Table 2 - Groundwater Monitoring.

Parameters	**Frequency**
Standing Water Level (GW2, GW3 and GW4 only)	Quarterly
pH	Annually
Electrical Conductivity	Annually
Total Nitrogen	Annually
Nitrate	Annually
Total Phosphorus	Annually
Total Coliforms	Annually

Agency Interest: Land

L1

The only contaminants to be released to land are effluent in accordance with the Table 3 - Contaminant Release Limit to Land.

Table 3 - Contaminant Release Limit to Land.

Sampling Point	Quality Characteristic (units)	Minimum	Maximum	Monitoring frequency[2]
WWS	Volume (litres/day)(averaging over a 14 day period)	-	56,355	-
-	Wet Weather Storage (litres)	90,000	-	-
WWS	**BOD5** (mg/L) (inhibited)	-	20	Quarterly
WWS	Total Suspended Solids (mg/L)	-	30	Quarterly
WWS	**Total Nitrogen** (mg/L as N)	-	30	Quarterly
WWS	**Total Phosphorus** (mg/L as P)	-	10	Quarterly
WWS	pH (pH units)	6.5	8.5	Quarterly
WWS	E.coli (Colony Forming Units/100ml)	-	<100	Quarterly
WWS	Electrical Conductivity (microSiemens/cm)	-	1600	Quarterly

	<table><tr><td>WWS</td><td>Residual Chloride (mg/L)</td><td></td><td>2</td><td>Quarterly</td></tr></table> **Associated requirements** 1. The irrigation area of 17,000m² excluding any necessary buffer zones must be utilised on each occassion that treated effluent is being irrigated in accordance with Attachment 1: Site Layout plan provided at the end of this approval. 2. No irrigation is to occur within the erosion prone area which is identified along the back of the site 40 meters from the position of Mean High Water Springs. 3. Monitoring must be in accordance with the **administering authority**'s Water Quality Sampling Manual and all monitoring devices must be effectively calibrated and maintained. 4. Indicators for TN and TP are recommended to be done as grab samples. 5. Release point described as WWS is the outlet of the wet weather storage tank as depicted in Attachment 1: Site Layout plan provided at the end of this approval.
L2	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 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 as depicted in the Attachment 1 - Site Layout plan provided at the end of this approval.
L3	Chemicals and fuels in containers of greater than 15 litres must be stored within a **secondary containment system.**
L4	An appropriate spill kit, personal protective equipment and relevant operator instructions/emergency procedure guides for the management of wastes and chemicals associated with the sewage treatment works must be kept at the site.
L5	Notices must be prominently displayed on areas undergoing irrigation, warning the public that the area is irrigated with recycled water and not to use or drink the recycled water. These notices must be maintained in visible and legible condition.

Definitions

Key terms and/or phrases used in this document are defined in this section. 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 and experience relevant to the EA requirements and can give authoritative assessment, advice and analysis in relation to the EA requirements using the relevant protocols, standards, methods or literature.

BOD5 means the 5 day biochemical oxygen demand determined using standard tests (e.g. those used by **NATA** laboratories). This test is not inhibited for nitrification, otherwise would be referred to as "carbonaceous" BOD.

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 24 hour period.

Environmental nuisance as defined under Chapter 1 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.

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

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.

NATA means National Association of Testing Authorities.

Noxious means harmful or injurious to health or physical well-being.

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

Prescribed contaminants means contaminants listed within Schedule 9 of the Environmental Protection Regulation 2008.

Records include breach notifications, written procedures, analysis results, monitoring reports and monitoring programs required under a condition of this authority.

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

1. a dwelling, residential allotment, mobile home or caravan park, residential marina or other residential premises; or
2. a motel, hotel or hostel; or
3. a kindergarten, school, university or other educational institution; or
4. a medical centre or hospital; or
5. a protected area under the *Nature Conservation Act 1992*, the *Marine Parks Act 1992* or a World Heritage Area; or
6. a public thoroughfare, park or gardens; or
7. for noise, a place defined as a sensitive receptor for the purposes of the Environmental Protection (Noise) Policy 2008.

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 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.

WaTERS is the Water Tracking and Electronic Reporting System database formally known as the Point Source Database.

Wet Weather Day means a day which is not a dry weather day.

You means the holder of the environmental authority.

END OF PERMIT

ATTACHMENT

Attachment 1 – Site Layout



Source: Queensland Globe, accessed 15 June 2018