

# Permit

*Environmental Protection Act 1994*

## Environmental authority EPPR00815913

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

### Environmental authority number: EPPR00815913

#### Environmental authority takes effect on the day of the approval.

The first anniversary day of this environmental authority remains **30 September**. Payment of the annual fee will be due each year on this day, and an annual return will be due on 1 March each year.

#### Environmental authority holder

Name(s)	Registered address
Fraser Coast Regional Council A. B. N. 19 277 850 689	77 Tavistock Street HERVEY BAY QLD 4655

#### Environmentally relevant activity and location details

Environmentally relevant activities	Location
Prescribed ERA 63(1)(b)(i) Sewage treatment – operating sewage treatment works, other than no-release works, with a total daily peak design capacity of – 100 to 1,500EP – if treated effluent is discharged from the works to an infiltration trench or through an irrigation scheme	Burgowan Road, TORBANLEA - Lot 179 Plan CP859379
Prescribed ERA 63(1)(b)(ii) Sewage treatment – operating sewage treatment works, other than no-release works, with a total daily peak design capacity of – 100 to 1,500EP – otherwise	48 Steley Street, HOWARD - Lot 1 Plan SP116610
Prescribed ERA 63(1)(c) Sewage treatment – operating sewage treatment works, other than no-release works, with a total daily peak design capacity of – 1,500 to 4,000EP	Orchid Drive, BURRUM HEADS - Lot 129 Plan CK3588
	Morris Road, TOOGOOM - Lot 217 Plan SP111516
Prescribed ERA 63(1)(e) Sewage treatment – operating sewage treatment works, other than no-release works, with a total daily peak design capacity of – 10,000 to 50,000EP	Booral Road, URANGAN - Lot 100 on SP226980
	151-169 Hythe Street, PIALBA - Lot 1 Plan RP122157

Environmentally relevant activities	Location
	80 Piggford Lane, WALLIGAN - Lot 1 Plan RP35386
	Errol Street, MARYBOROUGH - Lot 9 Plan RP74505
Prescribed ERA 64(3) Water treatment of 10ML or more raw water in a day	Steley Street, HOWARD - Lot 1 Plan RP13653
	1105 Teddington Road, TEDDINGTON - Lot 130 Plan MCH5203
	Churchill Mine Road, BURGOWAN - Lot 199 Plan MCH812153
ERA 57 - Regulated Waste Transport Transporting regulated waste, other than end-of-life tyres (01 vehicle only)	State of Queensland

### Transitional Environmental Program

Transitional Environmental Program (TEP) MAN19820 relates to this permit and is in force until 30 September 2023.

A copy of the TEP MAN19820 can be obtained from the administering authority.

It is an offence to contravene a requirement of the TEP or a condition of the TEP approval.

### 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](http://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*

21 September 2020

Date

**Enquiries:**  
Utilities and Government Organisations  
BRISBANE QLD 4001  
Phone: 1300130372  
Email: [palm@des.qld.gov.au](mailto: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.

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## Conditions of environmental authority

### Part 1 – all locations

Environmentally relevant activities	Location
63-(1b)(i) Sewage treatment >100 to 1500EP - IT or IR	Burgowan Road, TORBANLEA - Lot 179 Plan CP859379
63-(1b)(ii) Sewage treatment >100 to 1500EP - no IT or IR	48 Steley Street, HOWARD - Lot 1 Plan SP116610
63-(1e) Sewage treatment >10000 to 50000EP	Booral Road, URANGAN - Lot 100 on SP226980
63-(1e) Sewage treatment >10000 to 50000EP	151-169 Hythe Street, PIALBA - Lot 1 Plan RP122157
63-(1c) Sewage treatment >1500 to 4000EP	Orchid Drive, BURRUM HEADS - Lot 129 Plan CK3588
63-(1c) Sewage treatment >1500 to 4000EP	Morris Road, TOOGOOM - Lot 217 Plan SP111516
63-(1e) Sewage treatment >10000 to 50000EP	80 Piggford Lane, WALLIGAN - Lot 1 Plan RP35386
63-(1e) Sewage treatment >10000 to 50000EP	Errol Street, MARYBOROUGH - Lot 9 Plan RP74505
64-(3) Water treatment >10ML raw water day	Steley Street, HOWARD - Lot 1 Plan RP13653
64-(3) Water treatment >10ML raw water day	1105 Teddington Road, TEDDINGTON - Lot 130 Plan MCH5203
64-(3) Water treatment >10ML raw water day	Churchill Mine Road, BURGOWAN - Lot 199 Plan MCH812153

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
<b>G1-1</b>	All reasonable and practicable <b>measures</b> must be taken to prevent the likelihood of environmental harm being caused.
<b>G1-2</b>	Any breach of a condition of this environmental authority must be reported to the <b>administering authority</b> as soon as practicable, or at most, within 24 hours of becoming aware of the breach. <b>Records</b> must be kept including full details of the breach and any subsequent actions undertaken.
<b>G1-3</b>	Other than as permitted by this environmental authority, the <b>release of a contaminant into the environment</b> must not occur.

<b>G1-4</b>	All information and <b>records</b> required by the conditions of this environmental authority must be kept for a minimum of five years with the exception of environmental monitoring results which must be kept until surrender of this environmental authority. All information and <b>records</b> required by the conditions of this environmental authority must be provided to the <b>administering authority</b> upon request and in the format requested.
<b>G1-5</b>	An annual monitoring report must be prepared and submitted to the <b>administering authority</b> by 30 November each year, for the preceding financial year. The report must include: <ol style="list-style-type: none"> <li>1. Summary and interpretation of any data;</li> <li>2. Calculation of either: <ol style="list-style-type: none"> <li>a. mass loads of nitrogen and phosphorus, or</li> <li>b. the total volume of treated water, released to waters from the sewage treatment plant over the previous 12 months;</li> </ol> </li> <li>3. A summary of the previous 12 months monitoring results obtained in accordance with any of the monitoring requirements of this approval including graphical representations showing relevant limits if this data is not already reported to the <b>WaTERS</b> database;</li> <li>4. An evaluation/explanation of the data from any monitoring programs;</li> <li>5. An outline of actions taken or proposed to minimise the environmental risk from any deficiency identified by the monitoring or recording programs;</li> <li>6. Calculation of the volume of treated water recycled (used for purposes other than direct discharge at the approved discharge location(s)) during the previous 12 months; and</li> <li>7. Calculations of the volume and frequency of wet weather storage overflows, where applicable.</li> </ol>
<b>G1-6</b>	<b>You</b> must record the following details for all environmental complaints received: <ol style="list-style-type: none"> <li>a) date and time complaint was received</li> <li>b) name and contact details of the complainant;</li> <li>c) nature of the complaint;</li> <li>d) investigations undertaken;</li> <li>e) conclusions formed; and</li> <li>f) actions taken.</li> </ol>
<b>G1-7</b>	The <b>activity</b> must be undertaken in accordance with written procedures that: <ol style="list-style-type: none"> <li>a) identify potential risks to the environment from the <b>activity</b> during routine operations, closure and an emergency;</li> <li>b) establish and maintain control <b>measures</b> that minimise the potential for environmental harm;</li> <li>c) ensure plant, equipment and <b>measures</b> are maintained in a proper and effective condition;</li> <li>d) ensure plant, equipment and <b>measures</b> are operated in a proper and effective manner;</li> <li>e) ensure that staff are trained in and aware of their obligations under the <i>Environmental Protection Act 1994</i>; and</li> <li>f) ensure that reviews of environmental performance are undertaken at least annually.</li> </ol>
<b>G1-8</b>	Chemicals and fuels in containers greater than 15 litres must be stored within a <b>secondary containment system</b> .

<b>G1-9</b>	When required by the <b>administering authority</b> , monitoring must be undertaken in the manner prescribed by the <b>administering authority</b> , to investigate a complaint not considered by the <b>administering authority</b> to be frivolous or vexatious, of <b>environmental nuisance</b> arising from the <b>activity</b> . The monitoring results must be provided to the <b>administering authority</b> upon request.
<b>G1-10</b>	An <b>appropriately qualified person(s)</b> 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.
<b>Agency interest: Air</b>	
<b>Condition number</b>	<b>Condition</b>
<b>A1-1</b>	Odours or airborne contaminants must not cause <b>environmental nuisance</b> at a <b>sensitive place</b> or <b>commercial place</b> .
<b>Agency interest: Water</b>	
<b>Condition number</b>	<b>Condition</b>
<b>W1-1</b>	Other than as permitted within this environmental authority, contaminants must not be released to <b>waters</b> .
<b>Agency interest: Noise</b>	
<b>Condition number</b>	<b>Condition</b>
<b>N1-1</b>	Other than as permitted within this environmental authority, noise generated by the <b>activity</b> must not cause <b>environmental nuisance</b> at a <b>sensitive place</b> or <b>commercial place</b> .
<b>Agency interest: Land</b>	
<b>Condition number</b>	<b>Condition</b>
<b>L1-1</b>	Other than as permitted within this environmental authority, contaminants must not be released to <b>land</b> .
<b>L1-2</b>	Treatment and management of acid sulfate soils must comply with the current edition of the <i>Queensland Acid Sulfate Soil Technical Manual</i> .
<b>Agency interest: Waste</b>	
<b>Condition number</b>	<b>Condition</b>
<b>WA1-1</b>	All waste generated in carrying out the <b>activity</b> must be lawfully reused, recycled or removed to a facility that can lawfully accept the waste.

<b>WA1-2</b>	Treated sewage effluent may be removed from the site and used for an alternate purpose, with the written consent of any third party involved.
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**PART 2 – Torbanlea Sewage Treatment Plant, Howard Sewage Treatment Plant and Eli Creek Sewage Treatment Plant**

Environmentally relevant activities	Locations
63-(1b)(i) Sewage treatment >100 to 1500EP - IT or IR	Burgowan Road, TORBANLEA - Lot 179 Plan CP859379 (Torbanlea Sewage Treatment Plant)
63-(1b)(ii) Sewage treatment >100 to 1500EP - no IT or IR	48 Steley Street, HOWARD - Lot 1 Plan SP116610 (Howard Sewage Treatment Plant)
63-(1e) Sewage treatment >10000 to 50000EP	151-169 Hythe Street, PIALBA - Lot 1 Plan RP122157 (Eli Creek Sewage Treatment Plant)

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

Agency interest: Water	
Condition number	Condition
<b>WT2-1</b>	The only contaminants to be released to surface <b>waters</b> are from the sewage treatment plant to <b>waters</b> described as Eli Creek (from the Eli Creek Sewage Treatment Plant) and Maria Creek (from the Howard Sewage Treatment Plant) in accordance with <i>Part 2 – Table 1: Surface water release limits</i> and the associated requirements.

**Part 2 – Table 1: Surface water release limits**

Release Point (RP) Name	Monitoring Point	Quality Characteristic (units)	Minimum	50 <sup>th</sup> percentile (annual)	80 <sup>th</sup> percentile (annual)	Maximum	Mass load
D2	M2	Daily volume (dry weather) (ML)	-	-	-	2.75	-
D3	M3	Daily volume (dry weather) (m <sup>3</sup> )	-	-	-	51.8	-
D2	M2	Daily volume (any one day) (ML)	-	-	-	6.0	-
D3	M3	Daily volume (any one day) (m <sup>3</sup> )	-	-	-	51.8	-



Release Point (RP) Name	Monitoring Point	Quality Characteristic (units)	Minimum	50 <sup>th</sup> percentile (annual)	80 <sup>th</sup> percentile (annual)	Maximum	Mass load
D2	M2	5-day Biological Oxygen Demand (BOD <sub>5</sub> ) (mg/L)	-	12	15	35	-
D3	M3	BOD <sub>5</sub> (mg/L)	-	15	20	35	-
D2	M2	Suspended Solids (mg/L)	-	15	25	45	-
D3	M3	Suspended Solids (mg/L)	-	18	25	45	-
D2	M2	Dissolved Oxygen (mg/L)	2	-	-	-	-
D3	M3	Dissolved Oxygen (mg/L)	2	-	-	-	-
D2	M2	pH (pH units)	6.5	-	-	8.5	-
D3	M3	pH (pH units)	6.5	-	-	8.5	-
D2	M2	E.coli (CFU/100mL)	-	150	600	-	-
D3	M3	E.coli (CFU/100mL)	-	150	600	-	-
D2	M2	Total Phosphorus (tonnes/year)	-	-	-	-	2.5
D2	M2	Total Nitrogen (tonnes/year)	-	-	-	-	10

**Associated requirements:**

1. RP D2 is described as the authorised release point of treated sewage effluent from the Eli Creek Sewage Treatment Plant to Eli Creek at a location described as adjacent to the north-western boundary of Portion 171, Parish of Vernon, at 0.6km AMTD.
2. RP D3 is described as the authorised release point of treated sewage effluent from the Howard Sewage Treatment Plant to Maria Creek at a location described as 200m upstream of the Steley Street crossing.
3. Monitoring location M2 is described as the outlet of the chlorination tank at the Eli Creek Sewage Treatment Plant.
4. Monitoring location M3 is described as the standpipe that draws effluent from the effluent storage well at the Howard Sewage Treatment Plant.

<b>W2-2</b>	Monitoring of contaminant releases to <b>waters</b> must be undertaken in accordance with <i>Part 2 – Table 2: Monitoring frequency</i> and the associated requirements.
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**Part 2 – Table 2: Monitoring frequency**

Quality Indicator	Measurement (units)	Monitoring Frequency	Monitoring location
BOD <sub>5</sub>	mg/L	Weekly	M2
BOD <sub>5</sub>	mg/L	Fortnightly	M3
Suspended Solids	mg/L	Weekly	M2
Suspended Solids	mg/L	Fortnightly	M3
Dissolved Oxygen	mg/L	Weekly	M2
Dissolved Oxygen	mg/L	Fortnightly	M3
pH	pH units	Weekly	M2
pH	pH units	Fortnightly	M3
E.coli	CFU/100mL	Weekly	M2
E.coli	CFU/100mL	Fortnightly	M3
Total Phosphorus	mg/L	Monthly	M2
Total Phosphorus	mg/L	Monthly	M3
Total Nitrogen	mg/L	Monthly	M2
Total Nitrogen	mg/L	Monthly	M3

**Associated requirements:**

1. *Monitoring must be in accordance with the administering authority's Water Quality Sampling Manual and all monitoring devices must be effectively calibrated and maintained.*
2. *Monitoring must be undertaken when the activity is in operation and samples must be representative of a release.*
3. *Monitoring location M2 is described as the outlet of the chlorination tank at the Eli Creek Sewage Treatment Plant.*
4. *Monitoring location M3 is described as the standpipe that draws effluent from the effluent storage well at the Howard Sewage Treatment Plant.*

<b>W2-3</b>	In addition to condition <b>W2-1</b> , the release to <b>waters</b> must not produce any slick or other visible evidence of oil or grease, nor contain visible floating oil, grease, scum, litter or other visually objectionable matter
<b>W2-4</b>	Except for releases from Howard Sewage Treatment Plant to Maria Creek from release point D3, the release of contaminants to <b>waters</b> must only occur at least one (1) hour after local high water tide and no later than one (1) hour before local low water tide.
<b>W2-5</b>	Contaminants must only be released to <b>waters</b> from release point D3 to Maria Creek in the event of prolonged wet weather that results in the inability to irrigate the effluent produced at the Howard Sewage Treatment Plant to land in accordance with condition <b>L2-1</b> of this environmental authority. A release must only occur when there is flow in Maria Creek sufficient to assimilate the released contaminants. Such a release must be managed to maintain compliance with condition <b>W2-3</b> .
<b>W2-6</b>	Notwithstanding the maximum release rates in condition <b>W2-1</b> , you must ensure that: <ul style="list-style-type: none"> <li>a) greater than 90% of the average dry weather flow (ADWF) is irrigated to <b>land</b> in accordance with condition <b>L2-1</b> of this environmental authority; and</li> <li>b) less than 10% of the ADWF is released to <b>waters</b> in accordance with the water quality characteristics in condition <b>W2-1</b> of this environmental authority.</li> </ul>
<b>W2-7</b>	Notwithstanding the maximum release rates in condition <b>W2-1</b> , <b>you</b> must take all reasonable and practicable <b>measures</b> to minimise the release of contaminants to <b>waters</b> from the authorised release points to Eli Creek and Maria Creek.
<b>W2-8</b>	Release point D2 to from the Eli Creek Sewage Treatment Plant to Eli Creek must be submerged such that the top of the outfall pipes are at least 0.5m below Lowest Astronomical Tide.
<b>W2-9</b>	A <b>receiving environment monitoring program (REMP)</b> must be designed and implemented by an <b>appropriately qualified person(s)</b> to monitor the effects of the <b>activity</b> on the receiving environment.
<b>W2-10</b>	The <b>REMP</b> required by condition <b>W2-9</b> must include at least the following: <ul style="list-style-type: none"> <li>a) a description of the potentially affected environment including key communities and ambient water quality;</li> <li>b) a description of water quality objectives and biological objectives achieved;</li> <li>c) a description of selected physico-chemical and biological indicators (including nitrate, ammonia, filterable Phosphorus, salinity and chlorophyll 'a') and reason for their inclusion;</li> <li>d) the location of monitoring stations / locations including monitoring transects away from the outfall of the licenced releases as well as any control locations;</li> <li>e) the proposed sampling depths;</li> <li>f) the water quality characteristics of the receiving waters to be determined;</li> <li>g) the frequency of sampling and analysis;</li> <li>h) any historical datasets to be relied upon; and</li> <li>i) description of the statistical basis on which conclusions are drawn.</li> </ul>
<b>W2-11</b>	At twelve (12) monthly intervals from the date of commencement of the <b>REMP</b> , <b>you</b> must prepare a report compiling and interpreting the data and findings of the <b>REMP</b> .

<b>W2-12</b>	The report on the <b>REMP</b> must address at least the following: <ul style="list-style-type: none"> <li>a) a detailed description of the methodology used in the <b>REMP</b>;</li> <li>b) a detailed description and analysis of the results of the <b>REMP</b>;</li> <li>c) an assessment of the impact of contaminant discharge upon the receiving environment with respect to water quality objectives and biological objectives for the receiving environment;</li> <li>d) an assessment of the level of change in ambient conditions, if any, of the receiving environment; and</li> <li>e) a summary of recommendations that can be drawn from the findings of the <b>REMP</b>, with respect to the prevention or minimisation of the impacts of the contaminant releases on the receiving environment.</li> </ul>
<b>W2-13</b>	The parts of the <b>REMP</b> that relate to the direct discharge of treated sewage effluent to <b>waters</b> can be discontinued twelve (12) months after compliance with condition <b>W2-6</b> is achieved.
<b>Agency interest: Noise</b>	
<b>Condition number</b>	<b>Condition</b>
<b>N2-1</b>	In the event of a complaint about noise that constitutes annoyance being made to the <b>administering authority</b> , that the <b>administering authority</b> considers is not frivolous or vexatious, then the emission of noise from each of the licensed places must not result in levels greater than those specified in <i>Part 2 – Table 3: Noise limits</i> and the associated requirements at any <b>sensitive place</b> or <b>commercial place</b> .

**Part 2 – Table 3: Noise limits**

Noise level measured in dB(A)	Time period		
	7am – 6pm	6pm – 10pm	10pm – 7am
<b>Noise measured at the nearest sensitive place</b>			
$L_{A,max,adj,T}$	Background noise level (background) + 5 dB(A)	Background + 5 dB(A)	Background + 3 dB(A)
<b>Noise measured at a commercial place</b>			
$L_{A,max,adj,T}$	Background + 10 dB(A)	Background + 10 dB(A)	Background + 8 dB(A)

**Associated requirements:**

- $LA_{10,adj,15 mins}$  levels may be substituted for  $L_{A,max,adj,15 minutes}$  if evidence is provided that  $LA_{10,adj,15 mins}$  levels are representative of component noise levels from source(s) / premises under investigation.
- Any monitoring must be in accordance with the most recent version of the administering authority's Noise Measurement Manual.

Agency interest: Land	
Condition number	Condition
L2-1	The only contaminants to be released to <b>land</b> are treated sewage effluent in accordance with <i>Part 2 – Table 4: Treated effluent release limits to irrigation area</i> and the associated requirements.

**Part 2 – Table 4: Treated effluent release limits to irrigation area**

Monitoring point	Quality characteristic (units)	Minimum	50 <sup>th</sup> percentile (annual)	80 <sup>th</sup> percentile (annual)	Maximum	Monitoring frequency
M2, M3, M4	BOD <sub>5</sub> (mg/L)	-	-	-	-	Monthly
M2, M3, M4	E.coli (organisms/100mL)	-	150	600	-	Monthly
M2, M3, M4	pH (pH units)	6.5	-	-	9.5	Monthly
M6, M7, M8	Conductivity (µS/cm)	-	-	-	2,000	Monthly
M6, M7, M8	Sodium absorption ratio	-	-	-	-	Monthly
M6, M7, M8	Total Nitrogen (mg/L)	-	-	-	-	Monthly
M6, M7, M8	Total Phosphorus (mg/L)	-	-	-	-	Monthly

**Associated requirements:**

- Monitoring location M2 is described as the outlet of the chlorination tank at the Eli Creek Sewage Treatment Plant.
- Monitoring location M3 is described as the standpipe that draws effluent from the effluent storage well at the Howard Sewage Treatment Plant.
- Monitoring location M4 is described as the outlet of the chlorination tank at the Torbanlea Sewage Treatment Plant.

4. Monitoring location M6 is described as the outlet of the final effluent storage area to the irrigation system for the Eli Creek Sewage Treatment Plant.
5. Monitoring location M7 is described as the outlet of the final effluent storage area to the irrigation system for the Howard Sewage Treatment Plant.
6. Monitoring location M8 is described as the outlet of the final effluent storage area to the irrigation system for the Torbanlea Sewage Treatment Plant.
7. Monitoring must be in accordance with the administering authority's Water Quality Sampling Manual and all monitoring devices must be effectively calibrated and maintained.
8. Monitoring must be undertaken when treated sewage effluent is being irrigated, unless irrigation has ceased for longer than the relevant parameters specific frequency (e.g. if total suspended solids (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).

<b>L2-2</b>	Treated effluent released to <b>land</b> must be done in accordance with documentation that ensures: <ol style="list-style-type: none"> <li>a) drainage to <b>groundwater</b> and subsurface flows of contaminants to surface <b>waters</b> are prevented;</li> <li>b) surface pondage and run-off of effluent is prevented;</li> <li>c) degradation of soil structure is minimised;</li> <li>d) soil sodicity and the build-up of nutrients and heavy metals in the soil and subsoil are minimised;</li> <li>e) spray drift or overspray does not carry beyond effluent disposal areas;</li> <li>f) effluent disposal areas are maintained with an appropriate crop in a viable state for transpiration and nutrient uptake; and</li> <li>g) sufficient buffer zones are maintained between irrigation sites and sensitive environmental receptors.</li> </ol>
<b>L2-3</b>	When weather conditions or soil conditions preclude the release of treated sewage effluent to <b>land</b> , effluent must not be irrigated to <b>land</b> .
<b>L2-4</b>	Treated sewage effluent may be removed from the <b>site</b> and used for an alternate purpose, with the written consent of any third party involved.

### PART 3 – Burrum Heads Sewage Treatment Plant

Environmentally relevant activity	Location
63-(1c) Sewage treatment >1500 to 4000EP	Orchid Drive, BURRUM HEADS - Lot 129 Plan CK3588 (Burrum Heads Sewage Treatment Plant)

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
<b>G3-1</b>	<p><b>Activities</b> conducted under this environmental authority must not be conducted contrary to any of the following limitations:</p> <ul style="list-style-type: none"> <li>a) Dry weather day inflows must not exceed the plant design capacity of 0.65 ML/day.</li> <li>b) Wet weather day inflows must not exceed 3.25 ML/day.</li> </ul>
Agency interest: Water	
Condition number	Condition
<b>W3-1</b>	A receiving environment monitoring program ( <b>REMP</b> ) must be designed and implemented by <b>appropriately qualified persons</b> to monitor the effects of the <b>activity</b> on groundwater.
<b>W3-2</b>	<p>The <b>REMP</b> required by condition <b>W3-1</b>, must include at least the following:</p> <ul style="list-style-type: none"> <li>(a) a determination of the impacts of the licensed <b>activity</b> on the groundwater quality in the underlying aquifer; and</li> <li>(b) a sufficient number of bores installed at locations and depths which yield representative groundwater samples from points both <b>up-gradient</b> and <b>down-gradient</b> of the potential influence so as to: <ul style="list-style-type: none"> <li>i. establish the quality of groundwater that has not been affected by seepage or drainage of contaminants to groundwater from the <b>activity</b>; and</li> <li>ii. detect any seepage of contaminants to groundwater from the licensed place; and</li> </ul> </li> <li>(c) monitoring of background groundwater quality, hydraulically up-gradient of any release of contaminants to groundwater for selected physico-chemical and biological indicators, including nitrate, nitrite, total nitrogen, total phosphorus, conductivity, E.coli, pH and the standing water level (accurate to 0.01m); and</li> <li>(d) monitoring of groundwater quality hydraulically down gradient of all storage ponds, sewage treatment plant and irrigation areas for selected physico-chemical and biological indicators, including nitrate, nitrite, total nitrogen, total phosphorus, conductivity, E.coli, pH and the standing water level (accurate to 0.01m);</li> <li>(e) a sufficient number of sampling events to detect any possible release(s) of contaminants; and</li> <li>(f) consideration of the potential use of groundwater in the vicinity.</li> </ul>

<b>W3-3</b>	At twelve (12) monthly intervals from the date of commencement of the <b>REMP</b> , <b>you</b> must prepare a report compiling and interpreting the data and findings of the <b>REMP</b> .
<b>W3-4</b>	The report on the <b>REMP</b> must address at least the following: <ul style="list-style-type: none"> <li>a) a detailed description of the methodology used in the <b>REMP</b>;</li> <li>b) a detailed description and analysis of the results of the <b>REMP</b>;</li> <li>c) an assessment of the impact of contaminant discharge upon the receiving environment with respect to water quality objectives and biological objectives for the receiving environment;</li> <li>d) an assessment of the level of change in ambient conditions, if any, of the receiving environment; and</li> <li>e) a summary of recommendations that can be drawn from the findings of the <b>REMP</b>, with respect to the prevention or minimisation of the impacts of the contaminant releases on the receiving environment.</li> </ul>
<b>Agency interest: Noise</b>	
<b>Condition number</b>	<b>Condition</b>
<b>N3-1</b>	In the event of a complaint about noise that constitutes annoyance being made to the <b>administering authority</b> , that the <b>administering authority</b> considers is not frivolous or vexatious, then the emission of noise from each of the licensed places must not result in levels greater than those specified in <i>Part 3 – Table 2: Noise limits</i> and the associated requirements at any <b>sensitive place</b> or <b>commercial place</b> .

**Part 3 – Table 2: Noise limits**

Noise level measured in dB(A)	Time period		
	7am – 6pm	6pm – 10pm	10pm – 7am
<b>Noise measured at the nearest sensitive place</b>			
L <sub>A,max,adj,T</sub>	Background + 5 dB(A)	Background + 5 dB(A)	Background + 3 dB(A)
<b>Noise measured at a commercial place</b>			
L <sub>A,max,adj,T</sub>	Background + 10 dB(A)	Background + 10 dB(A)	Background + 8 dB(A)

**Associated requirements:**

- Any monitoring must be in accordance with the most recent version of the administering authority's Noise Measurement Manual.

<b>Agency interest: Land</b>	
<b>Condition number</b>	<b>Condition</b>
<b>L3-1</b>	The only contaminants to be released to <b>land</b> are treated sewage effluent in accordance with <i>Part 3 – Table 3: Treated effluent release limits to irrigation area</i> and the associated requirements.



**Part 3 – Table 3: Treated effluent release limits to irrigation area**

Release point	Monitoring point	Quality characteristic (units)	Minimum	50 <sup>th</sup> percentile (annual)	80 <sup>th</sup> percentile (annual)	Maximum	Monitoring frequency
W1	M1	BOD <sub>5</sub> (mg/L)	-	-	-	-	Monthly
W1	M1	Suspended solids (mg/L)	-	-	-	-	Monthly
W1	M1	E.coli (organisms/100 mL)	-	150	600	-	Monthly
W1	M1	pH (pH units)	6.5	-	-	8.5	Monthly
W1	M2	Electrical conductivity (µS/cm)	-	-	-	2,000	Monthly
W1	M2	Sodium absorption ratio	-	-	-	-	Monthly
W1	M2	Total Nitrogen (mg/L)	-	10	-	20	Monthly
W1	M2	Total Phosphorus (mg/L)	-	10	-	12	Monthly

**Associated requirements:**

1. Monitoring location M1 is described as the outlet of the chlorination tank at the Burrum Heads Sewage Treatment Plant.
2. Monitoring location M2 is described as the outlet of the treated effluent storage lagoon to the irrigation system for the Burrum Heads Sewage Treatment Plant.
3. Monitoring must be in accordance with the administering authority's Water Quality Sampling Manual and all monitoring devices must be effectively calibrated and maintained.
4. Monitoring must be undertaken when treated sewage effluent is being irrigated, unless irrigation has ceased for longer than the relevant parameters specific frequency (e.g. if total suspended solids (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).
5. Release Point W1 is described as the outlet of the treated effluent storage lagoon to the irrigation system for the Burrum Heads Sewage Treatment Plant

<b>L3-2</b>	Treated effluent released to <b>land</b> must be done in accordance with documentation that ensures: a) drainage to <b>groundwater</b> and subsurface flows of contaminants to surface <b>waters</b> 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 does not carry beyond effluent disposal areas; f) effluent disposal areas are maintained with an appropriate crop in a viable state for transpiration and nutrient uptake; and g) sufficient buffer zones are maintained between irrigation sites and sensitive environmental receptors.
<b>L3-3</b>	When weather conditions or soil conditions preclude the release of treated sewage effluent to <b>land</b> , effluent must not be irrigated to <b>land</b> .

## PART 4 – Toogoom Sewage Treatment Plant

Environmentally relevant activity	Location
63-(1c) Sewage treatment >1500 to 4000EP	Morris Road, TAKURA - Lot 217 Plan SP111516 (Toogoom Sewage Treatment Plant)

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: Water	
Condition number	Condition
<b>W4-1</b>	The only contaminants to be released to <b>waters</b> are from the Toogoom Sewage Treatment Plant to <b>groundwater</b> in accordance with <i>Part 4 – Table 1: Groundwater release limits</i> and the associated requirements.

### Part 4 – Table 1: Groundwater release limits

RP Name	Monitoring Point	Quality Characteristic (units)	Minimum	50 <sup>th</sup> percentile (annual)	80 <sup>th</sup> percentile (annual)	Maximum	Monitoring Frequency
W1	W1	Daily volume (any dry weather day) (ML)	-	-	-	0.15	Daily
W1	W1	Daily volume (any wet weather day) (ML)	-	-	-	0.75	Daily
W1	M1	BOD <sub>5</sub> (mg/L)	-	-	10	20	Fortnightly
W1	M1	Suspended Solids (mg/L)	-	-	10	30	Fortnightly
W1	M1	Dissolved Oxygen (mg/L)	2	-	-	-	Fortnightly
W1	M1	pH (pH units)	6.5	-	-	8.5	Fortnightly
W1	M1	E.coli (CFU/100mL)	-	150	600	-	Fortnightly
W1	M1	Total Phosphorus (mg/L)	-	10	-	12	Fortnightly
W1	M1	Total Nitrogen (mg/L)	-	10	-	20	Fortnightly

**Associated requirements:**

1. RP W1 is described as the authorised release point of treated sewage effluent from the Toogoom Sewage Treatment Plant to groundwater at the exfiltration areas on the site.
2. Monitoring Location M1 is described as the outlet of the chlorination tank at the sewage treatment plant.
3. Monitoring must be in accordance with the administering authority's Water Quality Sampling Manual and all monitoring devices must be effectively calibrated and maintained.
4. Monitoring must be undertaken when the activity is in operation and samples must be representative of a release.

<b>W4-2</b>	If treated sewage effluent is released to <b>groundwater</b> , <b>groundwater</b> quality in the affected aquifer must not exceed the contaminant limits specified in <i>Part 4 – Table 2: Groundwater contaminant limits and levels</i> beyond the <b>site boundary</b> . Groundwater must be monitored in accordance with <i>Part 4 – Table 2</i> and the associated monitoring requirements.
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**Part 4 – Table 2: Groundwater contaminant limits and levels**

Quality Indicator	Measurement (units)	Contaminant limits and groundwater level	Monitoring frequency
Nitrate	mg/L	Baseline value $\pm$ 20%	Quarterly
Nitrite	mg/L	Baseline value $\pm$ 20%	Quarterly
Total Nitrogen	mg/L	Baseline value $\pm$ 20%	Quarterly
Total Phosphorus	mg/L	Baseline value $\pm$ 20%	Quarterly
Conductivity	$\mu$ S/cm	Baseline value $\pm$ 20%	Quarterly
E.coli	CFU/100mL	Baseline value $\pm$ 20%	Quarterly
pH	pH units	Baseline value $\pm$ 20%	Quarterly
Standing water level	cm	-	Quarterly

**Associated requirements:**

1. Monitoring must be in accordance with the administering authority's Water Quality Sampling Manual and all monitoring devices must be effectively calibrated and maintained.
2. The baseline value is to be determined by sampling on at least four occasions, one month apart, from reference bores determined to represent background groundwater quality.

<b>W4-3</b>	<p>Prior to the release of treated sewage effluent to <b>groundwater</b> in accordance with the conditions of this environmental authority, a <b>groundwater monitoring network</b> must be installed for the <b>site</b>. The network must:</p> <ol style="list-style-type: none"> <li>a) be installed and maintained by a person possessing appropriate qualifications and experience in the fields of hydrogeology and groundwater monitoring program design to be able to competently make recommendations about these matters;</li> <li>b) be constructed in accordance with the methods prescribed in the latest edition of the Agriculture and Resource Management Council of Australia and New Zealand manual titled <i>Minimum Construction Requirements for Water Bores in Australia</i>;</li> <li>c) include a sufficient number of bore(s) of compliance that are located in an appropriate distance from potential sources of impact from the discharge of treated sewage and provides the following: <ol style="list-style-type: none"> <li>i) representative <b>groundwater</b> samples;</li> <li>ii) background <b>groundwater</b> quality in hydraulically <b>up-gradient</b> or background bore(s) that have not been affected by any activities associated with sewage treatment; and</li> <li>iii) the quality of groundwater <b>down-gradient</b> of any potential source of contamination including <b>groundwater</b> passing the relevant bore(s) of compliance.</li> </ol> </li> </ol>
<b>W4-4</b>	<p>If treated sewage is released to <b>groundwater</b> in accordance with the conditions of this environmental authority, <b>you</b> must conduct monitoring of <b>groundwater</b> quality for the relevant bores of compliances. All determinations of <b>groundwater</b> quality must be:</p> <ol style="list-style-type: none"> <li>a) conducted for the water quality characteristics and at the minimum frequency stated in <i>Part 4 – Table 2: Groundwater contaminant limits and levels</i> and the associated requirements;</li> <li>b) taken from sufficient monitoring points and/or wells to obtain representative samples of <b>groundwater</b> both <b>up-gradient</b> and <b>down-gradient</b> of the potential influence;</li> <li>c) carried out with sufficient regularity and spatial and temporal replication to make statistically valid conclusions about the presence or absence of contamination or other impact;</li> <li>d) carried out with a sufficient number of sampling events to determine ambient <b>groundwater</b> quality, level and flow; and</li> <li>e) followed by an assessment of whether or not there has been any statistically significant adverse change compared to background values at locations hydraulically <b>down-gradient</b> of the potential sources of contamination for each quality indicator in <i>Part 4 – Table 2: Groundwater contaminant limits and levels</i>.</li> </ol>
<b>W4-5</b>	<p>If treated sewage effluent is released to <b>groundwater</b>, a comprehensive vegetation monitoring program must be designed and implemented by an <b>appropriately qualified person</b>. The vegetation monitoring program must be adequate to detect changes in vegetation that may be caused by the release of treated sewage effluent to <b>groundwater</b>.</p>
<b>Agency interest: Noise</b>	
<b>Condition number</b>	<b>Condition</b>

<b>N4-1</b>	In the event of a complaint about noise that constitutes annoyance being made to the <b>administering authority</b> , that the <b>administering authority</b> considers is not frivolous or vexatious, then the emission of noise from each of the licensed places must not result in levels greater than those specified in <i>Part 4 – Table 3: Noise limits</i> and the associated requirements at any <b>sensitive place</b> or <b>commercial place</b> .
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**Part 4 – Table 3: Noise limits**

Noise level measured in dB(A)	Time period		
	7am – 6pm	6pm – 10pm	10pm – 7am
<b>Noise measured at the nearest sensitive place</b>			
$L_{A,max,adj,T}$	Background + 5 dB(A)	Background + 5 dB(A)	Background + 3 dB(A)
<b>Noise measured at a commercial place</b>			
$L_{A,max,adj,T}$	Background + 10 dB(A)	Background + 10 dB(A)	Background + 8 dB(A)

**Associated requirements:**

- Any monitoring must be in accordance with the most recent version of the administering authority's Noise Measurement Manual.

Agency interest: Land	
Condition number	Condition
<b>L4-1</b>	The only contaminants to be released to <b>land</b> are treated sewage effluent in accordance with <i>Part 4 – Table 4: Treated effluent release limits to irrigation area</i> and the associated requirements.

**Part 4 – Table 4: Treated effluent release limits to irrigation area**

RP	Monitoring point	Quality characteristic (units)	Minimum	50 <sup>th</sup> percentile (annual)	80 <sup>th</sup> percentile (annual)	Maximum	Monitoring frequency
W2	M1	BOD <sub>5</sub> (mg/L)	-	-	-	-	Monthly
W2	M1	Suspended solids (mg/L)	-	-	-	-	Monthly
W2	M1	E.coli (organisms/100 mL)	-	150	600	-	Monthly
W2	M1	pH (pH units)	6.5	-	-	8.5	Monthly
W2	M2	Electrical conductivity (µS/cm)	-	-	-	1,300	Monthly
W2	M2	Sodium absorption ratio	-	-	-	-	Monthly
W2	M2	Total Nitrogen (mg/L)	-	10	-	20	Monthly

RP	Monitoring point	Quality characteristic (units)	Minimum	50 <sup>th</sup> percentile (annual)	80 <sup>th</sup> percentile (annual)	Maximum	Monitoring frequency
W2	M2	Total Phosphorus (mg/L)	-	5	-	10	Monthly

**Associated requirements:**

1. *RP W2 is described as the authorised release point for treated sewage effluent from the Toogoom Sewage Treatment Plant effluent pond to land offsite.*
2. *Monitoring point M1 is described as the outlet of the chlorination tank at the Toogoom Sewage Treatment Plant.*
3. *Monitoring point M2 is described as the outlet of the effluent storage lagoon to the irrigation system for the Toogoom Sewage Treatment Plant.*
4. *Monitoring must be in accordance with the administering authority's Water Quality Sampling Manual and all monitoring devices must be effectively calibrated and maintained.*
5. *Monitoring must be undertaken when treated sewage effluent is being irrigated, unless irrigation has ceased for longer than the relevant parameters specific frequency (e.g. if total suspended solids (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).*

<b>L4-2</b>	When weather conditions or soil conditions preclude the release of treated sewage effluent to <b>land</b> , effluent must not be irrigated to <b>land</b> .
<b>L4-3</b>	Treated sewage effluent may be removed from the <b>site</b> and used for an alternate purpose, with the written consent of any third party involved.

## PART 5 – Pulgul Creek Sewage Treatment Plant

Environmentally relevant activity	Location
63-(1e) Sewage treatment >10000 to 50000EP	Booral Road, URANGAN - Lot 100 on SP226980 (Pulgal Creek Sewage Treatment Plant)

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
<b>G5-1</b>	<p><b>Activities</b> conducted under this environmental authority must not be conducted contrary to any of the following limitations:</p> <p>a) the quantity of effluent discharged from the sewage treatment plant must not exceed the design capacity of 24,300 equivalent persons (EP).</p> <p><i>Note: The design capacity is 7.0 ML/day ADWF based on the influent quality being received at the time of the application for this approval, i.e. calculated to be 290 litres (L) per EP (24,300 x 290 L = 7.0 ML/day ADWF).</i></p>
Agency interest: Water	
Condition number	Condition
<b>W5-1</b>	The only contaminants to be released to surface <b>waters</b> are from the Pulgul Creek Sewage Treatment Plant to <b>waters</b> described as Pulgul Creek in accordance with <i>Part 5 – Table 1: Surface water release limits</i> and the associated requirements.

**Part 5 – Table 1: Surface water release limits**

RP	Monitoring Point	Quality characteristic (units)	Minimum	50 <sup>th</sup> percentile (annual)	80 <sup>th</sup> percentile (annual)	Maximum	Mass load
D1	M1, M2	Daily volume (dry weather) (ML)	-	-	-	2.0	-
D1	M1, M2	Daily volume (any one day) (ML)	-	-	-	6.0	-
D1	M1, M2	BOD <sub>5</sub> (mg/L)	-	12	15	35	-
D1	M1, M2	Suspended Solids (mg/L)	-	15	25	45	-
D1	M1, M2	Dissolved Oxygen (mg/L)	2	-	-	-	-
D1	M1, M2	pH (pH units)	6.5	-	-	8.5	-



RP	Monitoring Point	Quality characteristic (units)	Minimum	50 <sup>th</sup> percentile (annual)	80 <sup>th</sup> percentile (annual)	Maximum	Mass load
D1	M1, M2	E.coli (CFU/100mL)	-	150	600	-	-
D1	M1, M2	Total Phosphorus (mg/L)	-	7	-	10	
D1	M1, M2	Total Nitrogen (mg/L)	-	10	-	15	-
D1	M1, M2	Total Nitrogen (tonnes/year)	-	-	-	-	10
D1	M1, M2	Total Phosphorus (tonnes/year)	-	-	-	-	2.5

**Associated requirements:**

1. RP D1 is described as the authorised release point of treated sewage effluent from the Pulgul Creek Sewage Treatment Plant to Pulgul Creek at a location described as opposite the corner of Pelican Avenue and Round Island Road, Urangan, at 0.6km AMTD.
2. Monitoring location M1 is described as the IDEA sewage treatment system outlet of the chlorination tank at the Pulgul Creek Sewage Treatment Plant.
3. Monitoring location M2 is described as oxidation ditch sewage treatment system outlet of the chlorination tank at the Pulgul Creek Sewage Treatment Plant.

<b>W5-2</b>	Monitoring of contaminant releases to <b>waters</b> must be undertaken in accordance with <i>Part 5 – Table 2: Monitoring frequency</i> and the associated monitoring requirements.
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**Part 5 – Table 2: Monitoring frequency**

Quality Indicator	Measurement (units)	Monitoring Frequency	Monitoring location
BOD <sub>5</sub>	mg/L	Weekly	M1, M2
Suspended Solids	mg/L	Weekly	M1, M2
Dissolved Oxygen	mg/L	Weekly	M1, M2
pH	pH units	Weekly	M1, M2
E.coli	CFU/100mL	Weekly	M1, M2
Total Phosphorus	mg/L as Phosphorus (P)	Monthly	M1, M2
Total Nitrogen	mg/L as Nitrogen (N)	Monthly	M1, M2

**Associated requirements:**

1. Monitoring must be in accordance with the administering authority's Water Quality Sampling Manual and all monitoring devices must be effectively calibrated and maintained.
2. Monitoring must be undertaken when the activity is in operation and samples must be representative of a release.
3. Monitoring location M1 is described as the IDEA sewage treatment system outlet of the chlorination tank at the Pulgul Creek Sewage Treatment Plant.

4. Monitoring location M2 is described as oxidation ditch sewage treatment system outlet of the chlorination tank at the Pulgul Creek Sewage Treatment Plant.

<b>W5-3</b>	In addition to condition <b>W5-1</b> of this environmental authority, the release to <b>waters</b> must not produce any slick or other visible evidence of oil or grease, nor contain visible floating oil, grease, scum, litter or other visually objectionable matter.
<b>W5-4</b>	Notwithstanding the maximum release rates in condition <b>W5-1</b> of this environmental authority, <b>you</b> must ensure that: <ul style="list-style-type: none"> <li>a) greater than 90% of the ADWF is irrigated to <b>land</b> in accordance with condition <b>L5-1</b> of this environmental authority; and</li> <li>b) less than 10% of the ADWF is released to <b>waters</b> in accordance with the water quality characteristics in condition <b>W5-1</b> of this environmental authority.</li> </ul>
<b>W5-5</b>	Notwithstanding the maximum release rates in conditions <b>W5-1</b> and <b>W5-4</b> , <b>you</b> must take all reasonable and practicable <b>measures</b> to minimise the release of contaminants to <b>waters</b> from the authorised release point(s) to Pulgul Creek.
<b>W5-6</b>	The release point in Pulgul Creek must be located in the middle of the creek with the top of the outfall pipe positioned at the lowest available depth.
<b>W5-7</b>	A <b>REMP</b> must be designed and implemented by <b>appropriately qualified person(s)</b> to monitor the effects of the <b>activity</b> on the receiving environment.
<b>W5-8</b>	The <b>REMP</b> required by condition <b>W5-7</b> must include at least the following: <ul style="list-style-type: none"> <li>a) a description of the potentially affected environment including key communities and ambient water quality;</li> <li>b) a description of water quality objectives and biological objectives achieved;</li> <li>c) a description of selected physico-chemical and biological indicators (including nitrate, ammonia, filterable Phosphorus, salinity and chlorophyll 'a') and reason for their inclusion;</li> <li>d) the location of monitoring stations / locations including monitoring transects away from the outfall of the licenced releases as well as any control locations;</li> <li>e) the proposed sampling depths;</li> <li>f) the water quality characteristics of the receiving waters to be determined;</li> <li>g) the frequency of sampling and analysis;</li> <li>h) any historical datasets to be relied upon; and</li> <li>i) description of the statistical basis on which conclusions are drawn.</li> </ul>
<b>W5-9</b>	At twelve (12) monthly intervals from the date of commencement of the <b>REMP</b> required by condition <b>W5-7</b> , <b>you</b> must prepare a report compiling and interpreting the data and findings of the <b>REMP</b> .

<b>W5-10</b>	The report on the <b>REMP</b> must address at least the following: a) a detailed description of the methodology used in the <b>REMP</b> ; b) a detailed description and analysis of the results of the <b>REMP</b> ; c) an assessment of the impact of contaminant discharge upon the receiving environment with respect to water quality objectives and biological objectives for the receiving environment; d) an assessment of the level of change in ambient conditions, if any, of the receiving environment; and e) a summary of recommendations that can be drawn from the findings of the <b>REMP</b> , with respect to the prevention or minimisation of the impacts of the contaminant releases on the receiving environment.
<b>W5-12</b>	The parts of the <b>REMP</b> that relate to the direct discharge of treated sewage effluent to <b>waters</b> can be discontinued twelve (12) months after compliance with condition <b>W5-4</b> is achieved and <b>you</b> are able to demonstrate that <b>environmental values</b> are being protected.
<b>Agency interest: Noise</b>	
<b>Condition number</b>	<b>Condition</b>
<b>N5-1</b>	In the event of a complaint about noise that constitutes annoyance being made to the <b>administering authority</b> , that the <b>administering authority</b> considers is not frivolous or vexatious, then the emission of noise from each of the licensed places must not result in levels greater than those specified in <i>Part 5 – Table 3: Noise limits</i> and the associated requirements at any <b>sensitive place</b> or <b>commercial place</b>

**Part 5 – Table 3: Noise limits**

Noise level measured in dB(A)	Time period		
	7am – 6pm	6pm – 10pm	10pm – 7am
<b>Noise measured at the nearest sensitive place</b>			
$L_{A,max,adj,T}$	Background + 5 dB(A)	Background + 5 dB(A)	Background + 3 dB(A)
<b>Noise measured at a commercial place</b>			
$L_{A,max,adj,T}$	Background + 10 dB(A)	Background + 10 dB(A)	Background + 8 dB(A)

**Associated requirements:**

- $LA_{10,adj,15 mins}$  levels may be substituted for  $L_{A,max,adj,15 minutes}$  if evidence is provided that  $LA_{10,adj,15 mins}$  levels are representative of component noise levels from source(s) / premises under investigation.
- Any monitoring must be in accordance with the most recent version of the administering authority's Noise Measurement Manual.

Agency interest: Land	
Condition number	Condition
L5-1	The only contaminants to be released to <b>land</b> are treated sewage effluent in accordance with <i>Part 5 – Table 4: Treated effluent release limits to irrigation area</i> and the associated requirements.

**Part 5 – Table 4: Treated effluent release limits to irrigation area**

Monitoring point	Quality characteristic (units)	Minimum	50 <sup>th</sup> percentile (annual)	80 <sup>th</sup> percentile (annual)	Maximum	Monitoring frequency
M1, M2	BOD <sub>5</sub> (mg/L)	-	-	-	-	Monthly
M1, M2	E.coli (organisms/100mL)	-	150	600	-	Monthly
M1, M2	pH (pH units)	6.5	-	-	9.5	Monthly
M5	Electrical Conductivity (µS/cm)	-	-	-	2,000	Monthly
M5	Sodium absorption ratio	-	-	-	-	Monthly
M5	Total Nitrogen (mg/L)	-	-	-	-	Monthly
M5	Total Phosphorus (mg/L)	-	-	-	-	Monthly

**Associated requirements:**

1. Monitoring location M1 is described as the IDEA sewage treatment system outlet of the chlorination tank at the Pulgul Creek Sewage Treatment Plant.
2. Monitoring location M2 is described as oxidation ditch sewage treatment system outlet of the chlorination tank at the Pulgul Creek Sewage Treatment Plant.
3. Monitoring location M5 is described as the Pasture Dam outlet of the final effluent storage area to the irrigation system for the Pulgul Creek Sewage Treatment Plant.
4. Monitoring must be in accordance with the administering authority's Water Quality Sampling Manual and all monitoring devices must be effectively calibrated and maintained.
5. Monitoring must be undertaken when treated sewage effluent is being irrigated, unless irrigation has ceased for longer than the relevant parameters specific frequency (e.g. if total suspended solids (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).

<b>L5-2</b>	<p>Treated effluent released to <b>land</b> must be done in accordance with documentation that ensures:</p> <ul style="list-style-type: none"> <li>a) drainage to <b>groundwater</b> and subsurface flows of contaminants to surface <b>waters</b> are prevented;</li> <li>b) surface pondage and run-off of effluent is prevented;</li> <li>c) degradation of soil structure is minimised;</li> <li>d) soil sodicity and the build-up of nutrients and heavy metals in the soil and subsoil are minimised;</li> <li>e) spray drift or overspray does not carry beyond effluent disposal areas;</li> <li>f) effluent disposal areas are maintained with an appropriate crop in a viable state for transpiration and nutrient uptake; and</li> <li>g) sufficient buffer zones are maintained between irrigation sites and sensitive environmental receptors.</li> </ul>
<b>L5-3</b>	<p>When weather conditions or soil conditions preclude the release of treated sewage effluent to <b>land</b>, effluent must not be irrigated to <b>land</b>.</p>
<b>L5-4</b>	<p>Treated sewage effluent may be removed from the <b>site</b> and used for an alternate purpose, with the written consent of any third party involved.</p>

## PART 6 – Nikenbah Sewage Treatment Plant

Environmentally relevant activity	Location
63-(1e) Sewage treatment >10000 to 50000EP	80 Piggford Lane, WALLIGAN - Lot 1 Plan RP35386 (Nikenbah Sewage Treatment Plant)

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
<b>G6-1</b>	<b>Activities</b> conducted under this environmental authority must not be conducted contrary to any of the following limitations: a) the average daily dry weather volume of contaminants treated must not exceed 4.8 ML per day.
Agency interest: Land	
Condition number	Condition
<b>L6-1</b>	The only contaminants to be released to <b>land</b> are treated sewage effluent in accordance with <i>Part 6 – Table 1: Treated effluent release limits to irrigation area</i> and the associated requirements.

**Part 6 – Table 1: Treated effluent release limits to irrigation area**

Monitoring point	Quality characteristic (units)	Minimum	Median	Maximum	80 <sup>th</sup> Percentile (annual)	Monitoring frequency
M1	BOD <sub>5</sub> (mg/L)	-	-	-	-	Monthly
M1	Suspended solids (mg/L)	-	-	-	-	Monthly
M1	E.coli (organisms/100mL)	-	-	-	600	Monthly
M1	pH (pH units)	6.5	-	8.5	-	Monthly
M1	Electrical conductivity (µS/cm)	-	-	1,560	-	Monthly
M2	Sodium absorption ratio	-	-	-	-	Monthly
M2	Total Nitrogen (mg/L)	-	-	-	-	Monthly
M2	Total Phosphorus (mg/L)	-	-	-	-	Monthly

**Associated requirements:**

1. Monitoring point M1 is described as the effluent discharge line, downstream of the MBR membrane system, prior to the discharge to the Nikenbah Storage Lagoon at the Nikenbah Sewage Treatment Plant.
2. Monitoring point M2 is described as the outlet of the Nikenbah Storage Lagoon to the irrigation system, at the Nikenbah Sewage Treatment Plant.
3. Monitoring must be in accordance with the administering authority's Water Quality Sampling Manual and all monitoring devices must be effectively calibrated and maintained.
4. A wet weather bypass event is described as: when discharge from the Nikenbah Sewage Treatment Plant to the Nikenbah Storage Lagoon has not passed through the MBR membrane system (e.g. during a wet weather event).

<b>L6-2</b>	Treated effluent released to <b>land</b> must be done in accordance with documentation that ensures: <ol style="list-style-type: none"> <li>a) drainage to <b>groundwater</b> and subsurface flows of contaminants to surface <b>waters</b> are prevented;</li> <li>b) surface pondage and run-off of effluent is prevented;</li> <li>c) degradation of soil structure is minimised;</li> <li>d) soil sodicity and the build-up of nutrients and heavy metals in the soil and subsoil are minimised;</li> <li>e) spray drift or overspray does not carry beyond effluent disposal areas;</li> <li>f) effluent disposal areas are maintained with an appropriate crop in a viable state for transpiration and nutrient uptake; and</li> <li>g) sufficient buffer zones are maintained between irrigation sites and sensitive environmental receptors.</li> </ol>
<b>L6-3</b>	<b>You</b> must have a sufficient area of suitable land under <b>your</b> control, which is appropriately equipped for irrigation, to sustainably irrigate all the treated effluent produced by the Nikenbah Sewage Treatment Plant.
<b>L6-4</b>	Effluent released from the chlorine contact tank during wet weather events must be disinfected to a quality that ensures that the effluent is suitable for the intended use or is subsequently managed to ensure that it is suitable for the intended use.
<b>L6-5</b>	<b>You</b> must develop and implement a Wet Weather Bypass Management Plan to monitor and manage compliance with condition <b>L6-4</b> . The Wet Weather Bypass Management Plan must be reviewed after each <b>bypass</b> event and, if required amended, to ensure that compliance with condition <b>L6-4</b> is achieved.
<b>L6-6</b>	When weather conditions or soil conditions preclude the release of treated sewage effluent to <b>land</b> , effluent must not be irrigated to <b>land</b> .
<b>L6-7</b>	Treated sewage effluent may be removed from the <b>site</b> and used for an alternate purpose, with the written consent of any third party involved.

## PART 7 – Maryborough (Aubinville) Sewage Treatment Plant

Environmentally relevant activity	Location
63-(1e) Sewage treatment >10000 to 50000EP	Errol Street, MARYBOROUGH - Lot 9 Plan RP74505 (Maryborough (Aubinville) Sewage Treatment Plant)

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: Water	
Condition number	Condition
W7-1	The only contaminants to be released to surface <b>waters</b> are from the Maryborough (Aubinville) Sewage Treatment Plant to <b>waters</b> described as the Mary River in accordance with <i>Part 7 – Table 1: Surface water release limits (quality)</i> and <i>Part 7 – Table 2: Surface water release limits (quantity)</i> and the associated requirements of each table.

### Part 7 – Table 1: Surface water release limits (quality)

RP Name	Monitoring Point	Quality Characteristic (units)	Minimum	80 <sup>th</sup> percentile (annual)	Maximum
W1	M1	BOD <sub>5</sub> (mg/L)	-	15	20
W1	M1	Suspended solids (mg/L)	-	25	30
W1	M1	Dissolved oxygen (mg/L)	2	-	-
W1	M1	Residual chlorine (mg/L)	-	-	0.7
W1	M1	pH (pH units)	6.5	-	8.5
W1	M1	E.coli (CFU/100mL)	-	-	1000
W1	M1, M3	Total Phosphorus (mg/L)	-	-	-
W1	M1, M3	Total Nitrogen (mg/L)	-	-	-

#### Associated requirements:

1. RP W1 is described as the authorised release point of treated sewage effluent from the Maryborough (Aubinville) Treatment Plant to the Mary River at 300 metres north-east of Booker Street, Aubinville (at 33.2 km AMTD).
2. Monitoring location M1 is described as the outlet of the chlorination tank at the Maryborough (Aubinville) Sewage Treatment Plant.
3. Monitoring location M3 is described as the return pipeline from the effluent storage facility to the Maryborough (Aubinville) Sewage Treatment Plant.



**Part 7 – Table 2: Surface water release limits (quantity)**

RP Name	Receiving water gauging station	Flow recording frequency	Mary + Tinana Criteria for Discharge	Permitted Contaminant Release (kg/day)		
				Contaminant	Mean	Maximum
W1	Mary Barrage Tinana Barrage	Twice daily (minimum)	Low flow: <23.15 m <sup>3</sup> /s	No releases permitted		
			Medium flow: >23.15 m <sup>3</sup> /s and <46.3 m <sup>3</sup> /s	Total Phosphorus	50	100
				Total Nitrogen	250	500
			High flow: >46.3 m <sup>3</sup> /s	Total Phosphorus	150	300
				Total Nitrogen	750	1,500

**Associated requirements:**

1. RP W1 is described as the authorised release point of treated sewage effluent from the Maryborough (Aubinville) Treatment Plant to the Mary River at 300 metres north-east of Booker Street, Aubinville (at 33.2 km AMTD).

<b>W7-2</b>	Monitoring of contaminant releases to <b>waters</b> must be undertaken in accordance with <i>Part 7 – Table 3: Monitoring frequency</i> and the associated requirements.
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**Part 7 – Table 3: Monitoring frequency**

Quality Indicator	Measurement (units)	Monitoring Frequency	Monitoring location
BOD <sub>5</sub>	mg/L	Weekly	M1
Suspended solids	mg/L	Weekly	M1
Dissolved oxygen	mg/L	Weekly	M1
Residual chlorine	mg/L	Daily	M1
pH	pH units	Weekly	M1
E.coli	CFU/100mL	Monthly	M1
Total Phosphorus (mg/L)	mg/L	Twice daily	M1
Total Nitrogen (mg/L)	mg/L	Twice daily	M1
Total Phosphorus (mg/L)	mg/L	Daily	M3
Total Nitrogen (mg/L)	mg/L	Daily	M3

**Associated requirements:**

1. Monitoring must be in accordance with the administering authority's Water Quality Sampling Manual and all monitoring devices must be effectively calibrated and maintained.
2. Monitoring must be undertaken when the activity is in operation and samples must be representative of a release.
3. Monitoring location M1 is described as the outlet of the chlorination tank at the Maryborough (Aubinville) Sewage Treatment Plant.

4. Monitoring location M3 is described as the return pipeline from the effluent storage facility to the Maryborough (Aubinville) Sewage Treatment Plant.

<b>W7-3</b>	<b>You</b> must take all reasonable and practicable <b>measures</b> to minimise the release of contaminants to <b>waters</b> from release point W1, as described in <i>Part 7 – Table 1: Surface water release limits (quality)</i> and <i>Part 7 – Table 2: Surface water release limits (quantity)</i> and the associated requirements of each table.
<b>W7-4</b>	Release point (RP) W1 must be submerged such that the top of the outfall pipe is at least 0.5 metres below Low Water Datum.
<b>W7-5</b>	All contaminants released from RP W1 must be released to achieve a minimum initial dilution of 1 in 50 dilution within 50 metres of the release point.
<b>W7-6</b>	The holder of this environmental authority must take all reasonable and practicable <b>measures</b> to minimise the occurrence of sewage treatment plant <b>bypass</b> events.
<b>W7-7</b>	Any effluent from a <b>bypass</b> event must be screened prior to release.
<b>Agency interest: Land</b>	
<b>Condition number</b>	<b>Condition</b>
<b>L7-1</b>	The only contaminants to be released to <b>land</b> are treated sewage effluent in accordance with <i>Part 7 – Table 4: Treated effluent release limits to irrigation area</i> and the associated requirements.

**Part 7 – Table 4: Treated effluent release limits to irrigation area**

RP Name	Monitoring point	Quality characteristic (units)	Minimum	Maximum	Monitoring frequency
W2	M1	BOD <sub>5</sub> (mg/L)	-	-	Monthly
W2	M1	Suspended solids (mg/L)	-	-	Monthly
W2	M1	pH (pH units)	6.5	8.5	Monthly
W2	M1	Faecal coliforms (faecal coliform organisms per 100mL)	-	1,000	Monthly
W2	M1	Electrical conductivity (µS/cm)	-	2,000	Monthly
W2	M2	Electrical conductivity (µS/cm)	-	2,000	Monthly
W2	M1	Sodium absorption ratio	-	-	Monthly

RP Name	Monitoring point	Quality characteristic (units)	Minimum	Maximum	Monitoring frequency
W2	M2	Total Nitrogen (mg/L)	-	-	Monthly
W2	M2	Total Phosphorus (mg/L)	-	-	Monthly

**Associated requirements:**

1. *RP W2 is described as the outlet of the treated effluent storage lagoon to the irrigation system for the Maryborough (Aubinville) Sewage Treatment Plant.*
2. *Monitoring point M1 is described as the outlet of the chlorination tank at the Maryborough (Aubinville) Sewage Treatment Plant.*
3. *Monitoring point M2 is described as the outlet of the effluent storage lagoon to the irrigation system for the Maryborough (Aubinville) Sewage Treatment Plant.*
4. *Monitoring must be in accordance with the administering authority's Water Quality Sampling Manual and all monitoring devices must be effectively calibrated and maintained.*

<b>L7-2</b>	When weather conditions or soil conditions preclude the release of treated sewage effluent to <b>land</b> , effluent must not be irrigated to <b>land</b> .
<b>L7-3</b>	Treated sewage effluent may be removed from the <b>site</b> and used for an alternate purpose, with the written consent of any third party involved.

## PART 8 – Burgowan Water Treatment Plant

Environmentally relevant activity	Location
64-(3) Water treatment >10ML raw water day	Churchill Mine Road, BURGOWAN 4659 - Lot 199 Plan MCH812153 (Burgowan Water Treatment Plant)

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: Noise	
Condition number	Condition
N8-1	In the event of a complaint about noise that constitutes annoyance being made to the <b>administering authority</b> , that the <b>administering authority</b> considers is not frivolous or vexatious, then the emission of noise from each of the licensed places must not result in levels greater than those specified in <i>Part 8 – Table 1: Noise limits</i> and the associated requirements at any <b>sensitive place</b> or <b>commercial place</b> .

Part 8 – Table 1: Noise limits

Noise level measured in dB(A)	Time period		
	7am – 6pm	6pm – 10pm	10pm – 7am
<b>Noise measured at the nearest sensitive place</b>			
$L_{A,max,adj,T}$	Background + 5 dB(A)	Background + 5 dB(A)	Background + 3 dB(A)
<b>Noise measured at a commercial place</b>			
$L_{A,max,adj,T}$	Background + 10 dB(A)	Background + 10 dB(A)	Background + 8 dB(A)

**Associated requirements:**

- $LA_{10,adj,15 mins}$  levels may be substituted for  $L_{A,max,adj,15 minutes}$  if evidence is provided that  $LA_{10,adj,15 mins}$  levels are representative of component noise levels from source(s) / premises under investigation.
- Any monitoring must be in accordance with the most recent version of the administering authority's Noise Measurement Manual.

Agency interest: Land	
Condition number	Condition
L8-1	The only contaminants to be released to <b>land</b> are filter backwash water from the Burgowan Water Treatment Plant to Lot 199 on Plan MCH81215.
L8-2	Notwithstanding condition <b>L8-1</b> of this environmental authority, releases to <b>land</b> must only occur when return of the sludge dewatering lagoon supernatant to the raw water supply cannot be carried out due to the quality of the supernatant.

<b>L8-3</b>	<p>The irrigation of effluent in accordance with conditions <b>L8-1</b> and <b>L8-2</b> of this environmental authority must be carried out in a manner such that:</p> <ul style="list-style-type: none"><li>a) vegetation is not damaged;</li><li>b) soil erosion and soil structure damage is avoided;</li><li>c) there is no surface ponding of effluent;</li><li>d) percolation of effluent beyond the root zone is minimised;</li><li>e) the capacity of the land to assimilate nitrogen, phosphorous, salts, organic matter (as measured by oxygen demand) and water is not exceeded; and</li><li>f) the quality of <b>groundwater</b> is not adversely affected.</li></ul>
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## PART 9 – Howard Water Treatment Plant

Environmentally relevant activity	Location
64-(3) Water treatment >10ML raw water day	Steley Street, HOWARD 4659 - Lot 1 Plan RP13653

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: Water	
Condition number	Condition
W9-1	<p>The only contaminants to be released to surface <b>waters</b> are from the Howard Water Treatment Plant to <b>waters</b> described as Maria Creek in accordance with <i>Part 9 – Table 1: Surface water release limits (Emergency event)</i> and the associated requirements during the following emergency event(s):</p> <p>a) where the contamination of recycled town water threatens human health (i.e. an emergent event impacting on drinking water quality); or</p> <p>b) as a result of power interruption.</p>

### Part 9 – Table 1: Surface water release limits (Emergency event)

RP Name	Quality Characteristic (units)	Minimum	Maximum
W1	BOD <sub>5</sub> (mg/L)	-	5.0
W1	Suspended Solids (mg/L)	-	30
W1	Dissolved Oxygen (mg/L)	2.0	-
W1	pH (pH units)	6.0	8.0
W1	Aluminium (mg/L)	-	1.0

#### Associated requirements:

- RP W1 is described as the authorised release point of contaminants from the Howard Water Treatment Plant to Maria Creek, at 4km AMTD.

W9-2	Monitoring of contaminant releases to <b>waters</b> must be undertaken in accordance with <i>Part 9 – Table 2: Monitoring frequency</i> and the associated requirements.
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**Part 9 – Table 2: Monitoring frequency**

Quality Indicator	Measurement (units)	Monitoring Frequency	Monitoring location
BOD <sub>5</sub>	mg/L	In the event of a release, and weekly while the release is occurring.	M1
Suspended Solids	mg/L		
Dissolved Oxygen	mg/L		
pH	pH units		
Aluminium	mg/L		

**Associated requirements:**

1. Monitoring must be in accordance with the administering authority's Water Quality Sampling Manual and all monitoring devices must be effectively calibrated and maintained.
2. Monitoring location M1 is described as the outlet of the supernatant lagoon at the Howard Water Treatment Plant.

<b>W9-3</b>	In addition to condition <b>W9-1</b> , the release to <b>waters</b> must not produce any slick or other visible evidence of oil or grease, nor contain visible floating oil, grease, scum, litter or other visually objectionable matter.
<b>W9-4</b>	In the event of a <b>release of a contaminant into the environment</b> , the environmental authority holder must conduct an assessment of the environmental impact on the receiving environment.

## PART 10 – Teddington Water Treatment Plant

Environmentally relevant activity	Location
64-(3) Water treatment >10ML raw water day	1105 Teddington Road, TEDDINGTON 4650 - Lot 130 Plan MCH5203

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: Water	
Condition number	Condition
W10-1	The only contaminants to be released to surface <b>waters</b> are from the Teddington Water Treatment Plant to <b>waters</b> described as Minni Minni Creek in accordance with <i>Part 10 – Table 1: Surface water release limits</i> and the associated requirements.

### Part 10 – Table 1: Surface water release limits

RP Name	Quality Characteristic (units)	Minimum	Maximum
WA1	BOD <sub>5</sub> (mg/L)	-	5.0
WA1	Suspended Solids (mg/L)	-	30.0
WA1	Dissolved Oxygen (mg/L)	2.0	-
WA1	pH (pH units)	6.0	8.0
WA1	Aluminium (mg/L)	-	1.0

#### Associated requirements:

1. RP WA1 is described as the authorised release point of contaminants from the Teddington Water Treatment Plant via the discharge point to Minni Minni Creek, at 14 km AMTD.

W10-2	Monitoring of contaminant releases to <b>waters</b> must be undertaken in accordance with <i>Part 10 – Table 2: Monitoring frequency</i> and the associated requirements.
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### Part 10 – Table 2: Monitoring frequency

Quality Indicator	Measurement (units)	Monitoring Frequency	Monitoring location
BOD <sub>5</sub>	mg/L	In the event of a release, and weekly while the release is occurring.	WA1
Suspended Solids	mg/L		
Dissolved Oxygen	mg/L		
pH	pH units		



Quality Indicator	Measurement (units)	Monitoring Frequency	Monitoring location
Aluminium	mg/L		

**Associated requirements:**

1. Monitoring must be in accordance with the administering authority's Water Quality Sampling Manual and all monitoring devices must be effectively calibrated and maintained.
2. Monitoring location WA1 is described as the Teddington Water Treatment Plant discharge point to Minni Minni Creek, at 14 km AMTD.

<b>W10-3</b>	In addition to condition <b>W9-1</b> , the release to <b>waters</b> must not produce any slick or other visible evidence of oil or grease, nor contain visible floating oil, grease, scum, litter or other visually objectionable matter.
<b>Agency interest: Noise</b>	
<b>Condition number</b>	<b>Condition</b>
<b>N10-1</b>	In the event of a complaint about noise that constitutes annoyance being made to the <b>administering authority</b> , that the <b>administering authority</b> considers is not frivolous or vexatious, then the emission of noise from each of the licensed places must not result in levels greater than those specified in <i>Part 10 – Table 1: Noise limits</i> and the associated requirements at any <b>sensitive place</b> or <b>commercial place</b> .

**Part 10 – Table 1: Noise limits**

Noise level dB(A)	Monday to Saturday			Sundays and public holidays		
	7am – 6pm	6pm – 10pm	10pm – 7am	9am – 6pm	6pm – 10pm	10pm – 9am
<b>Noise measured at a sensitive place</b>						
L <sub>A10,adj,10mins</sub>	Background + 5	Background + 5	Background + 0	Background + 5	Background + 5	Background + 0
L <sub>A1,adj,10mins</sub>	Background + 10	Background + 10	Background + 5	Background + 10	Background + 10	Background + 5
<b>Noise measured at a commercial place</b>						
L <sub>A10,adj,10mins</sub>	Background + 10	Background + 10	Background + 5	Background + 10	Background + 10	Background + 5
L <sub>A1,adj,10mins</sub>	Background + 15	Background + 15	Background + 10	Background + 15	Background + 15	Background + 10

**Associated requirements:**

1. Any monitoring must be in accordance with the most recent version of the administering authority's Noise Measurement Manual.

**PART 11 – Regulated waste transport (mobile and temporary)**

Environmentally relevant activity	Location
ERA 57 - Regulated Waste Transport Transporting regulated waste, other than end-of-life tyres (01 vehicle only)	Various locations

The environmentally relevant activity conducted at the location as described above must be conducted in accordance with the attached document titled:

- *Code of environmental compliance for certain aspects of regulated waste transport (ERA 57) – Version 4*

## 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.

**Activity** means the environmentally relevant activities, whether resource activities or prescribed activities, to which the environmental authority relates.

**Administering authority** means the Department of Environment and Science or its successor or predecessors.

**Appropriately qualified person(s)** means a person or persons who has professional qualifications, training, skills or experience relevant to the nominated subject matter and can give authoritative assessment, advice and analysis to performance relative to the subject matter using the relevant protocols, standards, methods or literature.

**Background** (for noise) means noise, measured in the absence of the noise under investigation, as  $L_{A90,adj,T}$  being the A-weighted sound pressure level exceeded for 90 per cent of the time period of not less than 15 minutes, using Fast response.

**Background bore** means **groundwater** monitoring bore, constructed in accordance with the relevant standard, and used to sample **groundwater** from an aquifer the water quality of which may be potentially affected by the **activity**. This may be an **up-gradient bore**, **down-gradient bore** or bore in the same aquifer in a nearby location unaffected by the **activity**.

**Bypass** means a discharge event during which effluent has not been fully treated is discharged to the receiving environment.

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

**Boundary** means within 1m of the cadastral boundary of the approved place / **site**.

**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.

**Down-gradient bore** means a background bore in a location hydraulically down-gradient of those aspects of the **activity** that may affect **groundwater** quality.

**Environmental nuisance** means as defined under Chapter 1 of the *Environmental Protection Act 1994*.

**Environmental value** means as defined under Chapter 1 of the *Environmental Protection Act 1994*.

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

**Groundwater monitoring system** means a system of **groundwater** monitoring devices, such as monitoring bores, used to provide data in respect to the level and quality of **groundwater** in the uppermost aquifer where the location of the groundwater monitoring devices is such that comparisons of **groundwater** quality and groundwater level can be made between **groundwater** flowing from beneath the site (**down-gradient** flow) of the **activity** and **groundwater** flowing towards the site of the activity (**up-gradient** flow).

$L_{A1,adj,10\ mins}$  means the A-weighted sound pressure level (adjusted for tonal character and impulsiveness of the sound) exceeded for 1% of any 10 minute measurement period, using Fast response.

$L_{A10,adj,10\ mins}$  means the A-weighted sound pressure level (adjusted for tonal character and impulsiveness of the sound) exceeded for 10% of any 10 minute measurement period, using Fast response.

$L_{Amax,T}$  means the maximum A-weighted sound pressure level measured over a time period T of not less than 15 minutes, using Fast response.

**Land** means any land, whether above or below the ordinary high-water mark at spring tides (i.e. includes tidal land).

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

**Median** means the middle value, where half the data are smaller and half the data are larger. If the number of samples is even, the median is the arithmetic average of the two middle values.

**NATA** means National Association of Testing Authorities.

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

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

**Receiving environment monitoring program** or **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 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.

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

- 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 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*.

**Site** means the place(s) to which this environmental authority relates.

**Total dissolved salts** (calculated) (mg/L) means a value calculated of the total dissolved salts from the measurement of the electrical conductivity of the treated sewage effluent.

**Total Nitrogen (TN)** means the sum of Organic Nitrogen, Ammonia Nitrogen, Nitrite plus Nitrate Nitrogen, expressed as mg/L as Nitrogen. This includes both the inorganic and organic fraction of nitrogen.

**Total Phosphorus (TP)** means the sum of the reactive phosphorus, acid-hydrolysable phosphorus and organic phosphorus, as mg/L of Phosphorus. This includes both the inorganic and organic fraction of phosphorus. Waters includes river, stream, lake, lagoon, pond, swamp, wetland, unconfined surface water, unconfined water, natural or artificial watercourse, bed and bank of any waters, dams, non-tidal or tidal waters (including the sea), stormwater channel, stormwater drain, roadside gutter, stormwater run-off, and groundwater and any part thereof.

**Up-gradient bore** means a background bore, in a location hydraulically up-gradient of all potential influences of the activity that may affect **groundwater** quality.

**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.

**You** means the holder of the environmental authority.

**50th percentile (annual)** means not more than half of the measured values of the quality characteristic are to exceed the stated release limit for all measured values over a 52 week period (on a rolling basis for limit calculations).

**80th percentile (annual)** means not more than one fifth of the measured values are to exceed the stated release limit for all measured values over a 52 week period (on a rolling basis for limit calculations).

**END OF ENVIRONMENTAL AUTHORITY**