

Permit

Environmental Protection Act 1994

Environmental authority EPPR00516713

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

Environmental authority number: EPPR00516713

Environmental authority takes effect on the date it is signed by the delegate.

The anniversary date of this environmental authority continues to be 9th September.

Environmental authority holder

Name	Registered address
Couran Point Services Pty Ltd (A.C.N. 089 110 672)	10 Erave Avenue, Runaway Bay QLD 4216

Environmentally relevant activity and location details

Environmentally relevant activity	Locations
ERA 63(1)(b)(i) operating sewage treatment works, other than no-release works, with a total daily peak design capacity of more than 100 but no more than 1500EP – discharge to an infiltration trench or through an irrigation scheme.	Lot 2 Plan RP804685, Lot 0 Plan SP151361, Lot 0 Plan SP113737, Lot 0 Plan SP159253, Lot 5 Plan SP208798, Lot 4 Plan SP208798, Lot 2 Plan SP208798, Lot 3 Plan SP208798, Lot 2 Plan RP811713.

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 land give written notice to the administering authority if they become aware of the following:

- the presence of, or happening of an event involving, a hazardous contaminant on the land that is causing, or is reasonably likely to cause, serious or material environmental harm (notice must be given within 24 hours); or
- if the land is contaminated land – a change in the condition of the land that is causing, or is reasonably likely to cause, serious or material environmental harm (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 land (notice must be given within 20 business days).

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

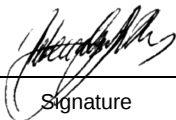
Please note that, in accordance with section 200 of the EP Act, an EA has effect:

- 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.


Signature

Rebecca Griffiths
Department of the Environment, Tourism, Science
and Innovation
Delegate of the administering authority
Environmental Protection Act 1994

01/04/2025
Date

Enquiries:
Industry and Development Business Centre
Department of the Environment, Tourism, Science
and Innovation
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)

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, Manufacturing and Regional and Rural Development (to clear vegetation), and the Department of Primary Industries (to clear marine plants or to obtain a quarry material allocation).

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 the Environment, Tourism, Science and Innovation to ensure that you have the most current version of the environmental authority relating to this site.

Conditions of environmental authority

Environmentally relevant activity	Locations
ERA 63(1)(b)(i) operating sewage treatment works, other than no-release works, with a total daily peak design capacity of more than 100 but no more than 1500EP – discharge to an infiltration trench or through an irrigation scheme.	Lot 2 Plan RP804685, Lot 0 Plan SP151361, Lot 0 Plan SP113737, Lot 0 Plan SP159253, Lot 5 Plan SP208798, Lot 4 Plan SP208798, Lot 2 Plan SP208798, Lot 3 Plan SP208798, Lot 2 Plan RP811713.

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

Agency interest: General	
Condition number	Condition
G1.0	Inflows into the sewage treatment plant must not exceed 90kL on any day .
G2.0	An Annual Monitoring Report must be prepared and submitted to the administering authority by 30 November each year, for the preceding financial year.
G3.0	All reasonable and practicable measures must be taken to prevent or minimise environmental harm caused, or likely to be caused, by the activity .
G4.0	Contravention of conditions Unless specifically authorised by a condition of this environmental authority, details of any contravention of a condition of this environmental authority must: a) be reported to the administering authority within 24 hours of becoming aware of the contravention; and b) include the nature and circumstances of the contravention and any immediate actions taken.
G4.1	As soon as reasonably practicable but no later than 20 business days of a report made under condition G4.0 (or a longer period agreed to in writing by the administering authority), an investigation must be undertaken to determine: a) the potential circumstances and actions that may have contributed to the contravention; and b) the environmental impact of the contravention; and c) reasonable and practicable measures that will be implemented to address the cause of the contravention to prevent future contraventions of this nature.
G4.2	As soon as reasonably practicable but no later than 20 business days of investigating a contravention under condition G4.1 (or a longer period agreed to in writing by the administering authority), the reasonable and practicable measures identified in the investigation must be implemented.
G4.3	The outcome of the investigation carried out under condition G4.1 and the reasonable and practicable measures implemented under condition G4.2 must be recorded.
G5.0	Complaints The following details must be recorded for all complaints received and provided to the administering authority upon request:

	a) date and time the complaint was received; and b) if authorised by the person making the complaint, their name and contact details; and c) nature and details of the complaint.
G5.1	As soon as reasonably practicable but no later than 5 business days of receiving a complaint (or a longer period agreed to in writing by the administering authority), an investigation must be undertaken to determine: a) the potential circumstances and actions on site that may have contributed to the basis of the complaint; and b) reasonable and practicable measures that will be implemented to address the complaint.
G5.2	As soon as reasonably practicable but no later than 5 business days of investigating a complaint under condition G5.1 (or a longer period agreed to in writing by the administering authority), the reasonable and practicable measures identified in the investigation must be implemented.
G5.3	The outcome of the investigation carried out under condition G5.1 and the reasonable and practicable measures implemented under condition G5.2 must be recorded.
G6.0	Environmental risk management procedures Written procedures must be developed and implemented by an appropriately qualified person that ensure: a) all potential risks to the environment from the carrying out of the activity are identified and assessed, including: i) during routine operations; and ii) outside routine operations (e.g., maintenance, start up and shut down); and iii) during preparation, rehabilitation, and closure; and iv) in an emergency (e.g., fire, flood or other natural disaster); and b) for each potential risk identified, any necessary measures to prevent or minimise the potential for environmental harm are implemented; and c) staff understand their obligations under this environmental authority and the <i>Environmental Protection Act 1994</i>; and d) environmental risk management procedures are continually reviewed and improved, based on a reasonable risk-management approach.
G7.0	Plant and equipment An appropriately qualified person must install, operate, calibrate, and maintain the plant and equipment required to carry out the activity (including monitoring devices) in a proper and effective manner.
G7.1	Records of installation, calibration and maintenance carried out under condition G7.0 must be kept.

G8.0	Record keeping Unless otherwise specified by a condition of this environmental authority, records must be: a) kept for the period outlined in <i>Table G1 – Record keeping requirements</i>; and b) provided to the administering authority upon request and in the format requested. Table G1 – Record keeping requirements <table border="1"> <thead> <tr> <th>Description of records</th><th>Retention requirement</th></tr> </thead> <tbody> <tr> <td>Monitoring results</td><td>Retain for 15 years</td></tr> <tr> <td>All other records</td><td>Retain for 5 years</td></tr> </tbody> </table>	Description of records	Retention requirement	Monitoring results	Retain for 15 years	All other records	Retain for 5 years
Description of records	Retention requirement						
Monitoring results	Retain for 15 years						
All other records	Retain for 5 years						
G9.0	Chemical storage Chemicals and fuels in containers of greater than 15 litres must be stored within a secondary containment system.						
G10.0	Monitoring and sampling All monitoring and sampling required by the conditions of this environmental authority must be carried out, interpreted, and recorded by an appropriately qualified person.						
G10.1	Unless otherwise authorised in writing by the administering authority, all laboratory analyses required under this environmental authority must be carried out by a laboratory that has National Association of Testing Authorities (NATA) accreditation for such analyses. The only exception to this condition is for <i>in situ</i> monitoring of pH, electrical conductivity, and total chlorine.						
G11.0	Other than as permitted by this environmental authority, the release of a contaminant into the environment must not occur.						
Agency interest: Air							
Condition number	Condition						
A1.0	Odours or airborne contaminants from the activity must not cause environmental nuisance to any sensitive place or commercial place .						
A2.0	Effluent spray must not move beyond the Effluent Disposal Area .						
A3.0	Warning signs must be installed and maintained at all land application areas within the Effluent Disposal Area with clearly visible wording that states 'Recycled Water – Avoid Contact – Do Not Drink'.						
A3.1	Any land application areas within the Effluent Disposal Area , that utilise above ground irrigation must only use low throw, heavy droplet sprinklers.						
A3.2	Any land application areas within the Effluent Disposal Area , that utilise above ground irrigation must only irrigate between the hours of 11pm and 5am unless the application area is fully fenced to prevent public access.						
A3.3	Any land application areas within the Effluent Disposal Area , that are located within 2 metres of a building or house must only be irrigated to via low pressure dispersion (e.g., gravity fed drip irrigation).						
Agency Interest: Noise							

Condition number	Condition
N1.0	Noise from the activity must not cause environmental nuisance at any sensitive place or commercial place .
Agency Interest: Waste	
Condition number	Condition
W1.0	All waste must be lawfully reused, recycled or removed to a facility that can lawfully accept the waste.
W2.0	Written procedures must be developed and implemented which identify measures to ensure that fluctuations in inflow rates to the sewage treatment plant throughout the year do not adversely impact the ability of the sewage treatment plant to treat sewage.
Agency Interest: Land	
Condition number	Condition
L1.0	The only contaminants authorised to be released to land is treated effluent generated by the activity , which must only be released to the Effluent Disposal Area shown in <i>Appendix 1 – Effluent Disposal Area</i> , and defined by the GPS coordinates in <i>Appendix 2 – GPS Coordinates of Effluent Disposal Area</i> .
L1.1	Treated effluent generated by the activity must only be released to the Effluent Disposal Area when the following requirements are complied with: a) the release limits for each quality characteristic are complied with at the monitoring locations as specified in <i>Table L1 – Contaminant limits for releases to land</i>; and b) releases are monitored at all monitoring locations and at the minimum monitoring frequency for each quality characteristic specified in <i>Table L1 – Contaminant limits for releases to land</i>.

Table L1 - Contaminant limits for releases to land

Monitoring location	Quality characteristic (units)	Release limits			Minimum monitoring frequency
		Minimum	Mean	Maximum	
STP Effluent Outlet – located after disinfection and prior to release to land, and at GPS coordinates -27.82163, 153.42179 (GDA2020)	Irrigation volume (L/day)	-	33,000	60,000	Daily
	Irrigation rate (mm/day)	-	2.2	4.0	
	Total Nitrogen TN (mg/L as N)	-	10	20	Monthly
	Total Phosphorus TP (mg/L as P)	-	1	2	Monthly
	pH (pH units)	6.5	-	8.5	Monthly

	Escherichia coli (E.coli) cfu/100mL)	-	-	20	Monthly
	Electrical Conductivity (EC) (µS/cm)	-	-	1,600	Monthly
Irrigation Tank – located at GPS coordinates -27.8214905, 153.42185 (GDA2020)	Total Chlorine (mg/L)	-	-	2.0	Monthly
L1.2	Monitoring required by condition L1.1 must be undertaken when effluent is being disposed, unless effluent disposal has ceased for longer than the relevant parameters specified minimum frequency (e.g., as pH is only required to be monitored monthly, then a pH sample would not be required after the first month following cessation of the release).				
L1.3	The irrigation rate monitoring required by condition L1.1 must be calculated based on the total area irrigated on that day , and the actual volume of effluent irrigated on that same day .				
L1.4	The mean calculations required by condition L1.1 must be taken as a Long-Term Rolling Limit, meaning a limit applied to consecutive monitoring results taken over a 12-month when monitored at the minimum frequency specified in <i>Table L1 - Contaminant limits for releases to land</i> .				
L1.5	Volume monitoring required by condition L1.1 and G1.0 must be undertaken using a flow meter.				
L1.6	By 1 April 2026 and thereafter, the Effluent Disposal Area must have a minimum surface area of 1.5ha.				
L2.0	When soil in the Effluent Disposal Area is saturated , effluent must not be released to land.				
L3.0	All organic material removed from vegetation growing in the Effluent Disposal Area must be transported and disposed of in an area other than in the Effluent Disposal Area .				
L4.0	Wet weather storage, with a minimum volume of 410kL, must be installed and maintained on the site for the storage of effluent .				
L4.1	By 30 November 2025 and thereafter, wet weather storage required by condition L4.0 must be completely enclosed from rainfall ingress.				
L4.2	Wet weather storage required by condition L4.0 must be managed to prevent overflow of stored effluent .				
L5.0	Ponding of effluent within the Effluent Disposal Area must not occur after irrigation has ceased.				
L6.0	Treated effluent must not run off to areas beyond the Effluent Disposal Area .				
L7.0	Soil structure must not be degraded as a result of the activity .				
L8.0	By 1 April 2026 and thereafter, the Effluent Disposal Area must be maintained with an appropriate crop in a viable state .				

L10.0	Effluent may be removed from the site and provided for reuse to a person with the written consent of that person.																	
L10.1	Records of treated effluent removed from the site and supplied to a person for reuse must be made and include the following: a) the person the effluent was supplied to; and b) the Escherichia coli (E. coli) (cfu/100mL) concentration of the effluent supplied; and c) the volume of effluent supplied; and d) the mode of effluent transport of the effluent supplied; and e) the property (address and lot on plan) where the supplied effluent was released; and f) the date the effluent was supplied.																	
L10.2	Immediately upon the request of the administering authority , you must cease providing effluent to a person.																	
L11.0	By 1 July 2025 and thereafter, a land monitoring program (LMP) must be: a) designed and implemented by an appropriately qualified person to monitor the effects of the activity on land; and b) reviewed annually by an appropriately qualified person and certified as being appropriate to monitor the effects of the activity on land.																	
L11.1	The LMP required by condition L11.0 must include: a) taking soil samples at a soil depth range of 0-30cm and 30-60cm from monitoring locations specified in <i>Table L2 – Land Monitoring Plan</i>; and b) monitoring at the monitoring location, and at the minimum monitoring frequency, and for the quality characteristics specified in <i>Table L2 – Land Monitoring Plan</i>. Table L2 – Land Monitoring Plan <table><tr><th>Monitoring locations</th><th>Quality characteristics (units)</th><th>Minimum monitoring frequency</th></tr><tr><td rowspan="12">At least one reference site, and representative locations within the Effluent Disposal Area.</td><td>pH (pH units)</td><td rowspan="12">Annually for a period of 2 years, and once every 2 years thereafter.</td></tr><tr><td>Electrical Conductivity (EC) (µS/cm)</td></tr><tr><td>Exchangeable Ca, Mg, Na, K</td></tr><tr><td>Exchangeable Sodium percentage (%)</td></tr><tr><td>Effective cation exchange capacity (ECEC)</td></tr><tr><td>Total organic carbon (mg/L)</td></tr><tr><td>Nitrate (mg/L)</td></tr><tr><td>Total kjeldahl nitrogen (mg/L)</td></tr><tr><td>KCL extractable NH₄⁺ and NO₃⁻</td></tr><tr><td>Colwell phosphorus (mg/kg)</td></tr><tr><td>Emerson aggregate stability test</td></tr><tr><td>Phosphorus Buffering Index (PBI)</td></tr></table>	Monitoring locations	Quality characteristics (units)	Minimum monitoring frequency	At least one reference site, and representative locations within the Effluent Disposal Area .	pH (pH units)	Annually for a period of 2 years, and once every 2 years thereafter.	Electrical Conductivity (EC) (µS/cm)	Exchangeable Ca, Mg, Na, K	Exchangeable Sodium percentage (%)	Effective cation exchange capacity (ECEC)	Total organic carbon (mg/L)	Nitrate (mg/L)	Total kjeldahl nitrogen (mg/L)	KCL extractable NH ₄ ⁺ and NO ₃ ⁻	Colwell phosphorus (mg/kg)	Emerson aggregate stability test	Phosphorus Buffering Index (PBI)
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L11.2	The LMP required by condition L11.0 must include observations recorded at the time soil samples are taken, that record the extent to which there is evidence of: a) effluent disposal induced surface runoff occurring to areas outside the Effluent Disposal Area ; and b) surface ponding of effluent occurring.
L11.3	The LMP required by condition L11.0 must include: a) the development of trigger values ; and b) the development of management actions to mitigate any adverse impacts caused, or likely to be caused, by the activity ; and c) the implementation of the management actions if an LMP trigger value is reached.
L11.4	The LMP required by condition L11.0 must be submitted to the administering authority upon request, and within a timeframe (which must be at least 1 business day) specified by the administering authority .
L11.5	Any comments made by the administering authority on the LMP must be addressed to the reasonable satisfaction of the administering authority , and within a timeframe (which must be at least 5 business days) specified by the administering authority .
L11.6	A report summarising the results of the LMP (LMP Report) must be prepared by an appropriately qualified person and submitted to the administering authority with the Annual Monitoring Report as required under G2.0.
L11.7	The LMP Report required by condition L11.6 must include: a) a summary of the monitoring data obtained under the LMP in the relevant financial year; and b) an evaluation of all relevant data obtained under the LMP, and include graphical representations showing all relevant historical data and a comparison of data trends against LMP trigger values ; and c) a description of all actions taken to minimise the environmental risk in response to information obtained through the LMP, including actions taken where trigger values in the LMP were reached; and d) the results of those management actions.
L11.8	The LMP Report required by condition L11.6 must include analysis and interpretation of monitoring results by an appropriately qualified person that determines: a) the ongoing capacity of the Effluent Disposal Area to sustainably receive contaminant releases from the activity , including but not limited to the capacity of the Effluent Disposal Area to sustainably adsorb nutrient loads from the activity ; and b) whether the Effluent Disposal Area is sufficient in size for the volume of effluent disposed of to land; and c) whether contaminants generated by the activity have migrated beyond the Effluent Disposal Area ; and d) how the soil in the Effluent Disposal Area has been impacted by the activity .
L11.9	The LMP Report required by condition L11.6 must include recommended action(s) to mitigate any adverse impacts caused, or likely to be caused, by the activity in respect of contaminant releases to land.
L11.10	Any action(s) recommended under condition L11.9 in the LMP Report must be undertaken: a) as soon as practicable, but no later than 10 business days after receiving the LMP

	Report; or b) another period agreed to in writing by the administering authority .
Agency Interest: Water	
Condition number	Condition
WT1.0	Contaminants must not be released to any waters .
WT2.0	By 1 July 2025 and thereafter, a groundwater monitoring program (GWMP) must be: a) designed and implemented by an appropriately qualified person(s) with experience and qualifications in groundwater monitoring , to monitor the effects of the activity on groundwaters; and b) reviewed annually by an appropriately qualified person(s) and certified as being appropriate to monitor the effects of the activity on groundwaters.
WT2.1	The GWMP required by condition WT2.0 must include: a) clearly stated aims and objectives; and b) a monitoring program that is developed using the latest version of the administering authority's guideline <i>Using monitoring data to assess groundwater quality and potential environmental impacts</i> , and that specifies: i) groundwater (GW) flow characteristics for the groundwater that could be impacted by the activity (potentially impacted groundwater GW); and ii) surface waters (SW) that could interact with potentially impacted GW (potentially impacted SW); and iii) the environmental values of the potentially impacted GW and the potentially impacted SW; and iv) cumulative impacts on the potentially impacted GW; and v) the spatial extent of the monitoring program, including the location of monitoring bores required under condition WT2.2; and vi) the temporal context of the monitoring program, including timing and frequency of sampling.
WT2.2	An appropriately qualified person(s) must install groundwater monitoring bores that enable monitoring from: a) the uppermost aquifer; and b) control location(s) that are suitable for establishing a background or other referable environmental value for the potentially impacted GW; and c) test location(s) that are suitable for determining the extent to which the potentially impacted GW are, or are potentially, being impacted by the activity ; and d) for potentially impacted GW, hydraulically up-gradient bore(s) and hydraulically down-gradient bore(s) of the activity .

WT2.3	Monitoring under the GWMP, must include monitoring of the receiving environment at the monitoring location(s), and at the minimum monitoring frequency, and for the quality characteristics specified in <i>Table WT1 – Groundwater Monitoring Program</i>. Table WT1 – Groundwater Monitoring Program <table><tr><th>Monitoring locations</th><th>Quality characteristics (units)</th><th>Minimum monitoring frequency</th></tr><tr><td rowspan="8">All monitoring bores which form the GWMP</td><td>pH</td><td rowspan="8">Annually</td></tr><tr><td>Electrical Conductivity (µS/cm)</td></tr><tr><td>Total Nitrogen TN (mg/L)</td></tr><tr><td>Ammonia Nitrogen (as N) (mg/L)</td></tr><tr><td>Total Phosphorus TP (mg/L)</td></tr><tr><td>Calcium, Chloride, Potassium, Magnesium, Sodium, Sulphate, Bicarbonate, and Carbonate (mg/L)</td></tr><tr><td>E. Coli (cfu/100mL)</td></tr><tr><td>Standing groundwater level (m)</td></tr></table>	Monitoring locations	Quality characteristics (units)	Minimum monitoring frequency	All monitoring bores which form the GWMP	pH	Annually	Electrical Conductivity (µS/cm)	Total Nitrogen TN (mg/L)	Ammonia Nitrogen (as N) (mg/L)	Total Phosphorus TP (mg/L)	Calcium, Chloride, Potassium, Magnesium, Sodium, Sulphate, Bicarbonate, and Carbonate (mg/L)	E. Coli (cfu/100mL)	Standing groundwater level (m)
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	E. Coli (cfu/100mL)													
	Standing groundwater level (m)													
WT2.4	The GWMP required by condition WT2.0 must include: a) the development of trigger values for the potentially impacted GW; and b) procedures to determine when trigger values are reached; and c) the development of management actions to mitigate any adverse impacts caused, or likely to be caused, by the activity; and d) the implementation of the management actions if an GWMP trigger value is reached.													
WT2.5	The GWMP required by condition WT2.0 must be submitted to the administering authority upon request and within a timeframe (which must be at least 1 business day) specified by the administering authority.													
WT2.6	Any comments made by the administering authority on the GWMP must be addressed to the reasonable satisfaction of the administering authority and within a timeframe (which must be at least 5 business days) specified by the administering authority.													
WT2.7	A report summarising the results of the GWMP (GWMP Report) must be prepared by an appropriately qualified person(s) and submitted to the administering authority with the Annual Monitoring Report as required under condition G2.0.													
WT2.8	The GWMP Report required by condition WT2.7 must include: a) a summary of the monitoring data obtained under the GWMP in the relevant financial year; and b) an evaluation of all relevant data obtained under the GWMP, including graphical representations showing all relevant historical data and a comparison of data trends against the GWMP trigger values; and													

	c) a description of all actions taken to minimise the environmental risk in response to data or other information obtained during the GWMP, including actions taken where GMPW trigger values were reached; and d) the results of those management actions.
WT2.9	The GWMP Report required by condition WT2.7 must include analysis and interpretation of monitoring results by an appropriately qualified person that determines: a) whether any deep drainage of contaminants from the activity into groundwater has occurred; and b) how the groundwater has been impacted by the activity.
WT2.10	The GWMP Report required by condition WT2.7 must include recommended action(s) to mitigate any adverse impacts caused, or likely to be caused, by the activity in respect of potentially impacted GW.
WT2.11	Any action(s) recommended by the GWMP Report must commence: a) as soon as practicable, and no more than 10 business days after receiving the GWMP monitoring report; or b) another period agreed to in writing by the administering authority.

Definitions

Where a word or phrase in this document is defined in this definitions section or within the document, it has its corresponding meaning. Where a word or phrase in this document is not defined in this definitions section, it has the meaning given to it (in order of priority):

- the *Environmental Protection Act 1994* (EP Act), its regulations or its environmental protection policies;
- the *Acts Interpretation Act 1954*;
- the Macquarie Dictionary (taking account of the context in which the word or phrase is used in this document).

For example, environmental value, environmental harm, environmental nuisance, material environmental harm, serious environmental harm and relevant act are defined in the EP Act and groundwater is defined in the Environmental Protection Regulation 2019.

Defined words or phrases in the singular include the plural and vice versa.

Activity means the environmentally relevant activity to which this environmental authority relates.

Administering authority means the Department of the Environment, Tourism, Science and Innovation or its successor or predecessors.

Appropriately qualified person means a person who has professional qualifications, training, skills or experience relevant to the environmental authority requirements and can give authoritative assessment, advice and analysis in relation to the environmental authority requirements using the relevant protocols, standards, methods or literature.

Commercial place means a place, or part of a place, used as a workplace, an office or for business or commercial purposes

Day means any 24-hour period of a calendar day.

Down-gradient bore means a bore, in a location hydraulically down gradient from those aspects of the **activity** that may affect groundwater quality. Where a down gradient location is not accessible, for example due to proximity with surface waters, down-gradient bore(s) may include bore(s) located within or adjacent to the **Effluent Disposal Area**.

Effluent means the liquid fraction of treated sewage.

Effluent Disposal Area means the land application areas shown in *Appendix 1 – Effluent Disposal Area*, and defined by the GPS coordinates in *Appendix 2 – GPS Coordinates of Effluent Disposal Area*.

Mean is the sum of a collection of numbers divided by the count of numbers in the collection.
E.g., $(n_1+n_2+n_3)/3$.

Monitor, monitored and monitoring means 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).

Records include any written procedures, plans, **monitoring** results, and **monitoring** programs required under a condition of this environmental authority.

Release of a contaminant into the environment 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.

Saturated means the soil moisture level is greater than the soil field capacity or drained upper limit. Field capacity or drained upper limit means the maximum amount of water retained in soil against gravity when the soil has been allowed to drain for 24hrs.

Secondary containment system means a system designed, installed and operated to prevent any release of contaminants from the system, or containers within the system.

Sensitive place includes any of the following places:

- (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 *Nature Conservation Act 1992*, the *Marine Parks Act 2004* or a World Heritage Area; or
- (f) a public park or garden; 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.

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.

Trigger values are physicochemical, biological, or other parameter-specific measurement values used to indicate where an environmental value is at risk of environmental harm.

Up-gradient bore means a bore, in a location hydraulically up gradient from those aspects of the **activity** that may affect groundwater quality.

Viable state means able to live and grow.

Waters includes a 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.

Appendix 1 – Effluent Disposal Area



Figure 1: Overview of all land application areas that comprise **Effluent Disposal Area**. Irrigation areas are areas artificially highlighted in colour to correspond with Appendix 2.

Appendix 1 (cont)

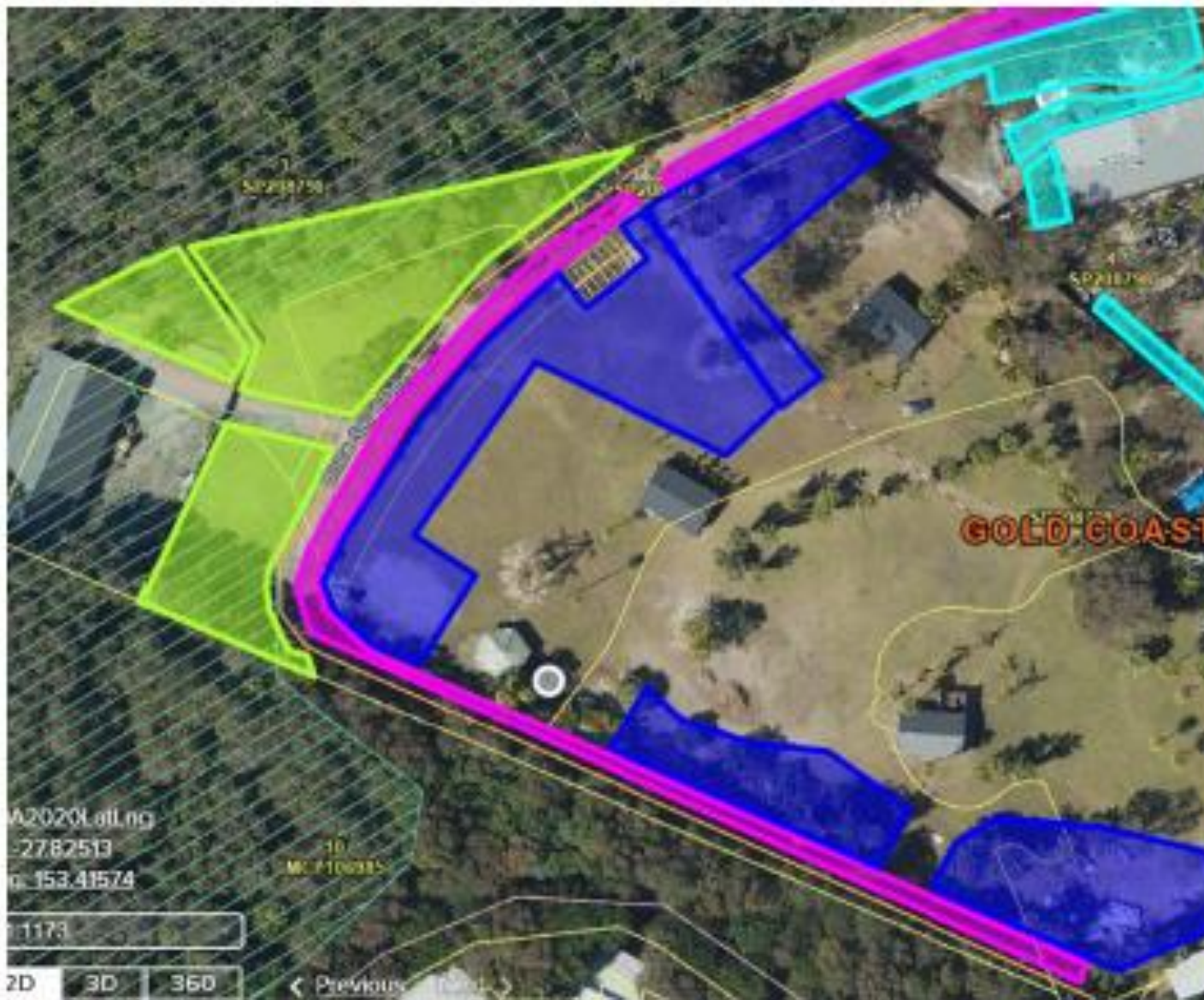


Figure 2: Shed (green), Mike (dark blue), Roadside 2 (pink)

Appendix 1 (cont)



Figure 3: Marina 1 & 2 and Generator (larger pink area)

Appendix 1 (cont)



Figure 4: Roadside 1 (pink), Katrina (aqua), Peter (red), Justin (yellow)

Appendix 1 (cont)



Figure 5: Sewage Treatment Plant land application areas (white)

Appendix 2 – GPS Coordinates for Effluent Disposal Area

Irrigation Zone	GPS (GDA2020)	Irrigation Zone	GPS (GDA2020)	Irrigation Zone	GPS (GDA2020)
Shed 1 (green)	-27.82430, 153.41708 -27.82441, 153.41694 -27.82406, 153.41689 -27.82421, 153.41664 -27.82422, 153.41668 -27.82421, 153.41677	STP 1 (white)	-27.82143, 153.42199 -27.82174, 153.42190 -27.82147, 153.42142 -27.82133, 153.42145	Katrina 1 (aqua)	-27.82549, 153.41673 -27.82555, 153.41673 -27.82551, 153.41662 -27.82546, 153.41664
Shed 2 (green)	-27.82440, 153.41735 -27.82440, 153.41716 -27.82435, 153.41710 -27.82447, 153.41697 -27.82502, 153.41710	STP 2 (white)	-27.82152, 153.42182 -27.82151, 153.42175 -27.82171, 153.42175 -27.82170, 153.42162 -27.82156, 153.42164	Katrina 2 (aqua)	-27.82579, 153.41671 -27.82578, 153.41668 -27.82550, 153.41679 -27.82549, 153.41674
Shed 3 (green)	-27.82418, 153.41738 -27.82437, 153.41736 -27.82438, 153.41716 -27.82434, 153.41713	STP 3 (white)	-27.82149, 153.42145 -27.82167, 153.42143 -27.82167, 153.42138 -27.82148, 153.42142	Katrina 3 (aqua)	-27.82547, 153.41647 -27.82549, 153.41648 -27.82565, 153.41594 -27.82561, 153.41594
Generator (pink)	-27.82806, 153.41611 -27.82738, 153.41605 -27.82733, 153.41571 -27.82802, 153.41558	Mike 1 (dark blue)	-27.82530, 153.41699 -27.82499, 153.41700 -27.82501, 153.41661 -27.82508, 153.41661 -27.82533, 153.41688 -27.82505, 153.41683	Katrina 4 (aqua)	-27.82533, 153.41698 -27.82534, 153.41694 -27.82552, 153.41690 -27.82551, 153.41685 -27.82583, 153.41684 -27.82580, 153.41673
Marina 1 (pink)	-27.82727, 153.41570 -27.82726, 153.41601 -27.82686, 153.41582 -27.82688, 153.41576	Mike 2 (dark blue)	-27.82498, 153.41701 -27.82430, 153.41675 -27.82436, 153.41657 -27.82449, 153.41664 -27.82490, 153.41659 -27.82500, 153.41661	Peter 1 (red)	-27.82586, 153.41682 -27.82585, 153.41666 -27.82626, 153.41669 -27.82618, 153.41595 -27.82615, 153.41596 -27.82621, 153.41653
Marina 2 (pink)	-27.82685, 153.41585 -27.82683, 153.41587 -27.82697, 153.41610 -27.82699, 153.41612 -27.82709, 153.41602 -27.82722, 153.41602	Mike 3 (dark blue)	-27.82453, 153.41628 -27.82463, 153.41633 -27.82485, 153.41593 -27.82477, 153.41588	Justin 1 (yellow)	-27.82619, 153.41595 -27.82622, 153.41595 -27.82627, 153.41668 -27.82659, 153.41654 -27.82652, 153.41650 -27.82629, 153.41658 -27.82684, 153.41623 -27.82677, 153.41618
Roadside 1 (pink)	-27.82503, 153.41702 -27.82505, 153.41704 -27.82695, 153.41611 -27.82698, 153.41613	Mike 4 (dark blue)	-27.82482, 153.41580 -27.82496, 153.41584 -27.82519, 153.41561 -27.82517, 153.41549 -27.82499, 153.41552		
Roadside 2 (pink)	-27.82493, 153.41553 -27.82493, 153.41553 -27.82499, 153.41702 -27.82497, 153.41705 -27.82425, 153.41675				

END OF ENVIRONMENTAL AUTHORITY