Queensland Government

Department of
Environment and Heritage Protection

05-MAY-2016

To: Ensign Australia Pty Ltd
Att: Trevor Roesler
15-17 Westport Road
EDINBURGH NORTH SA 5113

Email: trevor.roesler@ensignenergy.com

Our reference: 438951

Application details

I refer to the application that was received by the administering authority on 22-MAR-2016.

Land description: Lot 1 on SP133822 Lot 1 Plan SP133822.

Decision

Your application has been approved and your environmental authority (reference EPSX03843316) is attached.

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

Yours sincerely

Signature	Date
	05 May 2016

Anthony Schmid
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 EPSX03843316)

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: EPSX03843316

Environmental authority takes effect on 24-MAR-2016.

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 will be due each year on this day.

Environmental authority holder(s)

Name	Registered address
Ensign Australia Pty Ltd	15-17 Westport Road EDINBURGH NORTH SA 5113

Environmentally relevant activity and location details

Environmentally relevant activity(ies)	Location(s)
63-(1a)(i) Sewage treatment >21 to 100EP - IT or IR	Lot 1 on SP133822 - Lot 1 Plan SP133822

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).

Contaminated land

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

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.

	05 May 2016
Signature	Date

Anthony Schmid
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
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Phone: 1300 130 372
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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

The conditions of approval for this environmental authority are standard conditions contained within the attached document(s) entitled:

- Eligibility criteria and standard conditions for sewage treatment works (ERA 63) – Version 2

All reasonable steps must be taken to ensure the activity complies with the eligibility criteria.

END OF PERMIT

Eligibility criteria and standard conditions for sewage treatment works (ERA 63) – Version 2

This document provides eligibility criteria and standard conditions for Environmentally Relevant Activity (ERA) 63 - Sewage treatment at threshold 1(a)(i) - sewage treatment works with total daily peak design capacity of 21 to 100 equivalent persons if treated effluent is discharged through an irrigation scheme.

Eligibility criteria

Eligibility criteria are constraints set to ensure environmental risks associated with the operation of the ERA are able to be managed by the standard conditions. Eligibility criteria set out the circumstances in which a standard or variation application for an environmental authority can be made.

Standard conditions

Standard conditions are the minimum operating requirements an environmental authority holder must comply with.

Standard applications

If an applicant can meet all of the eligibility criteria and standard conditions, then they can make a standard application. Applicants are required to complete a 'Standard application form'. The form can be downloaded from the Queensland Government's Business and Industry Portal at www.business.qld.gov.au/ea

Variation applications

If an applicant can meet all of the eligibility criteria but needs to vary one or more of the standard conditions to suit their operational needs, then they can make a variation application. Applicants are required to complete a 'Variation application form'. The form can be downloaded from the Queensland Government's Business and Industry Portal at www.business.qld.gov.au/ea

Site specific applications

Applicants who cannot meet the eligibility criteria must make a site specific application. Applicants are required to complete a 'Site specific application form'. The form can be downloaded from the Queensland Government's Business and Industry Portal at www.business.qld.gov.au/ea

Amendment applications

If the holder of an environmental authority needs to amend a standard condition in the issued environmental authority, then the holder must submit an 'Amendment application form'. The form can be downloaded from the Queensland Government's Business and Industry Portal at www.business.qld.gov.au/ea

Definitions

Some terms used in this document are defined in Appendix 1.

Version history

Version	Date	Description of changes
1	6 December 2013	Eligibility criteria and standard conditions take effect
2	30 September 2015	Updated for repeal of wild river provisions (as allowed in section 715C of the *Environmental Protection Act 1994*) and version history added

ABN 46 640 294 485

Eligibility criteria

Eligibility criteria category	Eligibility criteria
Activity description	The activity is sewage treatment works with a total daily peak design capacity of 21 to 100 equivalent persons, if treated effluent is discharged through an irrigation scheme.
	The activity does not discharge effluent to an infiltration trench.
Activity location	The effluent disposal area is not within 250 metres of any bore used for domestic water supply.
	The effluent disposal area is not within 1000 metres of any bore used for town water supply.
	The activity is not carried out in a designated precinct in a strategic environmental area as defined in the Regional Planning Interests Regulation 2014 or regional plan.
	The facility is not within 100 metres of any watercourse, wetland or spring.
Water	There is no release of aqueous waste from the activity to waters.

Standard conditions

Conditions
General
G1: All reasonable steps must be taken to ensure the activity complies with the eligibility criteria.
G2: 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 control measures that minimise the potential for environmental harm • ensure plant and equipment is maintained and operated in proper and effective condition • 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.
G3: The activity must not cause environmental nuisance at a nuisance sensitive place.
G4: All documents and records of monitoring required by conditions of this authority must be kept for at least five years.
G5: Storage of chemicals and fuels in bulk or in containers of greater than 15 litres must be within a secondary containment system and releases controlled in a manner that prevents environmental harm.
Land
L1: Contaminants from the activity must not be released to land except as authorised by under conditions (D1), (D3) and (D4).
Water
W1: Stormwater contaminated by the activity must be managed to minimise or prevent any adverse effect on the environmental values of the receiving environment.
W2: Ponds used for the storage or treatment of effluent or wastes must be constructed, installed and maintained to: • prevent any release of effluent or wastes from the ponds • ensure the stability of the pond structure.
Disposal of effluent to land
D1: Treated effluent is permitted to be released to land provided that it is done in accordance with a written procedure that ensures: • infiltration to groundwater and subsurface flows of contaminants to surface waters are prevented • surface pondage and run-off of effluent is prevented • degradation of soil structure is minimised • soil sodicity and the build-up of nutrients and heavy metals in the soil and subsoil are minimised • spray drift or overspray do not carry beyond effluent disposal areas • effluent disposal areas are maintained with an appropriate crop in a viable state for transpiration and nutrient uptake • the crop on the disposal area is harvested and removed from the disposal area.
D2: When weather conditions or soil conditions preclude the release of effluent to land, effluent must be directed to wet weather storage or be lawfully removed from the site.

D3: In addition to the requirements of D1, the treated effluent must be evenly distributed over an area stated in Table 1 or a greater area.

Table 1 – Irrigation area requirements

Rainfall	**Maximum irrigation rate**	**Minimum land required (m^2)**
<600 millimetres per year (mm/year)	3 millimetres per day (mm/day)	335m^2 per m^3 of treated effluent irrigated
>600mm/year to 1000 mm/year	2mm/day	500m^2 per m^3 of treated effluent irrigated
>1000mm/year	1mm/day	1000m^2 per m^3 of treated effluent irrigated

D4: Treated effluent released to land must comply with the limits in Table 2.

Table 2 – Contaminant release limits to land

Quality characteristics	**Release limit**	**Limit type**
Total nitrogen*	60mg/L	maximum
Total phosphorous*	20mg/L	maximum
Electrical conductivity	1600µs/cm	maximum
pH	5.0–8.5	range
Total residual chlorine (if used for disinfection)	1mg/L	maximum
E. coli	<1000cfu/100ml	maximum

*note that these limits would typically correspond to long term total nitrogen and total phosphorous concentrations of 30 mg/L and 10 mg/L respectively.

D5: Quarterly monitoring of treated effluent must be carried out in accordance with the Monitoring and Sampling Manual 2009 (EHP) to assess compliance with condition (D4) and records of the results maintained.

Waste

R1: Other than effluent released to land in accordance with conditions (D1), (D3) and D4), all waste generated in carrying out the activity must be reused, recycled or lawfully disposed of offsite.

Appendix 1: Terms and definitions

Term	Definition
Activity	the environmentally relevant activity to which this environmental authority relates. An activity may be undertaken on the whole or a part of a site.
Aqueous waste	any aqueous waste including process water, water that has otherwise been used in the carrying out of the activity or sewage, whether or not the waste has been treated, but excluding stormwater.
Category A or B environmentally sensitive area	as defined in Schedule 12, Part 1 of the Environmental Protection Regulation 2008.
Chemical	as defined in Schedule 12, Part 2 of the Environmental Protection Regulation 2008.
Combustion of fuel	does not include fuel used in explosives or by vehicles.
Contaminant(s)	as defined in Section 11 of the *Environmental Protection Act 1994.*
Environmental harm	as defined in Section 14 of the *Environmental Protection Act 1994.*
Environmental nuisance	as defined in Section 15 of the *Environmental Protection Act 1994.*
Facility	the area used for carrying out the ERA including any buildings, disturbed areas or any associated infrastructure.
Land	land excluding waters and the atmosphere. Land includes land on the authorised place.
Minimise	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.
Nuisance sensitive place	nuisance sensitive place includes: • within or outside of a dwelling, residential allotment, mobile home or caravan park, residential marina or other residential premises • within or outside of a motel, hotel or hostel • within or outside of a kindergarten, school, university or other educational institution • within or outside of a medical centre or hospital • within a protected area under the *Nature Conservation Act 1992*, within a marine park under the *Marine Parks Act 1992* or a world heritage area • within a public thoroughfare, park or gardens • within or outside of 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.
Spring	the land to which water rises naturally from below the ground and the land over which the water then flows.
Waters	all or any part of a creek, river, stream, lake, lagoon, swamp, wetland, spring, unconfined surface water, unconfined water in natural or artificial watercourses, bed and bank of any waters, non-tidal or tidal waters (including the sea), stormwater channel, stormwater drain, roadside gutter, stormwater run-off, and underground water.
Watercourse	as defined in Section 8, Schedule 12 of the Environmental Protection Regulation 2008.
Wetland	as defined in Schedule 12 of the Environmental Protection Regulation 2008, means an area shown as a wetland on the map of referable wetlands.

Appendix 2: General obligations for environmental authority holders

This appendix is not intended to provide a comprehensive assessment of all obligations under Queensland law. It provides some general information and holders are encouraged to familiarise themselves with all requirements related to their specific operation.

Responsibilities under the *Environmental Protection Act 1994*

Separate to the requirements of the standard conditions, the holder of the environmental authority must also meet their obligations under the *Environmental Protection Act 1994*, and the regulations made under that Act. For example, the holder must be aware of the following provisions of the *Environmental Protection Act 1994* which may apply unless the environmental harm is authorised by the conditions of the environmental authority.

General environmental duty

Section 319 of the *Environmental Protection Act 1994* states that we all have a general environmental duty. This means that we are all responsible for the actions we take that affect the environment. We must not carry out any activity that causes or is likely to cause environmental harm unless we take all reasonable and practicable measures to prevent or minimise the harm. To decide what meets your general environmental duty, you need to consider:

- the nature of the harm or potential harm
- the sensitivity of the receiving environment
- the current state of technical knowledge for the activity
- the likelihood of successful application of the different measures to prevent or minimise environmental harm that might be taken
- the financial implications of the different measures as they would relate to the type of activity.

It is not an offence not to comply with the general environmental duty. However, maintaining your general environmental duty is a defence against the following acts:

(a) an act that causes serious or material environmental harm or an environmental nuisance

(b) an act that contravenes a noise standard

(c) a deposit of a contaminant, or release of stormwater run-off, mentioned in section 440ZG.

More information is available on the Department of Environment and Heritage Protection (EHP) website www.ehp.qld.gov.au.

Duty to notify

Section 320 of the *Environmental Protection Act 1994* explains the duty to notify. The duty to notify applies to all persons and requires a person or company to give notice where serious or material environmental harm is caused or threatened. Notice must be given of the event, its nature and the circumstances in which the event happened. Notification can be verbal, written or by public notice depending on who is notifying and being notified.

The duty to notify arises where:

- a person carries out activities or becomes aware of an act of another person arising from or connected to those activities which causes or threatens serious or material environmental harm
- while carrying out activities a person becomes aware of the happening of one or both of the following events:
  - the activity negatively affects (or is reasonably likely to negatively affect) the water quality of an aquifer
  - the activity has caused the unauthorised connection of two or more aquifers.

For more information on the duty to notify requirements refer to the guideline 'Duty to notify of environmental harm' (EM467).

Some relevant offences under the *Environmental Protection Act 1994*

Non-compliance with a condition of an environmental authority (section 430)

Section 430 of the *Environmental Protection Act 1994* requires that a person who is the holder of, or is acting under, an environmental authority must not wilfully contravene, or contravene a condition of the authority.

Environmental authority holder responsible for ensuring conditions complied with (section 431)

Section 431 of the *Environmental Protection Act 1994* requires that the holder of an environmental authority must ensure everyone acting under the authority complies with the conditions of the authority. If another person acting under the authority commits an offence against section 430, the holder also commits an offence, namely, the offence of failing to ensure the other person complies with the conditions.

Causing serious or material environmental harm (sections 437–39)

Material environmental harm is when the harm is not trivial or negligible in nature. Serious environmental harm is harm that is irreversible, of a high impact or widespread, or that is caused to an area of high conservation value or special significance. Damages, or costs required to rehabilitate the environment, of more than $5000 also constitute serious environmental harm.

Serious or material environmental harm excludes environmental nuisance.

Causing environmental nuisance (section 440)

Environmental nuisance is unreasonable interference with an environmental value caused by aerosols, fumes, light, noise, odour, particles or smoke. It may also include an unhealthy, offensive or unsightly condition because of contamination.

Depositing a prescribed water contaminant in waters (section 440ZG)

Prescribed contaminants include a wide variety of contaminants listed in Schedule 9 of the *Environmental Protection Act 1994*.

It is your responsibility to ensure that prescribed contaminants are not left in a place where they may or do enter a waterway, the ocean or a stormwater drain. This includes making sure that stormwater falling on or running across your site does not leave the site contaminated. Where stormwater contamination occurs you must ensure that it is treated to remove contaminants. You should also consider where and how you store material used in your processes onsite to reduce the chance of water contamination.

Placing a contaminant where environmental harm or nuisance may be caused (section 443)

A person must not cause or allow a contaminant to be placed in a position where it could reasonably be expected to cause serious or material environmental harm or environmental nuisance.

Some of the relevant offences under the *Waste Reduction and Recycling Act 2011*

Littering (section 103)

Litter is any domestic or commercial waste and any material a person might reasonably believe is refuse, debris or rubbish. Litter can be almost any material that is disposed of incorrectly. Litter includes cigarette butts and drink bottles dropped on the ground, fast food wrappers thrown out of the car window, poorly secured material from a trailer or grass clippings swept into the gutter. However, litter does not include any gas, dust, smoke or material emitted or produced during, or because of, the normal operations of a building, manufacturing, mining or primary industry.

Illegal dumping of waste (section 104)

Illegal dumping is the dumping of large volumes of litter (200 litres or more) at a place. Illegal dumping can also include abandoned vehicles.

Relevant offence under the Environment Protection (Waste Management) Regulation 2000

Trackable waste to be given only to licensed transporter (section 41)

A generator of trackable waste must not give the waste to another person to transport it commercially, or in a load of more than 250 kilograms, in a vehicle unless the other person holds, or is acting under, the required authority for transporting the waste in the vehicle.

Responsibilities under other legislation

An environmental authority pursuant to the *Environmental Protection Act 1994* does not remove the need to obtain any additional approval for the activity that might be required by other state and/or Commonwealth legislation. Other legislation for which a permit may be required includes but is not limited to the:

- *Aboriginal Cultural Heritage Act 2003*
- contaminated land provisions of the *Environmental Protection Act 1994*
- *Fisheries Act 1994*
- *Forestry Act 1959*
- *Nature Conservation Act 1992*
- *Petroleum and Gas (Production and Safety) Act 2004 / Petroleum Act 1923*
- *Queensland Heritage Act 1992*
- *Sustainable Planning Act 2009*
- *Water Supply (Safety and Reliability) Act 2008*
- *Water Act 2000.*

Applicants are advised to check with all relevant statutory authorities and comply with all relevant legislation.