

Permit

Environmental Protection Act 1994

Environmental authority EA0002519

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

Environmental authority number: EA0002519

Environmental authority takes effect on the day of the approval.

The first anniversary day of this environmental authority is the take effect day of this environmental authority. Payment of the annual fee will be due each year on this day.

Environmental authority holder

Name(s)	Registered address
DECMIL GROUP LIMITED	20 Parkland Rd, Osborne Park OSBORNE PARK WA 6017

Environmentally relevant activity and location details

Environmentally relevant activities	Location
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 15 on Plan SP315448

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).

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:

- a) the happening of an event involving a hazardous contaminant on the contaminated land (notice must be given within 24 hours); or
- b) a change in the condition of the contaminated land (notice must be given within 24 hours); or
- c) 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- 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

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

28 September 2020

Date

Enquiries:
Utilities and Government Organisations
BRISBANE QLD 4001
Phone: 1300130372
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)

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.

Development Approval

This permit is not a development approval under the *Planning Act 2016*. The conditions of this environmental authority are separate, and in addition to, any conditions that may be on the development approval. If a copy of this environmental authority is attached to a development approval, it is for information only, and may not be current. Please contact the Department of Environment and Science to ensure that you have the most current version of the environmental authority relating to this site.

Conditions of environmental authority

Environmentally relevant activities	Location
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 15 on Plan SP315448

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

Agency interest: General	
Condition number	Condition
A1	Activities conducted under this environmental authority must be conducted in accordance with the following: (a) inflows into the sewage treatment plant must not exceed 110,000 litres on any day ; and (b) treated effluent must only be released to land inside the land application area identified in Appendix 1 – Irrigation Area , and areas used for dust suppression and earth works.
A2	All reasonable and practicable measures must be taken to prevent or minimise any environmental harm caused by the activity .
A3	Other than as permitted by this environmental authority, the release of a contaminant into the environment must not occur.
A4	Any contravention of a condition of this environmental authority must be reported to the administering authority as soon as practicable, but no more than 24 hours after becoming aware of the contravention.
A5	For any contravention of a condition of this environmental authority, an investigation must be carried out to determine the cause of the contravention and the investigation must include an assessment to determine the environmental impact of the contravention.
A6	Records of any contravention of this environmental authority must be made including full details of the contravention and any subsequent actions taken in accordance with Condition A4 and Condition A5 .
A7	All records required by the conditions of this environmental authority must be kept for a minimum of five years, and all environmental monitoring results and underlying raw data must be kept until surrender of this environmental authority.

A8	All records required by the conditions of this environmental authority must be provided to the administering authority : (a) within the timeframe specified by the administering authority ; and (b) in the format requested by the administering authority .
A9	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.
A10	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 <i>in situ</i> monitoring of pH, total residual chlorine and electrical conductivity.
A11	Details of all environmental complaints received must be recorded including: (a) date and time complaint was received; and (b) name and contact details of the complainant when provided and authorised by the complainant; and (c) nature of the complaint; and (d) investigations undertaken; and (e) conclusions formed; and (f) actions taken.
A12	When required by the administering authority , monitoring must be undertaken in the manner and within the timeframe prescribed by the administering authority , to investigate any alleged environmental harm caused by the activity.
A13	The results, including an analysis of the results, of monitoring required by Condition A12 must be provided to the administering authority within 10 business days after you receive the monitoring results.
A14	Within three months of the environmental authority taking effect, written procedures must be developed which: (a) identify all potential risks to the environment from the activity , including: (i) during routine operations; and (ii) outside routine operations; and (iii) during closure; and (iv) in an emergency; and (b) identify measures to prevent or minimise the potential for environmental harm for each of the potential risks identified; and (c) establish an inspection and maintenance program for plant and equipment including calibration and servicing that is in accordance with manufacturer's instructions; and (d) establish a staff training program on obligations under this environmental authority and the <i>Environmental Protection Act 1994</i> to be conducted as part of staff inductions and at least annually thereafter; and (e) establish processes to review environmental risks, incidents, performance and complaints.

A15	Written procedures required by Condition A14 must be: (a) implemented; and (b) reviewed at least every two years; and (c) provided to the administering authority upon request and within a timeframe specified by the administering authority .
A16	For plant and equipment, all measures necessary to comply with the conditions of this environmental authority must be: (a) installed, operated and maintained in a proper and effective manner; and (b) in accordance with the written procedures required by Condition A14 .
A17	Chemicals and fuels in containers of greater than 15 litres must be stored within a secondary containment system .
A18	An annual monitoring report must be prepared by 30 November each year, for the preceding calendar year, and submitted to the administering authority when requested.
A19	The annual monitoring report required by Condition A18 must include: (a) a summary of the previous 12 months monitoring results; and (b) an outline of actions taken or proposed to minimise the risk of environmental harm identified by monitoring and/or environmental complaints.
Agency interest: Air	
Condition number	Condition
B1	Odours or airborne contaminants from the activity must not cause environmental nuisance to any sensitive place or commercial place .
Agency interest: Water	
Condition number	Condition
C1	The land application area must not be located within 30 metres of any watercourse .
C2	Contaminants must not be released to any waters .
Agency interest: Land	
Condition number	Condition
D1	The only contaminants to be released to land are treated effluent in accordance with Table 1 – Treated effluent release limits to land (and the associated requirements).

Table 1 – Treated effluent release limits to land

Authorised release Point	Quality Characteristic (units)	Minimum	Arithmetic mean	Maximum
Land application area	Volume (L/day)	-	16,600	-
	Irrigation rate (mm/day)	-	1	-
	Total chlorine (mg/L)	-	-	2
	Total Nitrogen (TN) (mg/L)	-	40	-
	Total Phosphorus (TP) (mg/L)	-	10	20
	pH (pH units)	6	-	8.5
	Electrical Conductivity (µS/cm)	-	-	1,600
	E.Coli (CFU/100mL)	-	-	10
	Total Suspended Solids (mg/L)	-	-	5

Associated requirements

1. **Arithmetic means** are to be taken as a **Long Term Rolling (limit)**, meaning a limit applied to consecutive samples taken over a 3 month period (on a rolling basis for limit calculations) where consecutive samples are taken at the minimum frequency specified in **Table 2 – Monitoring of treated effluent release to land**.

D2

Treated effluent **released** to land must be monitored in accordance with **Table 2 – Monitoring of treated effluent release to land** (and the associated requirements).

Table 2 – Monitoring of treated effluent release to land

Monitoring Point Name	Quality Characteristic / Indicator (units)	Minimum monitoring frequency
Sewage treatment plant inlet	Total inflow volume (L/day)	Daily
Outlet of sewage treatment plant	Irrigation rate (mm/day)	Daily
	Irrigation volume (L/day)	Daily
	Irrigated land area (m ²)	Daily

	Total chlorine (mg/L)	Quarterly
	Electrical Conductivity (µS/cm)	Quarterly
	Total Nitrogen (TN) (mg/L)	Quarterly
	Total Phosphorus (TP) (mg/L)	Quarterly
	pH	Quarterly
	E.Coli (CFU/100mL)	Monthly
	Total Suspended Solids (mg/L)	Monthly
Associated requirements		
1. Irrigation rate must be calculated based on 2.46 hectares of irrigation area, and the actual volume of effluent irrigated on that same day; and 2. Monitoring must be in accordance with the most recent edition of the administering authority's Monitoring and Sampling Manual; and 3. All monitoring devices must be effectively calibrated and maintained in accordance with manufacturers specifications; and 4. Indicators for TN and TP must be determined from grab samples; and 5. 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); and 6. Treated effluent samples collected must be representative of the treated effluent releases to land.		
D3	Treated effluent released to land authorised under Condition D1 must ensure that: (a) drainage to groundwater and subsurface flows of contaminants to surface waters do not occur; and (b) the treated effluent must be distributed evenly within the land application area; and (c) ponding of treated effluent does not occur; and (d) treated effluent does not run-off into areas beyond the land application area; and (e) soil structure is not degraded as a result of the activity; and (f) soil sodicity, salinity and the build-up of nutrients and heavy metals in the soil and subsoil are minimised; and (g) spray drift or overspray does not carry beyond the land application area; and (h) effluent disposal areas are maintained with appropriate plant(s) in a viable state for transpiration and nutrient uptake; and (i) sufficient buffer zones are maintained between irrigation sites and sensitive environmental receptors; and (j) biomass removed from plants must be removed from the land application area.	
D4	Rotational irrigation must sequentially irrigate the entire land application area before re-irrigating the same area.	
D5	You must install and maintain wet weather storage on the site with a volume of at least 450,000 litres for storage of effluent.	

D6	The land application area irrigation area must be at least 2.46 hectares in area.
D7	When weather conditions or soil conditions preclude the release of treated effluent to land, treated effluent must be directed to wet weather storage or be lawfully removed from the site .
Agency interest: Noise	
Condition number	Condition
E1	Noise generated by the activity must not cause environmental nuisance to any sensitive place or commercial place .
Agency interest: Waste	
Condition number	Condition
F1	Unless otherwise permitted by this environmental authority, all waste generated in carrying out the activity must be lawfully reused, recycled or removed to a facility that can lawfully accept the waste.

Definitions

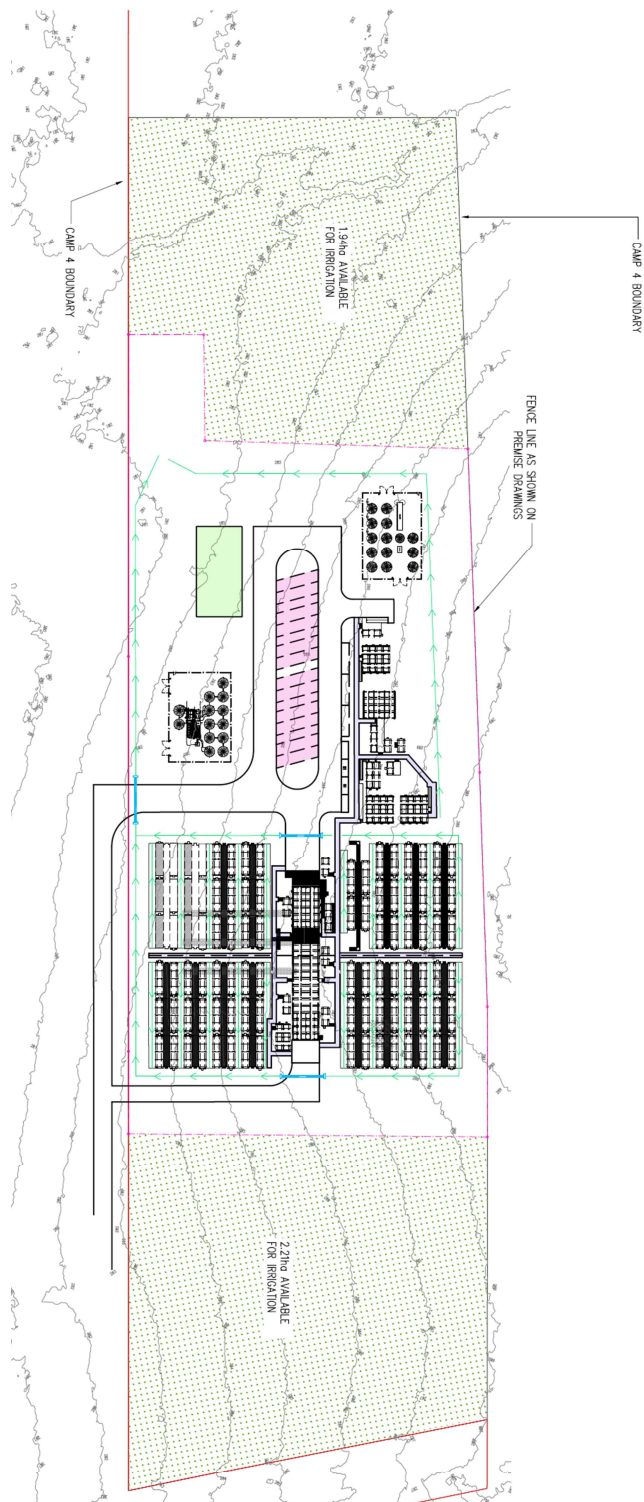
Key terms and/or phrases used in this document are defined in this section and **bolded** throughout this document. Applicants should note that where a term is not defined, the definition in the *Environmental Protection Act 1994*, its regulations or environmental protection policies must be used. If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

Word or Phrase	Meaning
Activity	Activity means the environmentally relevant activity(s) to which the environmental authority relates. An activity may be undertaken on the whole or a part of a site.
Administering authority	The Department of Environment and Science, or its successors or predecessors.
Arithmetic mean	The arithmetic value obtained by adding several quantities together and dividing the sum by the number of quantities.
Appropriately qualified person(s)	A person or persons who has professional qualifications, training, skills and experience relevant to the environmental authority (EA) requirements and can give authoritative assessment, advice and analysis in relation to the EA requirements using the relevant protocols, standards, methods or literature.
Chemical	As defined in Schedule 12, Part 2 of the Environmental Protection Regulation 2019.
Commercial place	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)	As defined in Section 11 of the <i>Environmental Protection Act 1994</i> .
Day	Any 24 hour period of a calendar day.
Environmental harm	As defined in Section 14 of the <i>Environmental Protection Act 1994</i> .
Environmental nuisance	As defined under Chapter 1 of the <i>Environmental Protection Act 1994</i> .
Land	Land excluding waters and the atmosphere. Land includes land on the site.
Land application area	The irrigation area identified in Appendix 1 – Irrigation Area .
Long Term Rolling (limit)	A limit applied to consecutive samples taken over a 3 month period (on a rolling basis for limit calculations) where consecutive samples are taken at the minimum frequency specified in Table 2 – Monitoring of treated effluent release to land .
Measures	Includes plant, equipment, physical objects, monitoring, procedures, actions, directions and competency.
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; and (b) the sensitivity of the receiving environment; and (c) the current state of technical knowledge for the activity; and

Word or Phrase	Meaning
	(d) the likelihood of successful application of different measures that might be taken to minimise the adverse effects; and (e) the financial implications of the different measures as they would relate to the type of activity; and (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.
Monitor, monitored and monitoring	Monitoring the impact of an activity on the receiving environment and includes analysing, assessing, examining, inspecting, measuring, modelling or reporting any of the following matters— (a) the quantity, quality, characteristics, timing and variability of the release of any contaminant; and (b) the effectiveness of any control measure; and (c) the characteristics of, and impact on, the receiving environment; and (d) the effectiveness of remedial or rehabilitation measures (if applicable to the relevant monitoring requirement).
NATA	National Association of Testing Authorities.
Record(s)	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 or release or released	Means to: (a) deposit, discharge, emit or disturb the contaminant; or (b) cause or allow the contaminant to be deposited, discharged, emitted or disturbed; or (c) fail to prevent the contaminant from being deposited, discharged emitted or disturbed; or (d) allow the contaminant to escape; or (e) fail to prevent the contaminant from escaping.
Secondary containment system	A system designed, installed and operated to prevent any release of contaminants from the system, or containers within the system, to land, groundwater, or surface waters.
Sensitive place	Includes any of the following: (a) a dwelling, residential allotment, mobile home or caravan park, residential marina or other residential premises; or (b) a motel, hotel or hostel; or (c) a kindergarten, school, university or other educational institution; or (d) a medical centre or hospital; or (e) a protected area under the <i>Nature Conservation Act 1992</i>, the <i>Marine Parks Act 2004</i> or a World Heritage Area; or

Word or Phrase	Meaning
	(f) a public thoroughfare, park or gardens; or (g) for noise, a place defined as a sensitive receptor for the purposes of the Environmental Protection (Noise) Policy 2019; or (h) the area within the curtilage of any of the above places.
Site	Land on or in which it is authorised to carry out the activities approved under this environmental authority.
Total Nitrogen (TN)	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)	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	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.
Watercourse	Defined in Section 10, Schedule 19 of the Environmental Protection Regulation 2019.
You	Means the holder of the environmental authority, or anyone acting under the environmental authority.

Appendix 1 – Irrigation Area



END OF ENVIRONMENTAL AUTHORITY