

Notice

Environmental Protection Act 1994

Amendment of an environmental authority by the administering authority

This notice is issued by the administering authority¹, pursuant to 211 of the Environmental Protection Act 1994 to advise that an environmental authority is being amended.

To: Gympie Regional Council
PO Box 155
GYMPIE QLD 4570

Email: council@gympie.qld.gov.au

Your reference: EPPR00514813
Our reference: 337551

Amendment of an environmental authority to correct a clerical error

1. Environmental authority details

Environmental authority number EPPR00514813 dated 19-Sep-2014.

Land description: Widgee Crossing Rd, Gympie Lot 1 Plan SP135767, Lot 1 Plan MPH23985; Snapper Creek Rd, Tin Can Bay Lot 58 Plan USL3705; Queen Elizabeth Drv, Cooloola Cove Lot 96 Plan SP136741; Cooloola Shire Council - Yabba Creek Rd Lot 61 Plan LX1848; Cooloola Shire Council - Kandanga Creek Rd Lot 22 Plan SP105938; Cooloola Shire Council - Busby St Lot 205 Plan LX1849; Kurrawa Drive RAINBOW BEACH QLD 4581 Lot 3 Plan USL37851; Gatehouse Rd, Kilkivan Lot 356 Plan LX2278; Boonaravale Rd, Goomeri Lot 1 Plan RP127128; Kilkivan Shire Council - Thomas Rd Lot 1 Plan RP100446; Mary Valley Road, Gympie Lot 78 Plan LX1424, Lot 224 Plan SP124312; Brian Smith Drive, Rainbow Beach Lot 1 Plan SP135765; Lot 18 on SP148209 Lot 18 Plan SP148209; Imbil-Kandanga Road Imbil Lot 4 Plan RP901098; L78 on LX1424, Lot 224 on SP175079 Waterworks Road JONES HILL.

2. Amendment

The administering authority has become aware that there was a clerical error on environmental authority EPPR00514813 that required correction. This correction is minor in nature and will not adversely impact your interests or anyone else. As a result, the following amendment has been made to your environmental authority:

- The amendment includes ERA 64 Water treatment Threshold 3, 105 Waterworks Road, Jones Hill, GYMPIE QLD 4570, Lot 78 on Plan LX1424 and Lot 224 on Plan SP175079 to environmental authority EPPR00514813.

The amended environmental authority is enclosed with this notice.

¹ The Department of Environment and Heritage Protection is the administering authority under the *Environmental Protection Act 1994*.

Amendment of an environmental authority by the administering authority

3. Review and appeal rights

You may apply to the administering authority for a review of this decision within 10 business days after receiving this notice. You may also appeal against this decision to the Planning and Environment Court. Information about your review and appeal rights is attached to this notice. This information is guidance only and you may have other legal rights and obligations.



Signature

Christine Mooney
Department of Environment and Heritage Protection
Delegate of the administering authority
Environmental Protection Act 1994



Date

Enquiries:
Graham Rennex
Government Organisations and Utilities
Assessment
Department of Environment and Heritage
Protection
GPO Box 2454
BRISBANE QLD 4001
Phone: 1300 130 372
Fax: 07 3330 6037
Email: andrea.schmitt@ehp.qld.gov.au

Attachments

Amended environmental authority (reference EPPR00514813)

Department of Environment and Heritage Protection

Permit¹

Environmental Protection Act 1994

Environmental authority

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

Permit¹ number: EPPR00514813

The anniversary date of this environmental authority is 30 June. An annual return and the payment of the annual fee will be due each year on this day.

Environmental authority holder(s)

| Name | Registered address |
|-------------------------|----------------------------------|
| Gympie Regional Council | 242 Mary Street, GYMPIE QLD 4570 |

Environmentally relevant activity and location details

| Environmentally relevant activity(ies) | Location(s) |
|--|---|
| 63-(1c) Sewage treatment >1500 but <4000EP | Queen Elizabeth Drive COOLOOLA COVE QLD 4580 Lot 96 SP136741 |
| 63-(1b) Sewage treatment >100 but <1500EP | Boonaravale Road, GOOMERI QLD 4601 Lot 1 RP127128 |
| 63-(1e) Sewage treatment >10000 but <50000EP | Widgee Crossing Road, GYMPIE QLD 4570 Lot 1 SP135767 |
| 63-(1b) Sewage treatment >100 but <1500EP | Imbil-Kandanga Road IMBIL QLD 4570 Lot 4 RP901098 |
| 63-(1b) Sewage treatment >100 but <1500EP | Gatehouse Road, KILKIVAN QLD 4600 Lot 356 LX2278 |
| 63-(1c) Sewage treatment >1500 but <4000EP | Brian Smith Drive, RAINBOW BEACH QLD 4581 Lot 1 SP135765 |

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



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| 63-(1c) Sewage treatment >1500 but <4000EP | Snapper Creek Road, TIN CAN BAY QLD 4580 Lot 58 MCH3705 |
| 64-(3) Water Treatment >10ML Raw Water in a day | 105 Waterworks Road, JONES HILL QLD 4570 Lot 78 Lx1424 Lot 224 SP175079 |

Additional information for applicants

Environmentally relevant activities

The description of any environmentally relevant activity (ERA) for which an environmental authority is issued is a restatement of the ERA as defined by legislation at the time the environmental authority is issued. Where there is any inconsistency between that description of an ERA and the conditions stated by an environmental authority as to the scale, intensity or manner of carrying out an ERA, then the conditions prevail to the extent of the inconsistency.

An environmental authority authorises the carrying out of an ERA and does not authorise any environmental harm unless a condition stated by the authority specifically authorises environmental harm.


A person carrying out an ERA must also be a registered suitable operator under the *Environmental Protection Act 1994* (EP Act).

Contaminated land

It is a requirement of the EP Act that if an owner or occupier of land becomes aware a notifiable activity (as defined in Schedule 3 and Schedule 4) is being carried out on the land, or that the land has been, or is being, contaminated by a hazardous contaminant, the owner or occupier must, within 22 business days after becoming so aware, give written notice to the chief executive.


Sewage effluent reuse

Production and supply of recycled water must be managed in accordance with the regulatory requirements under the *Water Supply (Safety and Reliability) Act 2008*, and that the supply should cease if the STP operator becomes aware of any breaches of the EP Act as a result of the re-use.



Signature

Christine Mooney
Department of Environment and Heritage Protection
Delegate of the administering authority
Environmental Protection Act 1994



Date

Enquiries:
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Assessment
Department of Environment and Heritage
Protection
GPO Box 2454
BRISBANE QLD 4001
Phone: 1300 130 372
Fax: 07 3330 6037
Email: graham.rennex@ehp.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)

Conditions of environmental authority

All environmentally relevant activities conducted at all the locations covered by this environmental authority must be conducted in accordance with the following conditions of environmental authority:

| Agency interest: General | |
|--------------------------|---|
| Condition number | Condition |
| G1 | All reasonable and practicable measures must be taken to minimise the likelihood of environmental harm being caused. |
| G2 | <p>The activity must be undertaken in accordance with written procedures that:</p> <ul style="list-style-type: none"> • identify potential risks to the environment from the activity during routine operations and emergencies; • establish and maintain control measures that minimise the potential for environmental harm; • ensure plant, equipment and measures are maintained in a proper and effective condition; • ensure plant, equipment and measures are operated in a proper and effective manner; • ensure that staff are trained and aware of their obligations under the <i>Environmental Protection Act 1994</i>; and • ensure that reviews of environmental performance are undertaken at least annually. |
| G3 | The daily operation of the sewage treatment plant or water treatment plant must be carried out by a competent person to ensure the effective operation of the treatment system and control equipment. |
| G4 | <p>Any environmental incident which has the potential to cause environmental harm (includes operation outside of the environmental authority conditions) must be reported to the administering authority's Pollution Hotline (1300 130 372 or PollutionHotline@ehp.qld.gov.au) within 24 hours of becoming aware and record full details of the environmental incident and any subsequent actions.</p> <p>Note: This condition does not cover non-compliances covered by Condition G5.</p> |
| G5 | Monthly non-compliances with effluent quality release limits in Schedule 2 must be reported to the administering authority in writing within two weeks of the end of every calendar month. |

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| G6 | All information and records that are required by the conditions of this environmental authority must be kept for a period of at least 5 years and provided to the administering authority upon request. |
| G7 | An appropriately qualified person(s) must monitor, interpret and record all parameters that are required to be monitored, in the manner provided, as per Schedule 1 at the monitoring locations described in Schedule 1, Table 1. |
| G8 | All instruments, equipment and measuring devices used for measuring or monitoring in accordance with any condition of this environmental authority must be calibrated and appropriately operated and maintained. |
| G9 | All determinations of the quality of contaminants released to waters or land must be made in accordance with methods prescribed in the administering authority's Water Quality Sampling Manual, or more recent additions or supplements to that document as such become available or as specifically approved by the administering authority . |
| G10 | The daily volume of treated effluent released from the sewage treatment plants to waters or land must be determined or estimated for each release point and records kept of such determinations. |
| G11 | The holder of this environmental authority must ensure that for all STPs, the results of all monitoring performed in accordance with this environmental authorities (excluding REMPs) are submitted to the WaTERS database. |
| G12 | An annual monitoring report must be prepared each year and be provided to the administering authority when requested. The report must include, but not be limited to: <ol style="list-style-type: none"> 1. A summary of the previous twelve (12) months monitoring results obtained in accordance with any of the monitoring requirements of this environmental authority and, in graphical form showing relevant limits, a comparison of the previous twelve (12) months monitoring results to both the limits specified in this environmental authority and to relevant prior results; and 2. An evaluation/explanation of the data from any monitoring programs; and 3. A summary of any record of quantities of releases required to be kept under this environmental authority; and 4. An outline of actions taken or proposed to minimise the environmental risk from any deficiency identified by the monitoring or recording programs; and 5. Data and findings of any REMP undertaken for that period; and 6. A summary of any trade waste and recycled water agreements entered into or amended during the year, including the nature of the industry. |
| G13 | Treated effluent may be removed from the approved locations and used for an alternate purpose, with the written consent of any third party involved. |
| G14 | You must record the following details of all environmental complaints received: <ol style="list-style-type: none"> 1. date and time of complaint; 2. name and contact details of the complainant; 3. nature of the complaint; 4. investigation undertaken; 5. conclusions formed; and 6. actions taken. |

| Agency interest: Air | |
|------------------------|---|
| Condition number | Condition |
| A1 | Odours or airborne contaminants which are noxious or offensive must not be released to any nuisance sensitive place or commercial place . |
| Agency interest: Water | |
| Condition number | Condition |
| WT1 | Other than as permitted within this environmental authority, contaminants must not be released from any site to any waters or the bed and banks of any waters . |
| WT2 | Other than as permitted within this environmental authority, contaminants must not be released to groundwater. |
| WT3 | The only contaminant permitted to be released to waters , in accordance with the conditions of this environmental authority, is treated effluent from the STPs and treated waste water from the WTP. |
| WT4 | Notwithstanding the effluent quality release limits in Schedule 2, the release of contaminant to waters or land must not produce any slick or other visible evidence of oil or grease, nor contain visible floating oil, grease, scum, litter or other objectionable matter. |
| WT5 | All ponds, lagoons and storages used for the storage (including emergency storage) or treatment of treated effluent at or on the approved place must be constructed, installed and maintained: <ul style="list-style-type: none"> (a) so as to minimise the likelihood of any release of the contaminants through the bed or banks of the pond to any waters (including groundwater); (b) so that a freeboard of not less than 0.3m is maintained at all times and allowance is made for high rainfall events and wave action; and (c) so as to ensure the stability of the ponds' construction. |
| WT6 | Suitable banks and/or diversion drains must be installed and maintained to exclude stormwater runoff from entering any ponds or other structures used for the storage or treatment of contaminants or wastes. |
| Agency interest: Noise | |
| Condition number | Condition |
| N1 | Noise from the activity(s) must not cause environmental nuisance at any nuisance sensitive place or commercial place . |
| N2 | Monitoring must be undertaken to investigate any complaint of noise nuisance upon receipt of a written request from the administering authority to carry out such monitoring. |
| N3 | The method of measurement and reporting of noise levels must comply with the administering authority's Noise Measurement Manual or more recent additions or supplements to that document as they become available. |

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| N4 | The method of measurement and reporting of noise levels must be undertaken by a person or body possessing appropriate experience and qualifications to perform the required measurements. |
| Agency interest: Land | |
| Condition number | Condition |
| L1 | Other than as permitted within this environmental authority, contaminants must not be released to land. |
| L2 | The only contaminant permitted to be released to land, in accordance with the conditions of this environmental authority, is treated effluent. |
| L3 | Re-use of sewage treatment effluents for service water and irrigation of landscaped areas at the approved places is permitted. |
| L4 | The release of contaminants to land must not be carried out if soil moisture conditions are such that surface runoff or ponding is likely to occur. |
| Agency interest: Waste | |
| Condition number | Condition |
| WS1 | Only remove waste from the site by using a transporter lawfully able to transport it and to a place lawfully able to receive it. |

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Cooloola Cove STP

Location: Queen Elizabeth Drive COOLOOLA COVE QLD 4580
Lot 96 SP136741

Relevant activity/ies:

63-(1c) Sewage treatment >1500 but <4000EP

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

| Agency interest: General | |
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| Condition number | Condition |
| CCG1 | The average daily dry weather volume of contaminants treated by the sewage treatment plant that is the subject of this approval must not exceed 960kL per day. |
| Agency interest: Water | |
| Condition number | Condition |
| CCW1 | <p>Emergency Release The only contaminants permitted to be released to waters is a cumulative maximum of 10% of the ADWF of treated effluent in any 12 month period (commencing on the anniversary date of this environmental authority) from the following release point: Release Point CC2 - Emergency release point described as the effluent discharge line from the sewage treatment plant to waters via monitoring point CC1.</p> |
| CCW2 | The release of contaminants to waters must comply with the limits stated in Schedule 2, Table 2. |
| CCW3 | <p>Each emergency release must be reported with the annual return. Information to be included with any emergency release reporting must include, but not be limited to:</p> <ul style="list-style-type: none"> (a) the reason for each emergency release; (b) the quantity of effluent released during each emergency release, expressed as a volume, and as a percentage of the overall quantity of effluent treated by the sewage treatment plant in the 12 month reporting period. |
| CCW4 | <p>A groundwater monitoring network must be installed. The network must:</p> <ul style="list-style-type: none"> (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; and (b) be constructed in accordance with methods prescribed in the latest edition of the Agriculture and Resource Management Council of Australia and New Zealand manual titled 'Minimum Construction Requirements For Water Bores In Australia'; and (c) include a sufficient number of monitoring bores that provide the following: <ul style="list-style-type: none"> - representative groundwater samples from the uppermost aquifer, and other potentially affected aquifers, - existing groundwater quality and the capacity to detect trends in groundwater quality; and - the quality of groundwater within the treated effluent irrigation area(s); and - the quality of groundwater down gradient of any potential sources of contamination. |

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| CCW5 | <p>Conduct monitoring and keep records of groundwater quality for the relevant monitoring bores required by condition (CCW4). All determinations of groundwater quality must be:</p> <ul style="list-style-type: none"> (a) conducted for the water quality characteristics and at the minimum frequency stated in Schedule 1, Table 5; (b) taken from sufficient monitoring points and/or wells to obtain representative samples of groundwater both up-gradient, down-gradient of, and within, the potential influence; (c) carried out with sufficient regularity and spatial and temporal replication to make statistically valid conclusions about changes to groundwater characteristics with regard to the presence, absence or fluctuation of contaminant concentrations, and changes in standing groundwater level; (d) carried out with sufficient number of sampling events to determine groundwater quality characteristics, standing groundwater levels prior to, and following proposed development of the site; (e) followed by an assessment by a person with suitable qualifications and experience to determine whether or not there has been any adverse impact at locations hydraulically down gradient of the potential sources of contamination. |
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| Agency interest: Land | |
| Condition number | Condition |
| CCL1 | The only contaminant permitted to be released to land is treated effluent to the area shown in Schedule 3, Map 1. |
| CCL2 | Sewage Effluent released to land must be treated to comply with the limits stated in Schedule 2, Table 1. |
| CCL3 | The total mass load of phosphorus released to land must be calculated and recorded and the results provided to the administering authority on request. |
| CCL4 | The total mass load of nitrogen released to land must be calculated and recorded and the results provided to the administering authority on request. |
| CCL5 | The release of sewage effluent to land must be in accordance with an Irrigation Management Program (IMP) to ensure the sustainable release of contaminants to the land. |



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| CCL6 | <p>The IMP must include but not be limited to:</p> <ul style="list-style-type: none"> (a) the identification of a sufficient area of land that is suitable for irrigation; (b) an assessment of the soils in the irrigation area including types, structure, phosphorus adsorption capacity, nutrient status, salinity and sodicity, cation exchange capacity and sodium absorption ratio (SAR); (c) consideration of the quality and quantity of treated effluent produced by the activity; (d) the occurrence, depth and characteristics of groundwater on the site together with known uses of this groundwater resource and interaction with surface water and vegetation; (e) conducting daily time step modelling (using MEDLI or similar) to estimate at least treated effluent irrigation application rates, the treated effluent irrigation area required and the volume of wet weather storage required, taking into account at least: <ul style="list-style-type: none"> - local climatic conditions; - soils in the treated effluent irrigation area; - vegetation within the treated effluent irrigation area; - predicted effect on soil conditions of long-term irrigation with consideration being given to nutrient balance, including loads of Nitrogen and Phosphorous, and salt balance; and - impacts on groundwater. (f) an irrigation program developed considering information collected for points i) to v) above, that is based on the sustainable long-term use of the contaminant release areas, and addresses at least the following matters: <ul style="list-style-type: none"> - irrigation scheduling; - effluent allocation to the contaminant release area; - management of the predicted effect on soil conditions; - management of the nutrient balance, including sustainable loads of Nitrogen and Phosphorous; - management of the salt balance; - managing impacts on existing native vegetation; and - managing potential impacts on water quality in adjacent areas. |
| CCL7 | <p>Soil and sub-soil analysis (beyond the root zone) must be undertaken on soil that is representative of the irrigation area, to determine the effects of the release of contaminants on soils within the designated irrigation area. The quality characteristics to be monitored and minimum frequency at which samples must be collected for analysis, is specified in Schedule 1, Table 4.</p> |
| CCL8 | <p>The irrigation of effluent must be carried out in a manner such that:</p> <ul style="list-style-type: none"> (a) vegetation is not damaged; (b) soil erosion and soil structure damage is avoided; (c) there is no surface ponding or runoff of effluent; (d) percolation of effluent beyond the plant root zone is minimised; (e) the capacity of the land to assimilate nitrogen, phosphorus, salts, organic matter (as measured by Biological Oxygen Demand) and water is not exceeded; and (f) groundwater values are not adversely affected. |
| CCL9 | <p>When conditions prevent the irrigation of treated effluent to land (such as during or following rain events), the treated effluent must be directed to wet weather storage ponds or alternative measures must be taken to store/lawfully dispose of treated effluent.</p> |

Goomeri STP

Location: Boonaravale Road, GOOMERI QLD 4601

Lot 1 RP127128

Relevant activity/ies:

63-(1b) Sewage treatment >100 but <1500EP

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

| Agency interest: Water | |
|------------------------|---|
| Condition number | Condition |
| GOW1 | Contaminants must only be released to waters from the discharge location below and in compliance with the release limits listed in Schedule 2 – Table 3. Discharge Location: GO1 – outlet from the Goomeri sewage treatment plant final effluent treatment pond to waters described as Chippendall Creek. |
| Agency interest: Land | |
| Condition number | Condition |
| GOL1 | Contaminants must only be released to land from the discharge location below and in compliance with the release limits listed in Schedule 2 – Table 3. Discharge Location: GO2 – outlet from the Goomeri sewage treatment plant final effluent treatment pond to pumping facility. |
| GOL2 | The irrigation of treated effluent must be carried out in a manner such that: <ul style="list-style-type: none">- vegetation is not damaged;- soil erosion and soil structure damage is avoided;- there is no surface ponding or runoff of effluent;- there is no spray drift beyond the boundary;- percolation of effluent beyond the plant root zone is minimised;- the capacity of the land to assimilate nitrogen, phosphorus, salts, organic matter as measured by oxygen demand and water is not exceeded; and- the quality of groundwater is not adversely affected. |



Gympie STP

Location: Widgee Crossing Road, GYMPIE QLD 4570
Lot 1 SP135767

Relevant activity/ies:

63-(1e) Sewage treatment >10000 but <50000EP

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

| Agency interest: Water | |
|------------------------|--|
| Condition number | Condition |
| GPW1 | Contaminants must only be released to waters from the discharge location below and in compliance with the release limits listed in Schedule 2 – Table 4. Discharge Location: GP1 – treated effluent leaving the Gympie Sewage Treatment Plant from end of pipe, via outfall, to waters described as the Mary River. |
| GPW2 | All contaminants from Release Point W1 must exit via the rocky outfall and must be sufficiently dispersed upon release to avoid potential toxic effects within the initial 15 metre mixing zone. |
| GPW3 | When there is a discharge from Release Point W1, the daily volume of flow in the Mary River must be determined by an appropriate method, and records kept of such determinations and estimations. The flow must be monitored in accordance with Schedule 1, Table 6 – Mary River Flow Monitoring Location and Frequency. |
| GPW4 | The total quantity of effluent released to waters via Release Point W1 must not exceed the respective quantities stated on any dry weather day or on any wet weather day as specified below: Maximum on any dry weather day = 4.3ML Maximum on any wet weather day = 30.0ML |
| GPW5 | The total mass loads of contaminants released to waters from Release Point W1 per year must not exceed any of the limits for the contaminants specified in Schedule 2, Table 5 – Total Allowable Yearly Mass Loads. |
| GPW6 | You must calculate the yearly mass load (in kilograms) of the contaminants total nitrogen and total phosphorus released to waters at Monitoring Point GP1. This is to be calculated using the following formula: Yearly Mass Load = (Yearly Median Concentration) x (Total Yearly Discharge Flow) |
| GPW7 | Direct Toxicity Assessment You must undertake a routine Direct Toxicity Assessment (DTA) to identify the toxicity of the wastewater discharged to the Mary River from the Gympie Sewage Treatment Plant in accordance with the following requirements: (a) Routine DTA must be carried out at least once every five years; (b) Whenever the results of a routine DTA show non-compliance with the requirements of conditions GPW8 and GPW9, then the frequency of routine DTA must be yearly until compliance is shown or it can be demonstrated that the cause of the non-compliance has been rectified and is unlikely to recur. |
| GPW8 | There must be no discharge of any contaminants to any waters where the NOEC for acute toxicity tests to any test organisms in a DTA is observed at 100% concentration of the effluent. |
| GPW9 | There must be no discharge of any contaminants to any waters where the NOEC for chronic toxicity tests to any test organisms in DTA is observed at 25% concentration of the effluent. |

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| GPW10 | <p>The Direct Toxicity Assessment (DTA) procedure followed must address the following:</p> <ol style="list-style-type: none"> 1. All specific methods and protocols to determine whether concentrations of toxicants are neither acutely toxic outside the approved acute toxicity zone nor chronically toxic outside the approved chronic toxicity zone to the test biota, including: <ol style="list-style-type: none"> (a) Specific test organisms to be utilised for DTA testing, in accordance with Section 8.3.6.8 of the ANZECC/ARMCANZ (2000) <i>Australian and New Zealand Guidelines for Fresh and Marine Water Quality</i>, to provide an accurate indication of actual and chronic toxic effects in the receiving waters, taking into consideration locally occurring species and the nature of any change being investigated; (b) The selection and characterisation of environmental waters for dilution of the wastewater; and (c) Characterisation of the wastewater stream, including potential toxicants present; (d) The nature of the contaminant(s); (e) Acute and chronic DTA testing conducted on end-of-pipe wastewater discharged; (f) Test/biological end points; (g) DTA end-points (including NOEC and Lowest Observable Effect Concentration (LOEC)); (h) Quality assurance/quality control; (i) Applicable Toxicity Identification Evaluation (TIE) procedures to be followed should the administering authority require such an evaluation; and (j) Reporting of DTA procedure results promptly to the administering authority, which must include but not be limited to: <ol style="list-style-type: none"> (i) NOEC for all bioassay results; (ii) LOEC for all bioassay results; (iii) a calculated EC₁₀ or LC₁₀ as appropriate for the bioassay; (iv) a calculated Species Sensitivity Distribution (SSD) curve; (v) All relevant sample collection information for the wastewater discharge test sample and receiving environment dilution water; (vi) Timing of wastewater test sample collection in relation to process performance; (vii) Details of any manipulation of the wastewater test sample or receiving environment dilution water; (viii) Wastewater test sample and receiving environment dilution water delivery details; (ix) Results of the chemical analysis of the wastewater discharge test sample for known toxicants of concern, receiving environment dilution water, and the test water (i.e. the mixture of effluent and receiving water) for each of the dilutions; (x) Time between test sample collection and commencement of the DTA, and (xi) Interpretation of results. |
| GPW11 | <p>You must report on the progress and/or results of DTA testing to the administering authority no more than 20 business days following the initial results of the toxicity assessment.</p> |
| GPW12 | <p>The DTA must be designed and performed by a suitably qualified person.</p> |
| GPW13 | <p>A Receiving Environment Monitoring Program (REMP) must be implemented to effectively determine whether environmental values are being protected.</p> <p>"Receiving environment" for the purpose of the REMP is the Mary River</p> <p>Notes:</p> <p>Ambient water quality objectives for aquatic ecosystem protection will not apply in the initial mixing zone defined as 15 metres from the discharge.</p> <p>Toxicant water quality objectives still apply in the initial mixing zone as there is to be no toxic effects or environmental harm caused in this initial mixing zone.</p> |

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| GPW14 | <p>The REMP must include, but not be limited to, the following:</p> <ul style="list-style-type: none"> (a) description of potentially affected environment including key communities and ambient water quality; (b) description of water quality objectives and biological objectives to be achieved; (c) specific targeted monitoring of the near-field receiving waters to Widgee Crossing under "low flow" conditions in the receiving water ("low flow" is defined in Schedule 2, Table 4); (d) description of selected physicochemical (including pH, total nitrogen, total phosphorous, ammonia, oxidised nitrogen, filterable reactive phosphorus, dissolved oxygen saturation, turbidity, secchi depth) and biological indicators (including chlorophyll 'a' and macro algal monitoring) and reasons for their inclusion; (e) the locations of monitoring stations including monitoring transects away from the outfall of the approved releases as well as any control locations; (f) the proposed sampling depths; (g) the water quality characteristics of receiving waters to be determined; (h) the frequency of sampling and analysis. Nutrient concentrations and physical chemical indicators (prescribed in Schedule 2, Table 4) for the receiving environment monitoring locations; (i) any historical datasets to be relied upon; and (j) description of the statistical basis on which conclusions are drawn. |
| GPW15 | <p>You must have due regard to the comments made by the administering authority in finalising the requirements of the REMP and must implement the REMP from commencement of this approval or within 30 days of ceasing to be a contributing member.</p> |
| GPW16 | <p>The report on the REMP must address at least the following:</p> <ul style="list-style-type: none"> (a) a detailed description of the methodology used in the REMP; and (b) a detailed description and analysis of the results of the REMP; and (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; and (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 REMP, with respect to the prevention or minimisation of the impacts of the contaminant releases on the receiving environment. |
| GPW17 | <p>To achieve compliance with the requirement for a REMP, you can become and remain a participating member in a local water quality strategy and monitoring program relevant to the receiving environment and endorsed in writing by the administering authority.</p> |
| GPW28 | <p>You are deemed by the administering authority to be a participating member in regional studies in the following situations:</p> <ul style="list-style-type: none"> (a) the holder is a contributing member to the regional studies of water quality and ecosystem health; and (b) the holder is identified as a contributing member in a written statement to the administering authority from the authority carrying out the regional studies; and (c) the holder continues to be a contributing member of such regional studies. |

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| GPW19 | <p>You are deemed by the administering authority to be a contributing member until such time as:</p> <ul style="list-style-type: none"> (a) the authority carrying out the regional studies notifies the administering authority in writing that the holder is no longer a contributing member; and (b) the administering authority has undertaken reasonable steps to confirm this with the holder and the authority carrying out the regional studies; and (c) the holder notifies the administering authority in writing that they are no longer a contributing member. |
| GPW20 | <p>There must be a buffer distance of at least 100 metres between any EHP referable wetlands and any operational part of the site (e.g. road, track, building, pond, plant, etc.).</p> <p>The only exception to operational structures permitted within this 100 metre buffer is an existing shed and effluent disinfection/storage tanks, irrigation systems and associated roadwork's.</p> |
| GPW21 | <p>All pump stations must be operated and maintained applying best practice environmental management so as to comply with all conditions of this approval appropriate to the size of the pump station.</p> |
| GPW22 | <p>Consideration must be given to all available measures to comply with condition GPW21, including, but not limited to:</p> <ul style="list-style-type: none"> a) ensuring adequate storage capacity at pump stations; b) the fitting of standby pumps; c) the fitting of pump failure alarms which must be able to be operated without mains power if such power failure occurs; and d) the fitting of a telemetry system capable of alerting Gympie Regional Council staff in a timely manner. |
| GPW23 | <p>Compliance with Condition GPW21 must be supported through a documented risk assessment of each pump station which must include consideration of factors including, but not limited to:</p> <ul style="list-style-type: none"> a) physical size and capacity of pump stations and pump; b) catchment size of pump station; c) wet weather infiltration to the system and the catchment; and d) location of the pump station. |
| GPW24 | <p>All duty and standby pumps must be inspected, tested and maintained on a regular basis to ensure they remain in a constant state of service.</p> |
| Agency interest: Land | |
| Condition number | Condition |
| GPL1 | <p>Contaminants must only be released to land in compliance with the release limits listed in Schedule 2 – Table 6.</p> |

| Agency interest: Noise | |
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| Condition number | Condition |
| GPN1 | All noise from the approved activity must not exceed the levels specified in Schedule 2, Table 7 – Noise Limits at the Gympie STP. |



Imbil STP

Location: Imbil-Kandanga Road IMBIL QLD 4570
Lot 4 RP901098

Relevant activity/ies:

63-(1b) Sewage treatment >150 but <1500EP

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

| Agency interest: Water | |
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| Condition number | Condition |
| IMW1 | <p>A groundwater monitoring network must be maintained. The network must:</p> <ul style="list-style-type: none"> (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; and (b) be constructed in accordance with methods prescribed in the latest edition of the Agriculture and Resource Management Council of Australia and New Zealand manual titled 'Minimum Construction Requirements For Water Bores In Australia'; and (c) include a sufficient number of monitoring bores that provide the following: <ul style="list-style-type: none"> - representative groundwater samples from the uppermost aquifer, and other potentially affected aquifers; - existing groundwater quality and the capacity to detect trends in groundwater quality; and - the quality of groundwater within the treated effluent irrigation area(s); and - the quality of groundwater down gradient of any potential sources of contamination. |
| IMW2 | <p>Conduct monitoring and keep records of groundwater quality for the relevant monitoring bores required by condition (IMW1). All determinations of groundwater quality must be:</p> <ul style="list-style-type: none"> (a) conducted for the water quality characteristics and at the minimum frequency stated in Schedule 1, Table 5; (b) taken from sufficient monitoring points and/or wells to obtain representative samples of groundwater both up-gradient, down-gradient of, and within, the potential influence; (c) carried out with sufficient regularity and spatial and temporal replication to make statistically valid conclusions about changes to groundwater characteristics with regard to the presence, absence or fluctuation of contaminant concentrations, and changes in standing groundwater level; (d) carried out with sufficient number of sampling events to determine groundwater quality characteristics, standing groundwater levels prior to, and following, proposed development of the site; (e) followed by an assessment by a person with suitable qualifications and experience to determine whether or not there has been any adverse impact at locations hydraulically down gradient of the potential sources of contamination. |
| Agency interest: Land | |
| Condition number | Condition |
| IML1 | The only contaminant permitted to be released to land is treated effluent to the area shown in Schedule 3, Map 4. |
| IML2 | Sewage effluent released to land must be treated to comply with the limits stated in Schedule 2, Table 8. |

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| IML3 | The release of sewage effluent to land must be in accordance with an Irrigation Management Program (IMP) to ensure the sustainable release of contaminants to the land. |
| IML4 | <p>The IMP must include, but not be limited to:</p> <ul style="list-style-type: none"> (a) the identification of a sufficient area of land that is suitable for irrigation; (b) an assessment of the soils in the irrigation area including types, structure, phosphorus adsorption capacity, nutrient status, salinity and sodicity, cation exchange capacity and sodium absorption ratio (SAR); (c) consideration of the quality and quantity of treated effluent produced by the activity; (d) the occurrence, depth and characteristics of groundwater on the site together with known uses of this groundwater resource and interaction with surface water and vegetation; (e) conducting daily time step modelling (using MEDLI or similar) to estimate at least treated effluent irrigation application rates, the treated effluent irrigation area required and the volume of wet weather storage required, taking into account at least: <ul style="list-style-type: none"> - local climatic conditions; - soils in the treated effluent irrigation area; - vegetation within the treated effluent irrigation area; - predicted effect on soil conditions of long-term irrigation with consideration being given to nutrient balance, including loads of Nitrogen and Phosphorus, and salt balance; and - impacts on groundwater. (f) an irrigation program developed considering information collected for points a) to e) above, that is based on the sustainable long-term use of the contaminant release areas, and addresses at least the following matters: <ul style="list-style-type: none"> - irrigation scheduling; - effluent allocation to the contaminant release area; - management of the predicted effect on soil conditions; - management of the nutrient balance, including sustainable loads of Nitrogen and Phosphorus; - management of the salt balance; - managing impacts on existing native vegetation; and - managing potential impacts on water quality in adjacent areas. |
| IML5 | A minimum area of 7.7 hectares of land must be available for the irrigation of treated effluent. |
| IML6 | Soil and sub-soil analysis (beyond the root zone) must be undertaken on soil that is representative of the irrigation area to determine the effects of the release of contaminants on soils within the designated irrigation area. The quality characteristics to be monitored and minimum frequency at which samples must be collected for analysis is specified in Schedule 1, Table 4. |
| IML7 | <p>The irrigation of effluent must be carried out in a manner such that:</p> <ul style="list-style-type: none"> (a) vegetation is not damaged; (b) spray drift is not carried beyond the boundaries of the approved place; (c) soil erosion and soil structure damage is avoided; (d) there is no surface ponding or runoff of effluent; (e) percolation of effluent beyond the plant root zone is minimised; (f) the capacity of the land to assimilate nitrogen, phosphorus, salts, organic matter (as measured by Biological Oxygen Demand) and water is not exceeded; and (g) groundwater values are not adversely affected. |
| IML8 | When conditions prevent the irrigation of treated effluent to land (such as during or following rain events), the treated effluent must be directed to wet weather storage ponds or alternative measures must be taken to store/lawfully dispose of treated effluent. |
| IML9 | <p>Emergency Release</p> <p>Contaminants may be released to land in wet weather only in the event that the available wet weather storage at the approved place is less than that required for the equivalent of 10 days effluent volume (based on the average dry weather flow) and the effluent complies with the limits stated in Schedule 2, Table 8.</p> |

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| IML10 | The emergency release stated in condition IML9 must cease immediately when 10 days of wet weather storage capacity is available. |
| IML11 | Each emergency release must be reported with the annual return. Information to be included with any emergency release reporting must include, but not be limited to: (a) the reason for each emergency release; and (b) the quantity of effluent released during each emergency release. |



Kilkivan STP

Location: Gatehouse Road, KILKIVAN QLD 4600
Lot 356 on LX2278

Relevant activity/ies:

63-(1b) Sewage treatment >100 but <1500EP

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

| Agency interest: Water | |
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| Condition number | Condition |
| KKW1 | Contaminants must only be released to waters from the discharge location below and in compliance with the release limits listed in Schedule 2 – Table 3. Discharge Location: KK1 – outlet from the Kilkivan sewage treatment plant final effluent treatment pond to waters described as One Mile Creek. |
| Agency interest: Land | |
| Condition number | Condition |
| KKL1 | Contaminants must only be released to land from the discharge location below and in compliance with the release limits listed in Schedule 2 – Table 3. Discharge Location: KK2 – outlet from the Kilkivan sewage treatment plant final effluent treatment pond to pumping facility. |
| KKL2 | The irrigation of treated effluent must be carried out in a manner such that: <ul style="list-style-type: none"> - vegetation is not damaged; - soil erosion and soil structure damage is avoided; - there is no surface ponding or runoff of effluent; - there is no spray drift beyond the boundary; - percolation of effluent beyond the plant root zone is minimised; - the capacity of the land to assimilate nitrogen, phosphorus, salts, organic matter as measured by oxygen demand and water is not exceeded; and - the quality of groundwater is not adversely affected. |

Rainbow Beach STP

Location: Brian Smith Drive, RAINBOW BEACH QLD 4581
Lot 1 SP135765

Relevant activity/ies:

63-(2c) Sewage treatment >1500 but <4000EP

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

| Agency interest: General | |
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| Condition number | Condition |
| RBG1 | The average daily dry weather volume of contaminants treated by the sewage treatment plant that is the subject of this approval must not exceed 960kL per day. |
| Agency interest: Water | |
| Condition number | Condition |
| RBW1 | <p>Emergency Release</p> <p>The only contaminants permitted to be released to waters is a cumulative maximum of 10% of the ADWF of treated effluent in any 3 year period (commencing on the anniversary date of this environmental authority) from the following release point:</p> <p>Release Point RB1 - Monitoring samples shall be taken from a designated sampling point in the effluent discharge line from the sewage treatment plant.</p> |
| RBW2 | The release of contaminants to waters must comply with the limits stated in Schedule 2, Table 2. |
| RBW3 | <p>Each emergency release must be reported with the annual return. Information to be included with any emergency release reporting must include, but not be limited to:</p> <ul style="list-style-type: none"> (c) the reason for each emergency release; (d) the quantity of effluent released during each emergency release, expressed as a volume, and as a percentage of the overall quantity of effluent treated by the sewage treatment plant in the 12 month reporting period. |
| RBW4 | <p>A groundwater monitoring network must be maintained. The network must:</p> <ul style="list-style-type: none"> (d) 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; and (e) be constructed in accordance with methods prescribed in the latest edition of the Agriculture and Resource Management Council of Australia and New Zealand manual titled 'Minimum Construction Requirements For Water Bores In Australia'; and (f) include a sufficient number of monitoring bores that provide the following: <ul style="list-style-type: none"> - representative groundwater samples from the uppermost aquifer, and other potentially affected aquifers, - existing groundwater quality and the capacity to detect trends in groundwater quality; and - the quality of groundwater within the treated effluent irrigation area(s); and - the quality of groundwater down gradient of any potential sources of contamination. |

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| RBW5 | <p>Conduct monitoring and keep records of groundwater quality for the relevant monitoring bores required by condition (RBW4). All determinations of groundwater quality must be:</p> <ul style="list-style-type: none"> (f) conducted for the water quality characteristics and at the minimum frequency stated in Schedule 1, Table 5; (g) taken from sufficient monitoring points and/or wells to obtain representative samples of groundwater both up-gradient, down-gradient of, and within, the potential influence; (h) carried out with sufficient regularity and spatial and temporal replication to make statistically valid conclusions about changes to groundwater characteristics with regard to the presence, absence or fluctuation of contaminant concentrations, and changes in standing groundwater level; (i) carried out with sufficient number of sampling events to determine groundwater quality characteristics, standing groundwater levels prior to, and following proposed development of the site; (j) followed by an assessment by a person with suitable qualifications and experience to determine whether or not there has been any adverse impact at locations hydraulically down gradient of the potential sources of contamination. |
| Agency interest: Land | |
| Condition number | Condition |
| RBL1 | The only contaminant permitted to be released to land is treated effluent to the area shown in Schedule 3, Map 2. |
| RBL2 | Sewage Effluent released to land must be treated to comply with the limits stated in Schedule 2, Table 1. |
| RBL3 | The total mass load of phosphorus released to land must be calculated and recorded and the results provided to the administering authority on request. |
| RBL4 | The total mass load of nitrogen released to land must be calculated and recorded and the results provided to the administering authority on request. |
| RBL5 | The release of sewage effluent to land must be in accordance with an Irrigation Management Program (IMP) to ensure the sustainable release of contaminants to the land. |

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| RBL6 | <p>The IMP must include but not be limited to:</p> <ul style="list-style-type: none"> (g) the identification of a sufficient area of land that is suitable for irrigation; (h) an assessment of the soils in the irrigation area including types, structure, phosphorus adsorption capacity, nutrient status, salinity and sodicity, cation exchange capacity and sodium absorption ratio (SAR); (i) consideration of the quality and quantity of treated effluent produced by the activity; (j) the occurrence, depth and characteristics of groundwater on the site together with known uses of this groundwater resource and interaction with surface water and vegetation; (k) conducting daily time step modelling (using MEDLI or similar) to estimate at least treated effluent irrigation application rates, the treated effluent irrigation area required and the volume of wet weather storage required, taking into account at least: <ul style="list-style-type: none"> - local climatic conditions; - soils in the treated effluent irrigation area; - vegetation within the treated effluent irrigation area; - predicted effect on soil conditions of long-term irrigation with consideration being given to nutrient balance, including loads of Nitrogen and Phosphorous, and salt balance; and - impacts on groundwater. (l) an irrigation program developed considering information collected for points i) to v) above, that is based on the sustainable long-term use of the contaminant release areas, and addresses at least the following matters: <ul style="list-style-type: none"> - irrigation scheduling; - effluent allocation to the contaminant release area; - management of the predicted effect on soil conditions; - management of the nutrient balance, including sustainable loads of Nitrogen and Phosphorous; - management of the salt balance; - managing impacts on existing native vegetation; and - managing potential impacts on water quality in adjacent areas. |
| RBL7 | <p>Soil and sub-soil analysis (beyond the root zone) must be undertaken on soil that is representative of the irrigation area, to determine the effects of the release of contaminants on soils within the designated irrigation area. The quality characteristics to be monitored and minimum frequency at which samples must be collected for analysis, is specified in Schedule 1, Table 4.</p> |
| RBL8 | <p>The irrigation of effluent must be carried out in a manner such that:</p> <ul style="list-style-type: none"> (h) vegetation is not damaged; (i) spray drift is not carried beyond the boundaries of the approved place; (j) soil erosion and soil structure damage is avoided; (k) there is no surface ponding or runoff of effluent; (l) percolation of effluent beyond the plant root zone is minimised; (m) the capacity of the land to assimilate nitrogen, phosphorus, salts, organic matter (as measured by Biological Oxygen Demand) and water is not exceeded; and (n) groundwater values are not adversely affected. |
| RBL9 | <p>When conditions prevent the irrigation of treated effluent to land (such as during or following rain events), the treated effluent must be directed to wet weather storage ponds or alternative measures must be taken to store/lawfully dispose of treated effluent.</p> |

Tin Can Bay STP

Location: Snapper Creek Road, TIN CAN BAY QLD 4580

Lot 58 MCH3705

Relevant activity/ies:

63-(1c) Sewage treatment >1500 but <4000EP

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

| Agency interest: General | |
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| Condition number | Condition |
| TCG1 | The average daily dry weather volume of contaminants treated by the sewage treatment plant that is the subject of this approval must not exceed 960kL per day. |
| Agency interest: Water | |
| Condition number | Condition |
| TCW1 | Emergency Release The only contaminants permitted to be released to waters is a cumulative maximum of 10% of the ADWF of treated effluent in any 12 month period (commencing on the anniversary date of this environmental authority) from the following release point: Release Point TC1 - Monitoring samples shall be taken from a designated sampling point in the effluent discharge line from the sewage treatment plant. |
| TCW2 | The release of contaminants to waters must comply with the limits stated in Schedule 2, Table 2. |
| TCW3 | Each emergency release must be reported with the annual return. Information to be included with any emergency release reporting must include, but not be limited to: (e) the reason for each emergency release; (f) the quantity of effluent released during each emergency release, expressed as a volume, and as a percentage of the overall quantity of effluent treated by the sewage treatment plant in the 12 month reporting period. |
| TCW4 | You must implement a Receiving Environment Monitoring Program (REMP) to monitor the effects of the release of contaminants on the receiving environment beyond the effluent irrigation area, to effectively determine whether environmental values are being protected. |
| TCW5 | The REMP must be designed, implemented and results reported by a suitably qualified person . |

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| TCW6 | <p>The REMP must include but not be limited to the following:</p> <ul style="list-style-type: none"> - a sufficient number of monitoring locations that provide for: <ul style="list-style-type: none"> (a) representative samples from the receiving environment; (b) existing water quality and the capacity to detect trends in water quality; and (c) the quality of water adjacent to any potential sources of contamination (which may include but not be limited to) water quality within and adjacent to the effluent irrigation areas). - a description of potentially affected environment including key communities and ambient water quality; - a description of water quality objectives and biological objectives to be achieved; - a description of selected physico-chemical (including pH, total nitrogen, total phosphorus, dissolved oxygen saturation, water clarity analyses) and biological indicators (including chlorophyll 'a' and macro algal monitoring) to be monitored; - the locations of monitoring stations including monitoring locations upstream and downstream of potentially affected waters; - the proposed sampling depths; - the water quality characteristics of receiving waters to be determined; - the frequency of sampling and analysis; - any historical datasets to be relied upon; and - a description of the statistical basis on which conclusions are drawn. |
| TCW7 | <p>The report on the REMP must address at least the following:</p> <ul style="list-style-type: none"> (a) a detailed description of the methodology used in the REMP; and (b) a detailed description and analysis of the results of the REMP; and (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; and (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 REMP, with respect to the prevention or minimisation of the impacts of contaminant releases on the receiving environment. |
| TCW8 | <p>A groundwater monitoring network must be maintained. The network must:</p> <ul style="list-style-type: none"> (g) 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; and (h) be constructed in accordance with methods prescribed in the latest edition of the Agriculture and Resource Management Council of Australia and New Zealand manual titled 'Minimum Construction Requirements For Water Bores In Australia'; and (i) include a sufficient number of monitoring bores that provide the following: <ul style="list-style-type: none"> - representative groundwater samples from the uppermost aquifer, and other potentially affected aquifers, - existing groundwater quality and the capacity to detect trends in groundwater quality; and - the quality of groundwater within the treated effluent irrigation area(s); and - the quality of groundwater down gradient of any potential sources of contamination. |

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| TCW9 | <p>Conduct monitoring and keep records of groundwater quality for the relevant monitoring bores required by condition (TCW8). All determinations of groundwater quality must be:</p> <ul style="list-style-type: none"> (k) conducted for the water quality characteristics and at the minimum frequency stated in Schedule 1, Table 5; (l) taken from sufficient monitoring points and/or wells to obtain representative samples of groundwater both up-gradient, down-gradient of, and within, the potential influence; (m) carried out with sufficient regularity and spatial and temporal replication to make statistically valid conclusions about changes to groundwater characteristics with regard to the presence, absence or fluctuation of contaminant concentrations, and changes in standing groundwater level; (n) carried out with sufficient number of sampling events to determine groundwater quality characteristics, standing groundwater levels prior to, and following proposed development of the site; (o) followed by an assessment by a person with suitable qualifications and experience to determine whether or not there has been any adverse impact at locations hydraulically down gradient of the potential sources of contamination. |
| Agency interest: Land | |
| Condition number | Condition |
| TCL1 | The only contaminant permitted to be released to land is treated effluent to the area shown in Schedule 3, Map 3. |
| TCL2 | Sewage Effluent released to land must be treated to comply with the limits stated in Schedule 2, Table 1. |
| TCL3 | The total mass load of phosphorus released to land must be calculated and recorded and the results provided to the administering authority on request. |
| TCL4 | The total mass load of nitrogen released to land must be calculated and recorded and the results provided to the administering authority on request. |
| TCL5 | The release of sewage effluent to land must be in accordance with an Irrigation Management Program (IMP) to ensure the sustainable release of contaminants to the land. |

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| TCL6 | <p>The IMP must include but not be limited to:</p> <ul style="list-style-type: none"> (m) the identification of a sufficient area of land that is suitable for irrigation; (n) an assessment of the soils in the irrigation area including types, structure, phosphorus adsorption capacity, nutrient status, salinity and sodicity, cation exchange capacity and sodium absorption ratio (SAR); (o) consideration of the quality and quantity of treated effluent produced by the activity; (p) the occurrence, depth and characteristics of groundwater on the site together with known uses of this groundwater resource and interaction with surface water and vegetation; (q) conducting daily time step modelling (using MEDLI or similar) to estimate at least treated effluent irrigation application rates, the treated effluent irrigation area required and the volume of wet weather storage required, taking into account at least: <ul style="list-style-type: none"> - local climatic conditions; - soils in the treated effluent irrigation area; - vegetation within the treated effluent irrigation area; - predicted effect on soil conditions of long-term irrigation with consideration being given to nutrient balance, including loads of Nitrogen and Phosphorous, and salt balance; and - impacts on groundwater. (r) an irrigation program developed considering information collected for points i) to v) above, that is based on the sustainable long-term use of the contaminant release areas, and addresses at least the following matters: <ul style="list-style-type: none"> - irrigation scheduling; - effluent allocation to the contaminant release area; - management of the predicted effect on soil conditions; - management of the nutrient balance, including sustainable loads of Nitrogen and Phosphorous; - management of the salt balance; - managing impacts on existing native vegetation; and - managing potential impacts on water quality in adjacent areas. |
| TCL7 | <p>Soil and sub-soil analysis (beyond the root zone) must be undertaken on soil that is representative of the irrigation area, to determine the effects of the release of contaminants on soils within the designated irrigation area. The quality characteristics to be monitored and minimum frequency at which samples must be collected for analysis, is specified in Schedule 1, Table 4.</p> |
| TCL8 | <p>The irrigation of effluent must be carried out in a manner such that:</p> <ul style="list-style-type: none"> (o) vegetation is not damaged; (p) soil erosion and soil structure damage is avoided; (q) there is no surface ponding or runoff of effluent; (r) percolation of effluent beyond the plant root zone is minimised; (s) the capacity of the land to assimilate nitrogen, phosphorus, salts, organic matter (as measured by Biological Oxygen Demand) and water is not exceeded; and (t) groundwater values are not adversely affected. |
| TCL9 | <p>When conditions prevent the irrigation of treated effluent to land (such as during or following rain events), the treated effluent must be directed to wet weather storage ponds or alternative measures must be taken to store/lawfully dispose of treated effluent.</p> |

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Gympie (Jones Hill) Water Treatment Plant

Location: Waterworks Road, JONES HILL QLD 4570
Lot 78 LX1424, Lot 224 SP175079

Relevant activity/ies:

64-(3) Water Treatment >10ML Raw Water in a day

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

| Agency interest: Water | |
|------------------------|---|
| Condition number | Condition |
| JHW1 | Contaminants must not be directly or indirectly released from any source at the site to any waters , other than in an emergency event . In an emergency event , contaminants may be released from Discharge Location JH1 provided that they comply with the release limits listed in Schedule 2, Table 9. Discharge Location: JH1 – the release of treated waste water from the Recovery Discharge Overflow Pipe to an unnamed watercourse leading from the water treatment plant at entry to Mary River at approximately 183km AMTD. |
| JHW2 | Notwithstanding the quality characteristic limits specified in Schedule 2, Table 9, the contaminants released must not have any properties nor contain any organisms or contaminants in concentrations that are capable of causing environmental harm. |
| JHW3 | Notwithstanding any other condition of this environmental authority, the waste water must be directed from the discharge structure in a manner which does not erode or otherwise disturb native vegetation, the streambed, the stream banks or the habitat in general. |
| Agency interest: Noise | |
| Condition number | Condition |
| JHN1 | All noise from the activities must not exceed the levels specified in Schedule 2, Table 10 – Noise Limits at the Jones Hill WTP. |

Definitions

Key terms and/or phrases used in this document are defined in this section. 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 Heritage Protection or its successor.

Average dry weather flow (ADWF) is the average flow measured over a period of seven consecutive days, the period to be chosen such that rainfall is less than 0.25mm/d, infiltration of stormwater into the sewerage system is at a minimum and any abnormal influences such as public holidays are excluded.

Appropriately qualified person(s) means a person or persons who has 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.

Approved place(s) means the place(s) authorised under this environmental authority for the carrying out of the specified environmentally relevant activities.

Background noise level means either:

$L_{A90, T}$ being the A-weighted sound pressure level exceeded for 90 percent of the time period not less than 15 minutes, using Fast response, or

$L_{A\text{bg}, T}$ being the arithmetical average of the minimum readings measured in the absence of the noise under investigation during a representative time period of not less than 15 minutes, using Fast response.

cfu means colony forming units.

Commercial place means a place used as an office or for business or commercial purposes.

Composite in respect of sampling means either time based taken at hourly intervals to cover the period in the 24 hours of the sampling day during which a contaminant release occurs; or taken after set flow volumes to cover the period of the sampling day during which the contaminant release occurs.

Competent person means a person or persons who has qualifications, training, skills or experience relevant to the nominated subject matter.

Emergency Event means unforeseen and rare events such as power interruption, sudden change in raw water quality (such as heavy rainfall or equipment failure) or threat of waterborne disease, where it is unsafe or undesirable to recycle supernatant for drinking water.

Emergency Release means a necessary release following a prolonged period of wet weather, in response to which, all wet weather storage capacity has been consumed (where the wet weather storage has been managed in accordance with this approval), and irrigation of treated effluent to land is not possible due to a combination of current weather conditions and an inability of the irrigation area to sustainably receive treated effluent.

Grab sample means "a single sample taken at a point at a single time".

$L_{A, \text{max adj}, T}$ means the average maximum A-weighted sound pressure level, adjusted for noise character and measured over a time period of not less than 15 minutes, using Fast response.

$L_{A 10, \text{adj}, 10 \text{ mins}}$ 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.

$L_A 1, \text{adj, 10 mins}$ 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.

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.

mg/L means milligrams per litre.

No Observed Effect Concentration or NOEC means the "No Observed Effect Concentration" which is the highest concentration of effluent tested that produces no statistically significant adverse effect on the exposed sample population of test organisms when compared to a control sample population.

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

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

1. a dwelling, residential allotment, mobile home or caravan park, residential marina or other residential premises; or
2. a motel, hotel or hostel; or
3. a kindergarten, school, university or other educational institution; or
4. a medical centre or hospital; or
5. a protected area under the Nature Conservation Act 1992, the Marine Parks Act 1992 or a World Heritage Area; or

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

Short term 50 percentile means that the median value of the measured values in ranked order of the quality characteristic is not to exceed the stated release limit for any five (5) consecutive samples where:

- the consecutive samples are taken over a five week period;
- the consecutive samples are taken at approximately equal periods; and
- the time interval between the taking of each consecutive sample is not more than seven days.

Total Nitrogen means the sum of Organic Nitrogen, Ammonia, Nitrite plus Nitrate, as mg/L of Nitrogen.

Total Phosphorus 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.

Wet weather day means a day which is not a dry weather day.

You means the holder of the environmental authority.

50th percentile means not more than three (3) of the measured values of the quality characteristic are to exceed the stated release limit for any six (6) consecutive samples for a release/monitoring point at any time during the environmental activity(ies) works.

80th percentile means not more than one (1) of the measured values of the quality characteristic is to exceed the stated release limit for any five (5) consecutive samples for a sampling point at any time during the environmental activity(ies) works.

Schedule 1 — Monitoring Requirements

Table 1 – Approved Monitoring points

| SEWAGE TREATMENT PLANT (STP) | MONITORING POINT(S) |
|------------------------------|--|
| Cooloola Cove STP | CC1 - Monitoring samples shall be taken from a designated sampling point in the effluent discharge line from the sewage treatment plant. |
| Goomeri STP | Discharge Location GO1 - outlet from the Goomeri sewage treatment plant final effluent treatment pond to waters described as Chippendall Creek. |
| Gympie STP | Monitoring Point GP1 – Outlet from the treated effluent storage pond at Gympie Sewage Treatment Plant Monitoring Point GP2 – Outlet from the chlorine contact tank at Gympie Sewage Treatment Plant (enterococci only) Monitoring Point GP3 – Outlet from the effluent disinfection/storage tanks at Gympie Sewage Treatment Plant (releases to land) Monitoring Point GP4 – as per Schedule 1, Table 6 |
| Imbil STP | IM1 - Monitoring samples shall be taken from a designated sampling point in the effluent discharge line from the sewage treatment plant. |
| Kilkivan STP | Discharge Location KK1 – outlet from the Kilkivan sewage treatment plant final effluent treatment pond to waters described as One Mile Creek. |
| Rainbow Beach STP | RB1 - Monitoring samples shall be taken from a designated sampling point in the effluent discharge line from the sewage treatment plant. |
| Tin Can Bay STP | TC1 - Monitoring samples shall be taken from a designated sampling point in the effluent discharge line from the sewage treatment plant. |
| Jones Hill WTP | JH1 – Recovery Discharge Overflow Pipe to an unnamed watercourse leading from the water treatment plant at entry to Mary River at approximately 183 km AMTD |

Om

Table 2 – Parameters to be monitored at all sewage treatment plant when releasing to waters

| QUALITY CHARACTERISTIC | UNITS | FREQUENCY | PLANTS |
|----------------------------------|-----------|-------------|--|
| 5-day Biochemical Oxygen Demand | mg/L | Weekly | Cooloola Cove, Rainbow Beach and Tin Can Bay and Gympie |
| | | Monthly | Kilkivan and Goomeri |
| Suspended Solids | mg/L | Weekly | Cooloola Cove, Rainbow Beach and Tin Can Bay and Gympie |
| | | Monthly | Kilkivan and Goomeri |
| pH | pH scale | Weekly | Cooloola Cove, Rainbow Beach and Tin Can Bay, Gympie, Kilkivan and Goomeri |
| Dissolved Oxygen | mg/L | Weekly | Cooloola Cove, Rainbow Beach and Tin Can Bay, Gympie, Kilkivan and Goomeri |
| Intestinal enterococci | cfu/100mL | Weekly | Gympie |
| Faecal Coliforms | cfu/100mL | Weekly | Cooloola Cove, Rainbow Beach and Tin Can Bay |
| | | Monthly | Kilkivan and Goomeri |
| Total chlorine | mg/L | Weekly | Gympie |
| Ammonia (as Nitrogen) | mg/L | Weekly | Gympie |
| Total Nitrogen (as Nitrogen) | mg/L | Weekly | Cooloola Cove, Rainbow Beach and Tin Can Bay and Gympie |
| | | Six monthly | Kilkivan and Goomeri |
| Total Phosphorus (as Phosphorus) | mg/L | Weekly | Cooloola Cove, Rainbow Beach and Tin Can Bay and Gympie |
| | | Six monthly | Kilkivan and Goomeri |
| Electrical conductivity | µS/cm | Weekly | Cooloola Cove, Rainbow Beach and Tin Can Bay and Gympie |
| | | Monthly | Kilkivan and Goomeri |

Table 3 – Parameters to be monitored at all sewage treatment plant when releasing to land

| QUALITY CHARACTERISTIC | UNITS | FREQUENCY | PLANTS |
|----------------------------------|-----------|-------------|---|
| 5-day Biochemical Oxygen Demand | mg/L | Monthly | Kilkivan, Goomeri, Cooloola Cove, Imbil, Rainbow Beach and Tin Can Bay and Gympie |
| Electrical conductivity | µS/cm | Monthly | Kilkivan, Goomeri, Cooloola Cove, Imbil, Rainbow Beach and Tin Can Bay and Gympie |
| Suspended Solids | mg/L | Monthly | Kilkivan, Goomeri, Cooloola Cove, Imbil, Rainbow Beach and Tin Can Bay and Gympie |
| pH | pH scale | Weekly | Kilkivan and Goomeri |
| | | Monthly | Cooloola Cove, Imbil, Rainbow Beach and Tin Can Bay and Gympie |
| Faecal Coliforms | Cfu/100mL | Monthly | Kilkivan, Goomeri, Cooloola Cove, Imbil, Rainbow Beach and Tin Can Bay |
| Total Nitrogen (as Nitrogen) | mg/L | Monthly | Cooloola Cove, Imbil, Rainbow Beach and Tin Can Bay |
| | | Six monthly | Kilkivan and Goomeri |
| Total Phosphorus (as Phosphorus) | mg/L | monthly | Cooloola Cove, Imbil, Rainbow Beach and Tin Can Bay |
| | | Six monthly | Kilkivan and Goomeri |
| E.coli | Cfu/100mL | Weekly | Gympie |

Table 4 – Soil Parameters to be monitored in Effluent Irrigation Areas at Cooloola Cove, Imbil, Rainbow Beach and Tin Can Bay STPs

| Parameter | Frequency |
|---------------------------------|-----------------|
| Electrical Conductivity (µS/cm) | Every two years |
| pH (pH units) | Every two years |
| Total Nitrogen (mg/L) | Every two years |
| Total Phosphorus (mg/L) | Every two years |
| Sodium Absorption Ratio | Every two years |

Table 5 - Groundwater Monitoring at Cooloola Cove, Imbil, Rainbow Beach and Tin Can Bay STPs

| Parameter | Minimum Monitoring Frequency |
|--|------------------------------------|
| Standing Water Level (relative to Australian Height Datum and to an accuracy of 0.01 metres) | Biannually (once every six months) |
| pH (pH units) | Biannually (once every six months) |
| Total Nitrogen(mg/L) | Biannually (once every six months) |
| Nitrate (mg/L) | Biannually (once every six months) |

| | |
|-----------------------------|------------------------------------|
| Total Phosphorus (mg/L) | Biannually (once every six months) |
| Total Coliforms (cfu/100mL) | Biannually (once every six months) |

Table 6 – Mary River Flow Monitoring Location and Frequency

| Monitoring point | Location description | Latitude (south) | Longitude (east) | Frequency |
|------------------|---|------------------|------------------|------------------------|
| GP4 | Fisherman's Pocket DNRM site ID: 138007A | 26:10:10 | 152:36:3 | Daily during discharge |

Table 7 – Emergency release event monitoring at Jones Hill WTP

| Parameter | Frequency |
|--|---------------------|
| 5-day Biochemical Oxygen Demand (mg/L) | Every release event |
| Suspended Solids (mg/L) | Every release event |
| pH (pH units) | Every release event |
| Dissolved Oxygen (mg/L) | Every release event |
| Aluminium | Every release event |

Schedule 2 — Release limits

Table 1 - Contaminant release limits to land at the Cooloola Cove, Rainbow Beach and Tin Can Bay STPs

| Quality Characteristics | Release Limit | | | |
|--|---------------|--------------------|--------------------|---|
| | Minimum | 50 th % | 90 th % | Maximum |
| BOD (mg/L)* | - | 5* | 10* | 20* |
| Electrical Conductivity (µS/cm) | - | - | - | 800 |
| Suspended Solids (mg/L)* | - | - | 15* | 20* |
| Faecal Coliforms (Faecal Coliform organisms / 100mL) | - | <10cfu | - | 4 out of 5 samples contain less than 200cfu |
| pH (pH units) | 6.5 | - | - | 8.5 |
| Total Nitrogen (mg/L)* | - | 5* | - | 10* |
| Total Phosphorous (mg/L)* | - | 1* | - | 2* |

* Indicates composite sample

Table 2 - Contaminant release limits to waters at the Cooloola Cove, Rainbow Beach and Tin Can Bay STPs

| Quality Characteristics | Release Limit | | | |
|--|---------------|--------------------|--------------------|---|
| | Minimum | 50 th % | 90 th % | Maximum |
| BOD (mg/L)* | - | 5* | 10* | 20* |
| Electrical Conductivity (µS/cm) | - | - | - | 800 |
| Suspended Solids (mg/L)* | - | - | 15* | 20* |
| Faecal Coliforms (Faecal Coliform organisms / 100mL) | - | <10cfu | - | 4 out of 5 samples contain less than 200cfu |
| pH (pH units) | 6.5 | - | - | 8.5 |
| Dissolved Oxygen (mg/L) | 2 | - | - | - |
| Total Nitrogen (mg/L)* | - | 5* | - | 10* |
| Total Phosphorous (mg/L)* | - | 1* | - | 2* |

* Indicates composite sample

Table 3 Contaminant limits to land and waters at the Goomeri and Kilkivan STPs

| Quality characteristics | Minimum | 80 th Percentile | Maximum |
|---|---------|-----------------------------|---------|
| 5-day Biochemical Oxygen Demand. (mg/L) | - | 20 | 40 |
| Suspended Solids. (mg/L) | - | 30 | 60 |
| pH. (pH Units) | 6.5 | - | 8.5 |
| Dissolved Oxygen (mg/L) | 2 | - | - |
| Faecal Coliforms (organisms/100mL) | - | 1000 | - |
| Electrical conductivity (µS/cm) | - | - | 1700 |

Table 4 Contaminant limits to waters at the Gympie STP

| QUALITY CHARACTERISTICS | RELEASE LIMIT | LIMIT TYPE | TRIGGER VALUE |
|---|---------------|-------------------------------------|---------------|
| 5- day Biochemical Oxygen Demand (mg/L) | 15 | Maximum | - |
| Suspended Solids (mg/L) | 20 | Maximum | - |
| pH (pH Units) | 6.5-8.5 | Range | - |
| Total Nitrogen as N (mg/L) | 15 | Maximum | - |
| | 10 | Short term 50 percentile compliance | |
| Total Phosphorus as P (mg/L) | 3 | Maximum | - |

| | | | |
|------------------------------------|------|-------------------------------------|---|
| | 0.5 | Maximum ¹ | |
| | 2 | short term 50 percentile compliance | |
| Ammonia as N (mg/L) | - | - | 5 |
| Dissolved Oxygen (mg/L) | 2 | Minimum | - |
| Conductivity (µS/cm) | 1700 | Maximum | - |
| Total Chlorine (mg/L) | 0.05 | Maximum | - |
| Intestinal Enterococci (cfu/100mL) | 200 | Maximum | - |

¹ Maximum total phosphorus limit of 0.5mg/L at M1 applies seven days after "low flow" conditions in the Mary River are noted in accordance with monitoring required by condition GPW3. ("Low flow" in the Mary River is defined as a daily river flow rate of 50ML or less, as measured at Monitoring Point M4 and defined in condition GRW3.)

Table 5 – Total Allowable Yearly Mass Loads from the Gympie STP

| Parameter | Release Limit (kg/year) |
|------------------|-------------------------|
| Total Nitrogen | 7060 |
| Total Phosphorus | 1410 |

Table 6 – Release limits to land at the Gympie STP

| QUALITY CHARACTERISTICS | RELEASE LIMIT | LIMIT TYPE |
|----------------------------|---------------|------------|
| <i>E. coli</i> (cfu/100ml) | 10 | Maximum |

Table 7 - Noise Limits at the Gympie STP

| Time period | Noise level at a 'Noise sensitive place' measured as the Adjusted Maximum Sound Pressure Level $L_{A, \max \text{ adj } T}$ |
|-------------|---|
| 7am - 6pm | Background noise level plus 5 dB(A) |
| 6pm - 10pm | Background noise level plus 5 dB(A) |
| 10pm - 7am | Background noise level plus 3 dB(A) |
| Time period | Noise level at a 'Commercial place' measured as the Adjusted Maximum Sound Pressure Level $L_{A, \max \text{ adj } T}$ |
| 7am - 6pm | Background noise level plus 10 dB(A) |
| 6pm - 10pm | Background noise level plus 10 dB(A) |
| 10pm - 7am | Background noise level plus 8 dB(A) |

Note: L_{A10} may be used if shown to be equivalent to $L_{A \max}$

CW

Table 8 - Contaminant release limits to land at the Imbil STP

| Quality Characteristics | Release Limit | | | |
|--|---------------|---------|--------------------|---------|
| | Minimum | Median | 90 th % | Maximum |
| BOD (mg/L)* | - | - | - | 20 |
| Electrical Conductivity (µS/cm) | - | - | - | 800 |
| Suspended Solids (mg/L)* | - | - | - | 30 |
| Faecal Coliforms (Faecal Coliform organisms / 100mL) | - | 10,000* | - | - |
| pH (pH units) | 6.5 | - | - | 8.5 |

* The median value is calculated from a minimum of 5 samples taken in any one day.

Table 9 – Contaminant release limits to water at the Jones Hill WTP

| Quality Characteristics | Release Limit | |
|--|---------------|---|
| | Minimum | Maximum |
| 5-day Biochemical Oxygen Demand (mg/L) | N/A | 5mg/L |
| Suspended Solids (mg/L) | N/A | 30 mg/L or Equal to Background* Levels (mg/L), whichever is greater |
| pH (pH units) | 6.5 | 8.5 |
| Dissolved Oxygen (mg/L) | 5mg/L | N/A |
| Aluminium | N/A | 1.0 mg/L |

* Background = the raw water quality for suspended solids (mg/L) in the Mary River adjacent to the water treatment plant on the day of the release event.

Table 10 - Noise Limits at the Jones Hill WTP

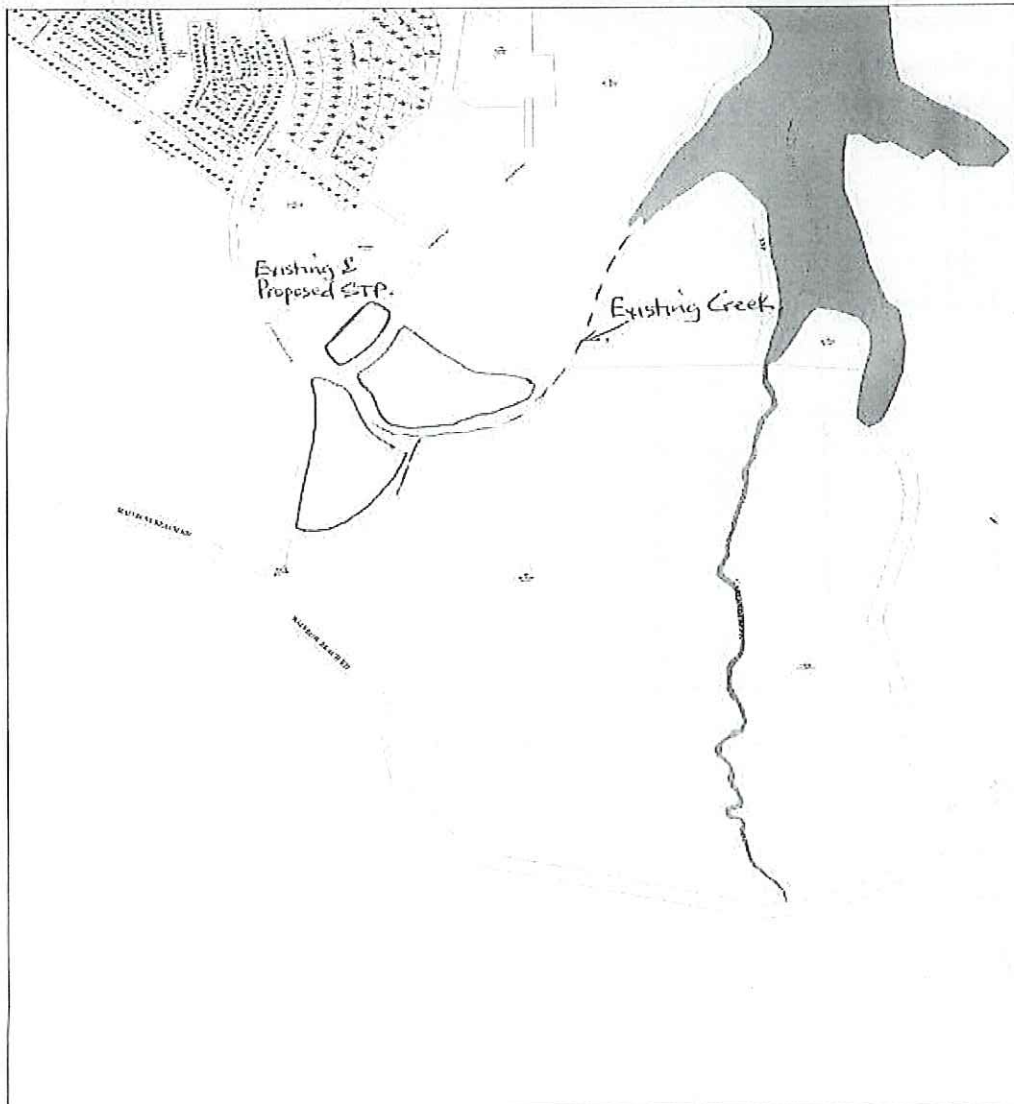
| Noise level dB(A) measured as | Monday to Saturday | | | Sundays and public holidays | | |
|-------------------------------------|---|------------|------------|-----------------------------|------------|------------|
| | 7am - 6pm | 6pm - 10pm | 10pm - 7am | 9am - 6pm | 6pm - 10pm | 10pm - 9am |
| | Noise measured at a 'Noise sensitive place' | | | | | |
| L _{A10} , adj. 10 mins | Bkg + 5 | Bkg + 5 | Bkg + 0 | Bkg + 5 | Bkg + 5 | Bkg + 0 |
| L _{A1} , adj. 10 mins | Bkg + 10 | Bkg + 10 | Bkg + 5 | Bkg + 10 | Bkg + 10 | Bkg + 5 |
| | Noise measured at a 'Commercial place' | | | | | |
| L _{A10} , adj. 10 mins | Bkg + 10 | Bkg + 10 | Bkg + 5 | Bkg + 10 | Bkg + 10 | Bkg + 5 |
| L _{A1} , adj. 10 mins | Bkg + 15 | Bkg + 15 | Bkg + 10 | Bkg + 15 | Bkg + 15 | Bkg + 10 |

* BKG = Background noise level

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Schedule 3 — Maps / Plans

Map 1 – Effluent irrigation area at Cooloola Cove STP



- ☐ Road
- ☐ Lot Boundary

☐ Maximum Irrigation Area Cooloola Cove STP

☐ Maximum Wet Weather Storage Area.

0 1000
Metres

Scale: 1:20000



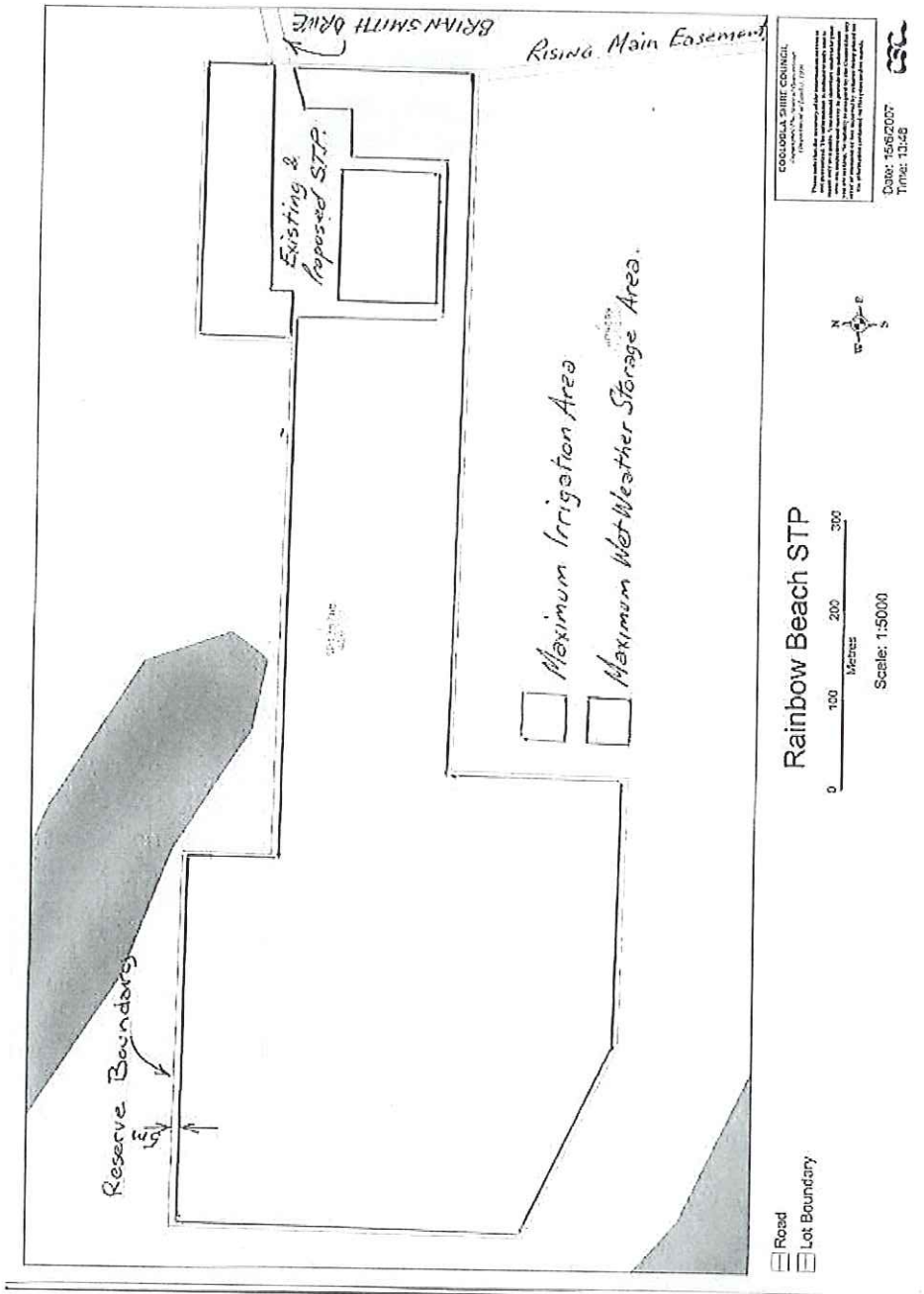
COOLOOLA SHIRE COUNCIL
Environmental Services Unit
1000 Lakes Road, Lakes Entrance, VIC 3925
Tel: 03 5123 4567
Fax: 03 5123 4568
Email: info@cooloola.vic.gov.au
Website: www.cooloola.vic.gov.au

Date: 15/6/2007

CSC

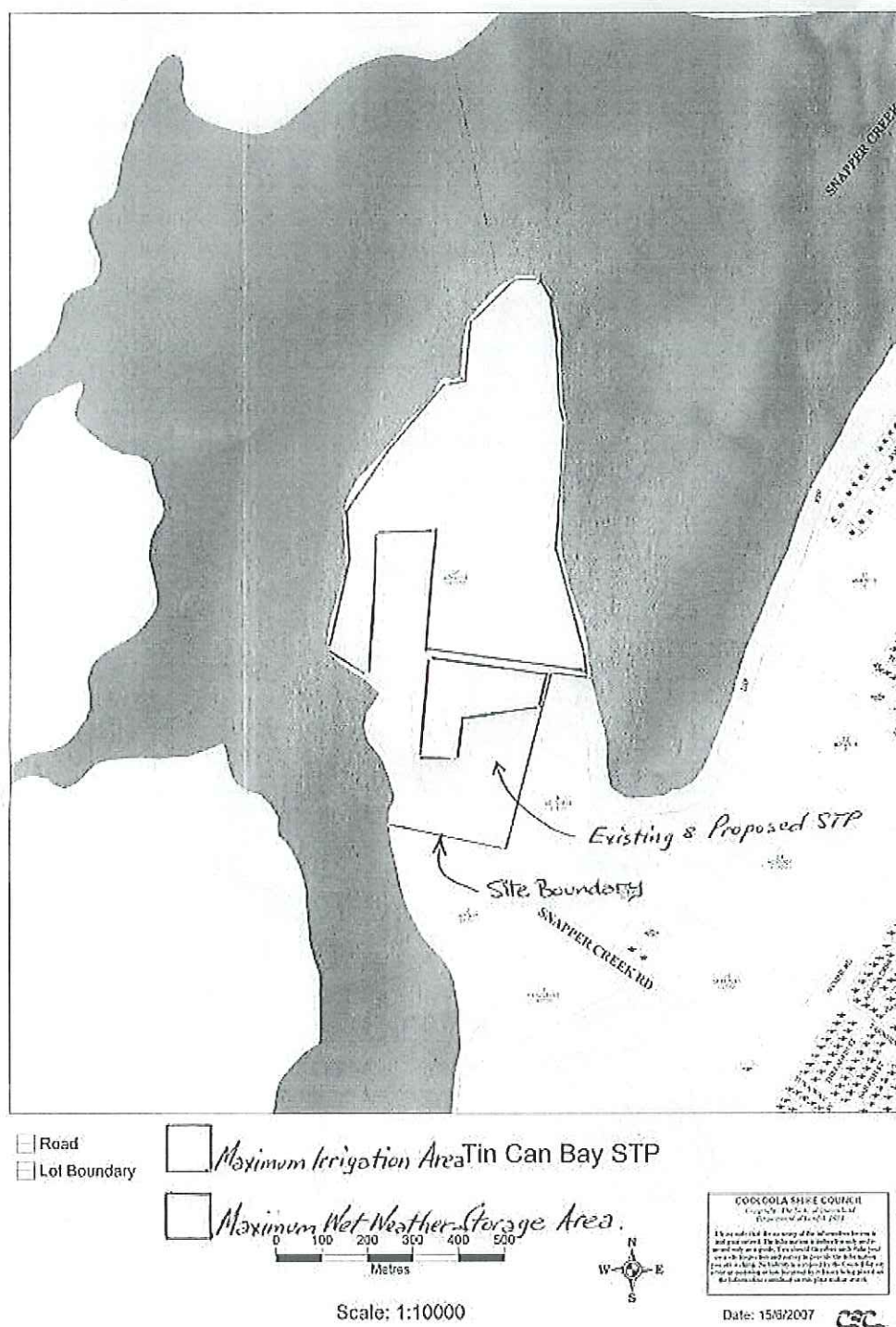
CW

Map 2 Effluent irrigation area at Rainbow Beach STP

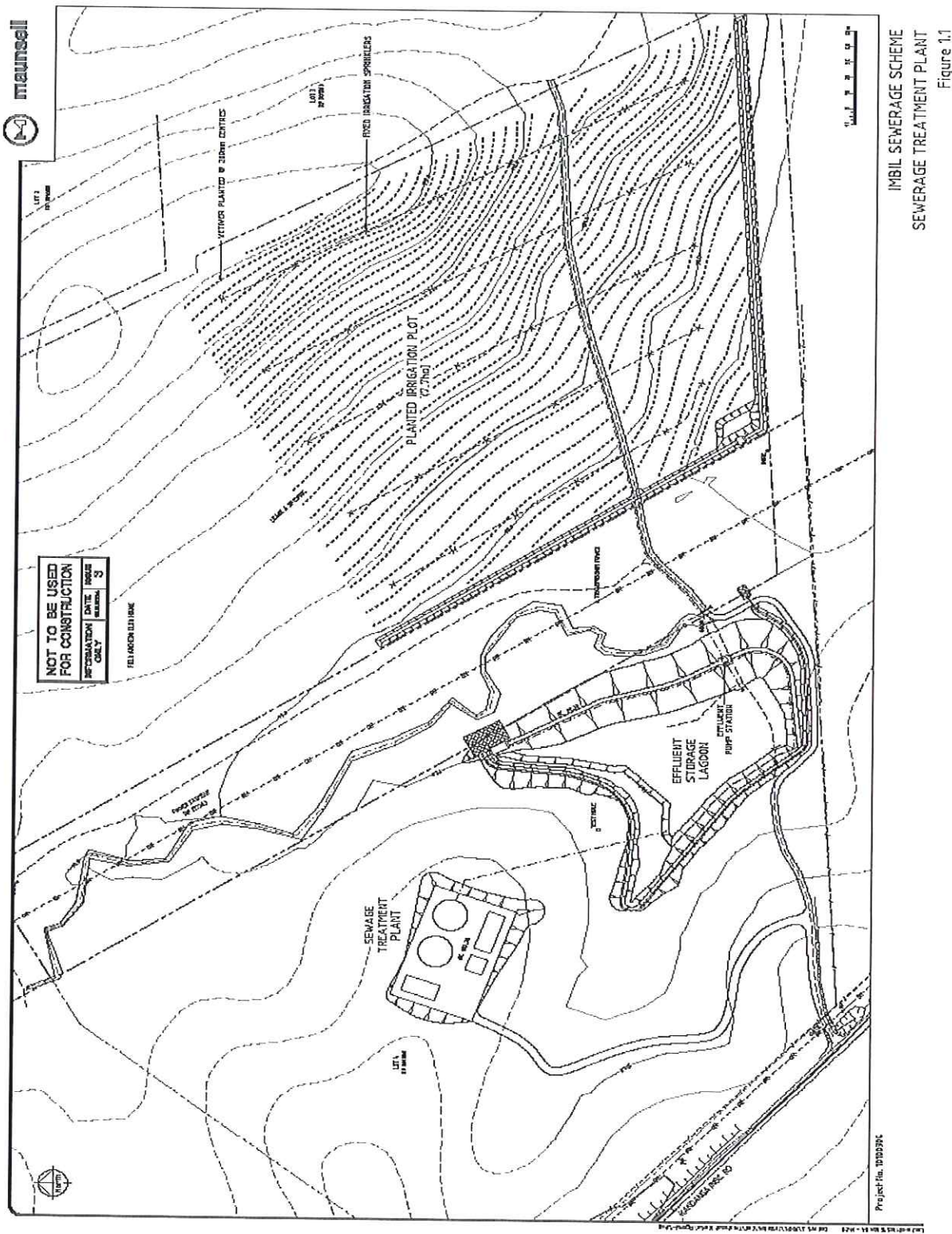


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Map 3 Effluent irrigation area at Tin Can Bay STP



Map 4 Effluent irrigation area at Imbil STP



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