Permit

Environmental Protection Act 1994

Environmental authority EPPR00491513

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

Environmental authority number: EPPR00491513

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

The anniversary day of this environmental authority remains **5 March**

Environmental authority holder

Name	Registered address
Department of Environment, Science and Innovation	400 George Street BRISBANE CITY, 4000, QLD Australia

Environmentally relevant activity and location details

Environmentally relevant activities	Locations
ERA 63 Sewage treatment (1)(a)(i) operating sewage treatment works, other than no-release works, with a total daily peak design capacity of— 21 to 100EP— if treated effluent is discharged from the works to an infiltration trench or through an irrigation scheme	**Moss Garden Sewage Treatment Plant**, Carnarvon National Park, Lot 236 Plan NPW490 **Bald Rock Creek Day Use Area Sewage Treatment Plant,** Girraween National Park, Lot 29 Plan NPW638 **Castle Rock Camping Ground Sewage Treatment Plant,** Girraween National Park, Lot 29 Plan NPW638 **Dandabah Camping Ground Sewage Treatment Plant**, Bunya Mountains National Park, Lot 48 Plan NPW873 **Dandabah Picnic Area Sewage Treatment Plant**, Bunya Mountains National Park, Lot 48 Plan NPW873 **Burton's Well Camping Ground Sewage Treatment Plant,** Bunya Mountains National Park, Lot 48 Plan NPW873 **Westcott Camping Ground Sewage Treatment,**

Environmentally relevant activities	Locations
	Bunya Mountains National Park, Lot 48 Plan NPW873
ERA 63 Sewage treatment (1)(b)(i) operating sewage treatment works, other than no-release works, with a total daily peak design capacity of— 100 to 1500EP— if treated effluent is discharged from the works to an infiltration trench or through an irrigation scheme	**Carnarvon Gorge Day Use and Visitor Area Sewage Treatment Plant**, Carnarvon National Park, Lot 236 NPW490

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:

- 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 Queens**land** 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

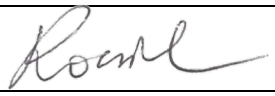
b) if the authority states a day or an event for it to take effect-on the stated day or when the stated event happens; or

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.

	1 October 2024
Signature	Date

Dorota Rosiak
Department of Environment, Science and Innovation
Delegate of the administering authority
Environmental Protection Act 1994

Enquiries:
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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:

1) general environmental duty (section 319)
2) duty to notify environmental harm (section 320-320G)
3) offence of causing serious or material environmental harm (sections 437-439)
4) offence of causing **environmental nuisance** (section 440)
5) offence of depositing prescribed water **contaminants** in **waters** and related matters (section 440ZG)
6) offence to place **contaminant** where environmental harm or nuisance may be caused (section 443)

Conditions of environmental authority

Part 1 - General Conditions

Environmentally relevant activities	Locations
ERA 63 Sewage treatment (1)(a)(i) operating sewage treatment works, other than no-release works, with a total daily peak design capacity of— 21 to 100EP— if treated effluent is discharged from the works to an infiltration trench or through an irrigation scheme	**Moss Garden Sewage Treatment Plant**, Carnarvon National Park, Lot 236 Plan NPW490 **Bald Rock Creek Day Use Area Sewage Treatment Plant,** Girraween National Park, Lot 29 Plan NPW638 **Castle Rock Camping Ground Sewage Treatment Plant,** Girraween National Park, Lot 29 Plan NPW638 **Dandabah Camping Ground Sewage Treatment Plant**, Bunya Mountains National Park, Lot 48 Plan NPW873 **Dandabah Picnic Area Sewage Treatment Plant**, Bunya Mountains National Park, Lot 48 Plan NPW873 **Burton's Well Camping Ground Sewage Treatment Plant,** Bunya Mountains National Park, Lot 48 Plan NPW873 **Westcott Camping Ground Sewage Treatment,** Bunya Mountains National Park, Lot 48 Plan NPW873

The environmentally relevant activities conducted at the locations as described above must be conducted in accordance with the following conditions of approval:

Agency interest: General	
Condition number	**Condition**
G1-1	The **activity** must be undertaken in accordance with written procedures that: a) identify potential risks to the environment from the **activity** during routine operations and emergencies b) establish control measures that **minimise** the potential for environmental harm c) 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* d) ensure that reviews of environmental performance are undertaken at least annually.
G1-2	The **activity** must not cause **environmental nuisance** at a nuisance sensitive place.

G1-3	All documents and records of monitoring required by conditions of this authority must be kept for at least five years.
G1-4	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.
Agency interest: Land	
Condition number	**Condition**
L1-1	**Contaminants** authorised to be released to **land** must only be released in designated, delineated and signed areas.
L1-2	Treated effluent is permitted to be released to **land** provided that it is done in accordance with a written procedure that ensures: a) infiltration 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 and heavy metals in the soil and subsoil are minimised e) spray drift or overspray do 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) the crop on the disposal area is harvested and removed from the disposal area.
Agency interest: Waste	
Condition number	**Condition**
W1-1	Other than effluent released to **land** in accordance with conditions of this environmental authority all waste generated in carrying out the **activity** must be reused, recycled or lawfully disposed of offsite.
Agency interest: Water	
Condition number	**Condition**
WT1-1	Stormwater contaminated by the **activity** must be managed to **minimise** or prevent any adverse effect on the environmental values of the receiving environment.
WT1-2	**Contaminants** must not be released from any source on the licensed **facility** to any waters.

There are no conditions under Part 2

Part 3 – Site specific conditions

Environmentally relevant activity	Location
ERA 63 Sewage treatment (1)(a)(i) operating sewage treatment works, other than no-release works, with a total daily peak design capacity of— 21 to 100EP— if treated effluent is discharged from the works to an infiltration trench or through an irrigation scheme	**Moss Garden Sewage Treatment Plant**, Carnarvon National Park, Lot 236 Plan NPW490

There are no site-specific conditions for the environmentally relevant activity conducted at the location as described above. The activity must be conducted in accordance with condition listed in Part 1.

Part 4 – Site specific conditions

Environmentally relevant activities	Locations
ERA 63 Sewage treatment (1)(a)(i) operating sewage treatment works, other than no-release works, with a total daily peak design capacity of— 21 to 100EP— if treated effluent is discharged from the works to an infiltration trench or through an irrigation scheme	**Bald Rock Creek Day Use Area Sewage Treatment Plant,** Girraween National Park, Lot 29 Plan NPW638 **Castle Rock Camping Ground Sewage Treatment Plant,** Girraween National Park, Lot 29 Plan NPW638 **Dandabah Camping Ground Sewage Treatment Plant**, Bunya Mountains National Park, Lot 48 Plan NPW873 **Dandabah Picnic Area Sewage Treatment Plant**, Bunya Mountains National Park, Lot 48 Plan NPW873 **Burton's Well Camping Ground Sewage Treatment Plant,** Bunya Mountains National Park, Lot 48 Plan NPW873 **Westcott Camping Ground Sewage Treatment,** Bunya Mountains National Park, Lot 48 Plan NPW873

In addition to Part 1, the environmentally relevant activities conducted at the locations as described above must be conducted in accordance with the following site-specific condition of approval:

Agency interest: Water

<table>
<tr><th>Condition number</th><th>Condition</th></tr>
<tr><td>WA4-5</td><td>The EA holder shall develop an ambient monitoring program for surface water and groundwater to monitor the impacts of the licensed activities on the receiving environment. The required parameters to be tested are given in Tables 2 and 3 - Ambient monitoring requirements for surface water for the following monitoring locations:

<u>Girraween National Park</u>
• Bald Rock Creek (upstream of the disposal trenches)
• Bald Rock Creek (downstream of the disposal trenches)

<u>Bunya Mountains National Park</u>
• Little Saddletree Creek (upstream of the disposal trenches)
• Little Saddletree Creek (downstream of the disposal trenches)
• Groundwater (Bores, up gradient of the disposal trenches)
• Groundwater (Bores, down gradient of the disposal trenches)

Table 2 - Ambient monitoring requirements for surface water
<table><tr><th>PARAMETER</th><th>FREQUENCY</th></tr><tr><td>pH</td><td>Biannually</td></tr><tr><td>Temperature (in-situ)</td><td>Biannually</td></tr><tr><td>Dissolved Oxygen (mg/L)</td><td>Biannually</td></tr><tr><td>Total Dissolved Salts (mg/L)</td><td>Biannually</td></tr><tr><td>Total Nitrogen and its forms (mg/L)</td><td>Biannually</td></tr><tr><td>Total Phosphorous (mg/L)</td><td>Biannually</td></tr><tr><td>Total Coliforms (Organisms/100ml)</td><td>Biannually</td></tr><tr><td>Faecal Coliforms (Organisms/100ml)</td><td>Biannually</td></tr></table>Note: The frequency of monitoring for Nitrogen and Phosphorous can be revised after initial results of first 24 months have been assessed by the administering authority.

Table 3 - Ambient monitoring requirements for ground water
<table><tr><th>PARAMETER</th><th>FREQUENCY</th></tr><tr><td>pH</td><td>Biannually</td></tr><tr><td>Total Dissolved Salts (mg/L)</td><td>Biannually</td></tr><tr><td>Total Phosphorous (mg/L)</td><td>Biannually</td></tr><tr><td>Total Phosphorous (mg/L)</td><td>Biannually</td></tr></table>Note: The frequency of monitoring for Nitrogen and Phosphorous can be revised after initial results of first 24 months have been assessed by the administering authority.</td></tr>
</table>

Part 5 – Site specific conditions

Environmentally relevant activity	Location
ERA 63 Sewage treatment (1)(b)(i) operating sewage treatment works, other than no-release works, with a total daily peak design capacity of— 100 to 1500EP—	**Carnarvon Gorge Day Use and Visitor Area Sewage Treatment Plant**, Carnarvon National Park, Lot 236 NPW490

Environmentally relevant activity	Location
if treated effluent is discharged from the works to an infiltration trench or through an irrigation scheme	

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

Agency interest: General	
Condition number	**Condition**
G5-1	**Activities** must be conducted in accordance with the following: (a) the total daily inflow into the Advanced Enviro-Septic System **(AES) disposal area** must not exceed the daily peak design capacity of 48,000 L/**day.**
G5-2	All reasonable and practicable measures must be taken to prevent or minimise any environmental harm caused, or likely to be caused by the **activities**.
G5-3	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 of becoming aware of the contravention.
G5-4	Within 14 **days** of providing the notification under condition G5-3, or a longer period agreed to in writing by the **administering authority**, an investigation must be completed into any contravention of a condition of the environmental authority 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 **measures** that could be implemented to address the cause of the contravention to prevent future contraventions of this nature.
G5-5	**Measures** identified under condition G5-4(c) must be implemented within: (a) 28 **days** of the investigation required by condition G5-4 being completed; or (b) a longer period agreed to in writing by the **administering authority**.
G5-6	The following details must be recorded for all contraventions of conditions within the environmental authority: (a) date and time the contravention occurred; and (b) nature and details of the contravention; and (c) investigations carried out in response to the contravention as required by condition G5-4; and (d) the results of investigations; and (e) **measures** taken under condition G5-4(c).
G5-7	Other than as permitted by this environmental authority, the **release of a contaminant into the environment** must not occur.

G5-8	All **records** required by the conditions of this environmental authority must be kept for a minimum of five (5) years, and all monitoring results and **raw data** from the **land monitoring program (LMP**) required by condition L5-14 must be kept until surrender of this environmental authority.
G5-9	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**.
G5-10	An **appropriately qualified person(s)** must monitor, record and interpret all parameters that are required to be monitored by this environmental authority.
G5-11	All analyses required under this environmental authority must be carried out by a laboratory that has National Association of Testing Authorities (NATA) accreditation or an equivalent certification, for such analyses. The only exception to this condition is for in situ monitoring of pH and electrical conductivity.
G5-12	An annual monitoring report (Annual Monitoring Report) must be prepared and submitted to the **administering authority** by 30 November each year, for the preceding financial year.
G5-13	The following details must be recorded for all **environmental complaints** received: (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; and (d) investigations carried out in response to the complaint as required by condition G5-14; and (e) the results of investigations; and (f) **measures** taken under condition G5-14.
G5-14	An investigation must be undertaken within 28 **days** (or a longer period agreed to in writing by the administering authority) into all complaints received to determine: (a) the potential circumstances and actions on **site** that may have contributed to the basis of the complaint; and (b) reasonable **measures** that could be implemented to address the complaint.
G5-15	**Measures** identified under condition G5-14 must be implemented within: (a) 28 **days** of the investigation required by condition G5-14 being finalised; or (b) a longer period agreed to in writing by the **administering authority**.
G5-16	When requested 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**.
G5-17	The results, including an analysis of the results, of monitoring required by condition G5-16 must be provided to the **administering authority**: (a) within 10 **days** after you receive the monitoring results; or (b) a longer period agreed to in writing by the **administering authority**.
G5-18	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 *Environmental Protection Act 1994* 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.
G5-19	Written procedures required by condition G5-18 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**.
G5-20	Plant and equipment necessary to comply with the conditions of this environmental authority must be installed, operated, calibrated and maintained: (a) in a proper and effective manner; and (b) in accordance with the written procedures developed under condition G5-18 for the plant and equipment.
G5-21	Chemicals and fuels in containers of greater than 15 litres must be stored within a **secondary containment system**.
Agency interest: Air	
Condition number	**Condition**
A5-1	Odours or airborne contaminants from the activity must not cause environmental nuisance to any **sensitive place** or **commercial place**.
Agency interest: Land	
Condition number	**Condition**
L5-1	Other than as permitted within this environmental authority, contaminants from the **activity** must not be released to **land**.
L5-2	The only contaminants to be released to land are treated effluent to the **AES disposal area.**
L5-3	Releases to land authorised under condition L5-2 must comply with the following: (a) the **AES disposal area** must be installed over a minimum surface area of 1,600m^2; and

<table>
<tr><td></td><td>(b) releases to land must only occur in the AES disposal area as shown in Appendix 1 – Site plan 1 and Site plan 2 of this environmental authority.</td></tr>
<tr><td>L5-4</td><td>All organic material removed from vegetation growing in the AES disposal area must be transported and disposed of in an area other than in the AES disposal area.</td></tr>
<tr><td>L5-5</td><td>When soil in the AES disposal area is saturated, effluent must not be released to land.</td></tr>
<tr><td>L5-6</td><td>Ponding of contaminants within the AES disposal area must not occur.</td></tr>
<tr><td>L5-7</td><td>Contaminants must not run off to areas beyond the AES disposal area.</td></tr>
<tr><td>L5-8</td><td>Soil structure must not be degraded as a result of the activity.</td></tr>
<tr><td>L5-9</td><td>Soil sodicity and the build-up of nutrients and heavy metals in the soil and subsoil must be minimised.</td></tr>
<tr><td>L5-10</td><td>Public access to the AES disposal area must be prevented.</td></tr>
<tr><td>L5-11</td><td>The AES disposal area must be maintained with an appropriate crop in a viable state.</td></tr>
<tr><td>L5-12</td><td>A land monitoring program (LMP) must be:
(a) designed 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 meet the requirements in subparagraph (a).</td></tr>
<tr><td>L5-13</td><td>The LMP required by condition L5-12 must include:
(a) taking soil samples at a soil depth range of 0-30cm and 30-60cm from monitoring locations specified in Table 1 – Land Monitoring Program; and
(b) monitoring of the receiving environment at the monitoring location, and at the minimum monitoring frequency, and for the quality characteristics specified in Table 1 – Land Monitoring Program.

Table 1 – Land Monitoring Program
<table>
<tr><th>Monitoring locations</th><th>Quality characteristic (units)</th><th>Minimum monitoring frequency</th></tr>
<tr><td rowspan="10">At least one reference site, and representative locations within 1m of and adjacent to the AES disposal area</td><td>Soil texture class</td><td>Annually</td></tr>
<tr><td>Emerson aggregate stability test</td><td rowspan="9">Annually</td></tr>
<tr><td>pH (pH units)</td></tr>
<tr><td>Nitrogen adsorption capacity (mg/kg)</td></tr>
<tr><td>Phosphorus adsorption capacity (mg/kg)</td></tr>
<tr><td>Total Kieldahl nitrogen (mg/kg)</td></tr>
<tr><td>Colwell phosphorus (mg/kg)</td></tr>
<tr><td>Electrical Conductivity (EC) (µS/cm)</td></tr>
<tr><td>Exchangeable sodium percentage (%)</td></tr>
<tr><td>Salinity leaching fraction</td></tr>
</table></td></tr>
</table>

	<table><tr><td></td><td>Cation exchange capacity (meg/100g)</td><td></td></tr><tr><td></td><td>Phosphorus Buffering Index (PBI)</td><td>Every 5 years</td></tr></table>
L5-14	The LMP required by condition L5-12 must include observations recorded at the time soil samples are taken, that record the extent to which there if evidence of: (a) effluent disposal induced surface runoff occurring to areas outside the **AES disposal area**; and (b) surface ponding of effluent occurring.
L5-15	The LMP required by condition L5-12 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.
L5-16	The LMP required by condition L5-12 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**.
L5-17	Any comments made by the **administering authority** on the LMP must be addressed to the reasonable satisfaction of, and within a timeframe (which must be at least 5 business days) specified by, the **administering authority**
L5-18	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 condition G5-12.
L5-19	The LMP Report required by condition L5-18 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.
L5-20	The LMP Report required by condition L5-18 must include analysis and interpretation of monitoring results by an **appropriately qualified person** that determines: (a) the ongoing capacity of the **AES disposal area** to sustainably receive contaminant releases from the activity, including but not limited to the capacity of the **AES disposal area** to sustainably adsorb nutrient loads from the **activity**; and (b) whether the **AES 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 **AES disposal area**; and (d) how the soil in the **AES disposal area** has been impacted by the **activity**.

L5-21	The LMP Report required by condition L5-18 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**.
L5-22	Any action(s) recommended under condition L5-21 in the LMP Report must be undertaken: (a) as soon as practicable, but no later than 14 days after receiving the LMP Report; or (b) another period agreed to in writing by the **administering authority**.
Agency interest: Acoustic	
Condition number	**Condition**
N5-1	Noise generated by the **activity** must not cause **environmental nuisance** to any **sensitive place** or **commercial place.**
Agency interest: Waste	
Condition number	**Condition**
W5-1	All waste generated by the **activity** must be lawfully reused or recycled, and/or lawfully removed to a facility that can lawfully accept the waste.
Agency interest: Water	
Condition number	**Condition**
WT5-1	Contaminants must not be released to any **waters**.
WT5-2	Plant and equipment must be designed to allow for continued operation during flood events and inundation of the **site**.
WT5-3	Contaminant pumping stations must be fitted with stand-by pumps and pump-failure alarms as well as high level alarms to warn of imminent pump station overflow. All alarms must be able to operate in the event of power failure.
WT5-4	All duty and stand-by pumps must be inspected, tested and maintained on a regular basis to ensure they remain in a constant state of service.
WT5-5	**Effluent** may be removed from the **site** and provided to a **person** with the written consent of that **person**.
WT5-6	**Records** of treated **effluent** removed from the **site** and supplied to a **person** 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 date the **effluent** was supplied.
WT5-7	Immediately upon the request of the **administering authority, you** must cease providing **effluent** to a **person**.
Agency interest: Groundwater	

Condition number	Condition
GW5-1	A **Groundwater** Monitoring Program (GWMP) must be: (a) designed 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 meet the requirements in subparagraph (a).
GW5-2	The GWMP required by condition GW5-1 must include a monitoring program that is developed using the latest version of the **administering authority's** guideline *'Using monitoring data to assess groundwater quality and potential environmental impacts'.*
GW5-3	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**.
GW5-4	Monitoring under the GWMP, must: (a) include monitoring of the receiving environment at the monitoring bores, installed in accordance with condition GW5-3; and (b) be undertaken annually (post Easter holidays).
GW5-5	The GWMP required by condition GW5-1 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.
GW5-6	Any comments made by the **administering authority** on the GWMP must be addressed to the reasonable satisfaction and within a timeframe (which must be at least 5 business days) specified by the administering authority.
GW5-7	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 G12.
GW5-8	The GWMP Report required by condition GW8 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.
GW5-9	The GWMP Report required by condition GW5-8 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.
GW5-10	The GWMP Report required by condition GW5-8 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.
GW5-11	Any action(s) recommended by the GWMP Report must be undertaken: (a) as soon as practicable, and no more than 14 days after receiving the GWMP monitoring report; or (b) another period agreed to in writing by the administering authority.

Definitions

Key terms and/or phrases bolded in this environmental authority 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 activity(s) to which the environmental authority relates. An activity may be undertaken on the whole or a part of a site.

Administering authority means the Chief Executive administering the *Environmental Protection Act 1994.*

AES disposal area means the area identified as '4 AES Beds' in *Appendix 1 – Site plan 1* and 'Bed A, B, C and D' in *Appendix 1 – Site plan 2* of this environmental authority.

Appropriately qualified person means 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 and/or literature.

Commercial place means a place used as a workplace, an office or for business or commercial purposes and includes a place within the curtilage of such a place reasonably used by persons at that place.

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.

Effluent means the liquid fraction of treated sewage.

Environmental complaints mean an expression of dissatisfaction, concern or report, whether written or verbal, about the activity and/or its impact on the environment.

Facility - the area used for carrying out the **activity** including any buildings, disturbed areas or any associated infrastructure.

Field capacity means the amount of water retained in soil when the soil has been allowed to drain for 24hrs under normal gravity conditions.

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

Land - land excluding waters and the atmosphere.

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.

Measures has the broadest interpretation and 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
(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.

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).

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 2004* 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

Person means an individual and a corporation, as per section 32D of the *Acts Interpretation Act 1954*.

Raw data means primary data collected from a source that has not been processed and includes monitoring sheets, monitoring device readings, laboratory analysis results and certificate of analysis.

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

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 or **release** 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.

Secondary containment system means 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 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.

Surface water means water other than groundwater.

The site means the area of land identified as being approved for the carrying out of the activity as per *Appendix 1 – Site plan 1 and Site plan 2* of this environmental authority.

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**.**

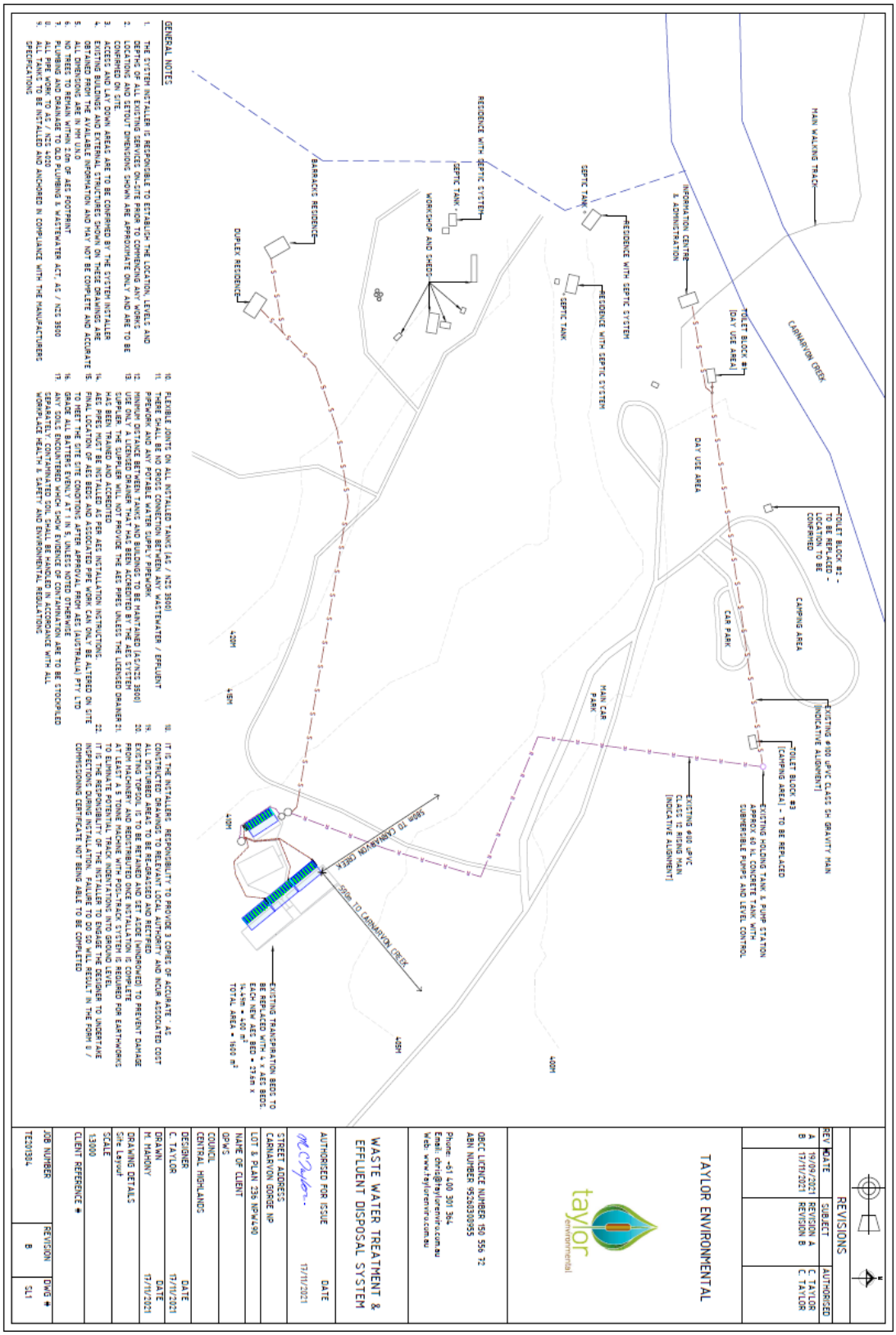
Trigger values are physicochemical, biological, or other parameter-specific measurement values used to indicate where an **environmental value** is at risk of **environmental harm**.

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

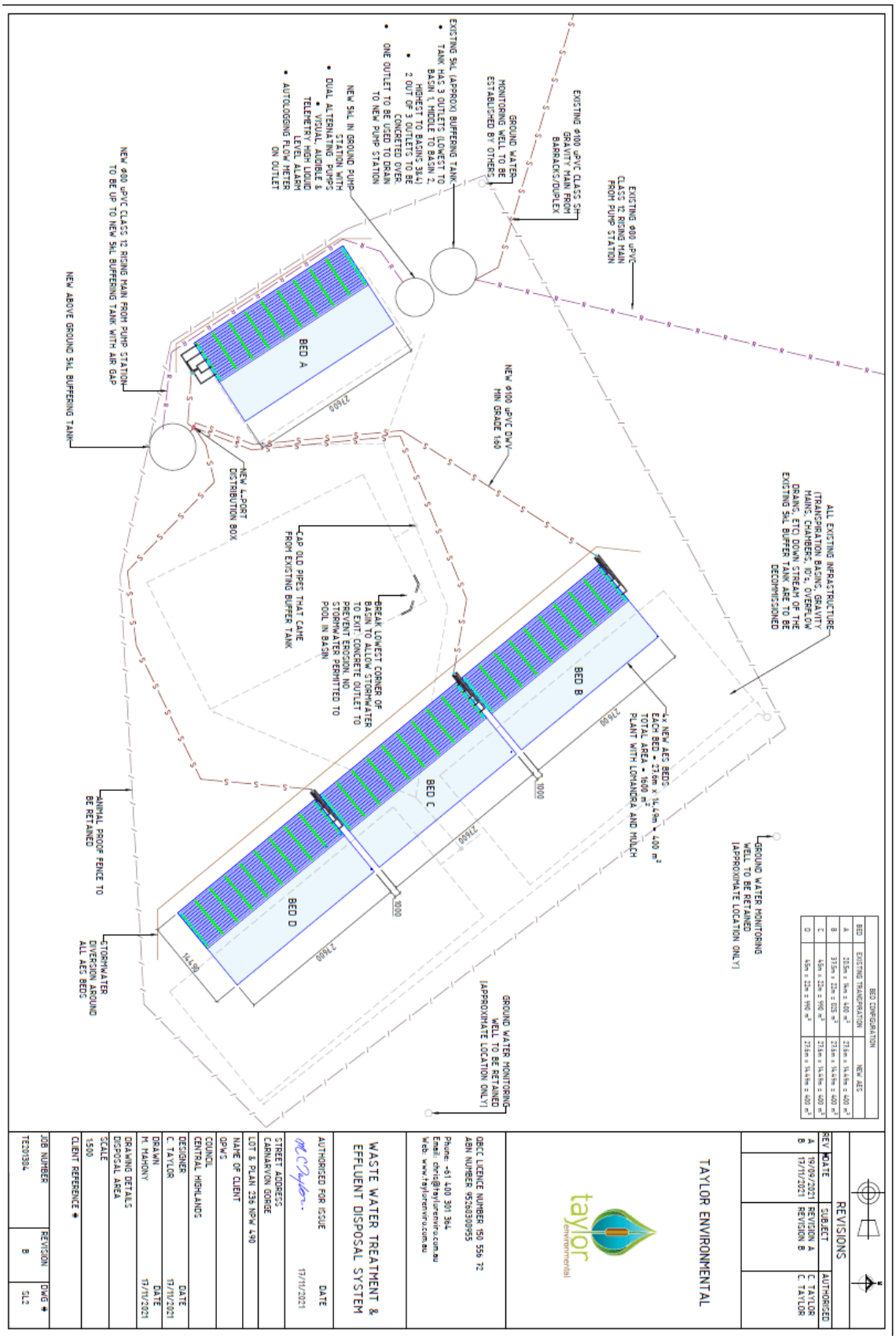
Viable state or viability means able to live and grow.

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.

Appendix 1 - Site plan 1



Appendix 1 - Site plan 2



END OF ENVIRONMENTAL AUTHORITY