On-Site Sewerage Treatment Facility Redland

Plumbing Permit Number	Owners Details
PD	Title: ☐ Mr ☐ Mrs ☐ Ms ☐ Miss Given name(s)
Type of Treatment Facility	
□ Septic □ Treatment Facility □ Treatment Plant □ AES	Surname
Type Model	Title: ☐ Mr ☐ Mrs ☐ Ms ☐ Miss Given name(s)
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Applicant Details (if applicant is not the owner)	Surname
Title:	Company
Surname	Residential address
Company	Suburb Postcode
Residential address	Postal address
	Outstands
Suburb Postcode	Suburb Postcode
Postal address	Phone − □ (W) □ (H) Mobile
Suburb Postcode	Email address
Phone − □ (W) □ (H) Mobile	Owner's Declaration
Email address Signature Date	I confirm that I have read the operating guidelines (GL-3001-001) and accept the conditions of operation as outlined on the back of this form, should Council grant approval. I hereby make application for an on-site sewerage treatment system. Must be signed by at least one property owner.
Property Description	Signature(s) Date
Site address	Signature(s) Date
Suburb Postcode	
Lot number Plan number Nature of occupancy	

Approval is granted subject to the following conditions



Conditions

- The unit shall be as authorised by the Queensland Department of Housing and Public works and shall comply with any amendments to their conditions of approval.
- The plant shall be operated in accordance with the manufacturer's requirements.
- Effluent shall meet the following minimum standards
 - a) BOD5 not to exceed 20mg/l in any sample.
 - b) Suspended solids not to exceed 30mg/l in any sample.
 - c) E.Coli limited as follows:
 - d) Geometric mean of five (5) samples taken at 30 minute intervals not to exceed 200/100ml
 - e) Any single sample not to exceed 1000/100ml.
- The effluent disposal system including the disposal area is to be installed by a Licensed Drainer. The onsite sewerage facility is to be operated and maintained in accordance with Council's Approval Conditions.
- Treated effluent shall be disposed of on-site within the declared disposal area (located within the building envelope, if applicable). Although the minimum disposal area shall be as approved by Council, it shall be the responsibility of the owner to ensure that there is no failure of the system. Should there be insufficient area of disposal; Council may require you to construct an additional disposal area at your expense.
- Council shall carry out a final inspection of the installation before commissioning.
- The facility shall be registered annually by payment of a fee and (payment of compliance and testing fee).
- Council staff to be permitted access without notice during normal working hours for physical inspection of the plant and system and the taking of biological samples.
- Council may carry out any test it considers necessary to ensure compliance with effluent standards.
- The property owner shall carry out at their expense any necessary repairs or modifications to the installation to ensure it is operated within the standards.

Conditions Cont.

- The property owner shall be responsible for the operation and maintenance of the installation to the satisfaction of Council. Accordingly, the property owner shall enter into a maintenance contract with the supplier of the equipment, or another approved organisation, to ensure proper operation of the unit. Inspections and maintenance by the maintenance contractor shall be carried out as per Chief Executive Approval, and a report shall be supplied to Council's Plumbing Assessment Unit within fourteen (14) days of the due date of service. The report shall comprise the contractor's normal service report.
- Should the property be offered for sale it is the property owner's responsibility to advise prospective purchasers of the existence of the facility and the requirements relating to continuing maintenance and their responsibility to acquaint any further purchasers.
- Should you fail to comply with the condition of Approval, e.g.
 - 1. Disposal of effluent outside the disposal area; or
 - 2. Non-submission of maintenance reports;
 - Council will prosecute under the powers of the Plumbing and Drainage Act 2002.
 - This action will be taken after the gathering of sufficient evidence and failure by the property owner to rectify the situation within fourteen (14) days of notice from Council.
- Operation of the facility shall be adjusted so that any deviation from approved operating standards is rectified within fourteen (14) days of notice from Council. Should Council become aware that the facility is continually not producing effluent in accordance with the required standards and no action is taken to improve the performance of the facility, then Council may declare the dwelling unfit for occupation.
- An Advanced Secondary On-Site Wastewater Treatment Facility must be installed on Southern Moreton Bay Islands – refer GL3032 001 Performance Criteria 10.



GL-3001-001



Secondary Treatment Plants

Scope

This guideline applies to Redland City Council or contractors installation of secondary treatment plants. To be read in conjunction with GL-3032-001 On-site Wastewater Management Guideline.

Purpose

This guideline lists all requirements relating to the assessment, approval, installation and operation/maintenance of secondary treatment plants within the City.

Actions and Responsibilities

The Manager of Community Standards Group is responsibile for the approval of plans.

To allow the installation of only those on-site domestic sewage treatment systems which will not jeopardise the health of the public.

To ensure that such installations do not harm the neighbourhood environment, are appropriate to the land use zoning under the town plan and are maintained and operate to a specified standard.

1 APPLICATIONS

1.1 Constraints on Use - General

- 1.1.1 All properties in a declared sewered area must connect their sewage system to the Council's Sanitary Sewer System.
- 1.1.2 Property owners whose property is not in a declared sewerage area must obtain a permit of compliance for new and replacement sanitary and sullage waste disposal installations from the Plumbing Services section.

1.2 Restrictions on Use

1.2.1 Sanitary Waste Treatment Systems

Only sanitary waste treatment or collection systems that have been licensed by the Department of Housing and Public Works are permitted within the area of Redland City.

- 1.2.2 Minimim size allotment for Secondary Sewerage Treatment Plant above ground disposal is 4000 square metres.
- 1.2.3 Effluent and Sullage Treatment Systems

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The following effluent or sullage systems are permitted:

Lots less than 4000 square metres

- Trenches, absorption (see property assessment for design)
- Turfed, transpiration areas. Trenches to be minimum of 300mm x 300mm at 1m separations (see 2.3.1)
- · Sub-surface irrigation to fixed, planted landscaped areas (see 2.3.1)

Lots 4000 square metres or larger

- Trenches, absorption (to Local Authority requirements)
- Turfed, transpiration areas. Trenches of be minimum of 300mm x 300mm at 1m separations. See 2.3.1
- Sub-surface irrigation to fixed planted landscaped areas (see 2.3.1)
- Surface irrigation (drip, trickle or flood) to fixed planted landscaped areas (spray methods that produce aerial mists is prohibited) (see 2.3.1)
- Sand filters followed by surface irrigation (drip, trickle or flood) in fixed landscaped areas (spray methods that produce areial mists is prohibited) (see 2.3.1)

1.3 Restrictions on Use – Effluent Disposal

- 13.3.1 Areas used for drip, trickle or flood irrigation shall not be used for passive or active recreation purposes. Paths, barbecues, play equipment and the like shall not be constructed or erected in such areas and shall be located no closer than three (3) metres from the edge of the area.
- 1.3.2 Effluent from secondary sewerage treatment plants shall not be disposed of by spraying or any other method that produces aerial mists.

1.4 Information to be Submitted with Proposal

1.4.1 Site Plan

The site plan shall be drawn to scale and clearly indicate the following:

- Location of dwelling and other buildings on site
- Proposed location of the treatment plant
- Proposed location of the effluent disposal area
- If the property is already developed then the location of passive recreation equipment, eg. awnings, paths, BBQ's, shall be shown.

1.4.2 Details

Installation details shall indicate the following:

- Details of proposed plant from manufacturer must include unit specifications and aspects of tanks
- Treatment and work to be undertaken in fixed disposal area

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Group: City Planning & Environment

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 Location of signs if surface irrigation is proposed, i.e. the sign shall be on a white background with red lettering at least 20mm high. The sign shall state:

RECLAIMED EFFLUENT DO NOT DRINK AVOID CONTACT

- Copy of maintenance contract detailing that inspections and maintenance shall be carried out in accordance with the Manufacturers License.
- Submission of a completed application form and payment of fees.

2 INSTALLATION/DESIGN GUIDELINES

2.1 Plant Requirements

- 2.1.1 Only applications for treatment systems licensed for domestic applications will be considered.
- 2.1.2 Capacity of the treatment or collection system must be linked to the number of bedrooms in the dwelings. The minimum capacity of the treatment or collection system to be ten (10) persons. Larger units as required.
- 2.1.3 The sanitary and sullage waste treatment system shall be chosen to suit the site's ability to contain and dispose of all effluent and other by-products within the property boundaries. Relevant Standards, such as the AS/NZS 1547:2012 should be used for this assessment.
 - Other by-products shall not include sludge, greases and chemical toilet waste.
- 2.1.4 The Sanitary Waste Treatment system shall be sited so as to be unaffected by surface and rainwater run-off.
- 2.1.5 The top of the treatment plant shall be 100mm minimum above finished surface level.
- 2.1.6 Noise Emissions from pumps shall not exceed 3 decibel above background noise levels when measured at the nearest lot boundary. Where emissions are greater than 3 decibel, the pump is to be housed in an Acoustically Insulated Casing or Enclosure to achieve the 3-decibel above background noise levels.
- 2.1.7 Firms and individuals manufacturing, installing and maintaining secondary sewerage treatment plans shall have the appropriate licences and accreditation.

2.2 Disposal Area Requirements:

- 2.2.1 There is not to be any discernible odour from the disposal area at the property boundary.
- 2.2.2 When designing a disposal area the following controls shall be taken into account:

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- Type and depth of soil;
- · Any retaining and filling;
- Site slopes;
- Location of domestic water sources (underground, surface or piped);
- Position of irrigation lines;
- Depth to water table at location of disposal unit or area;
- Irrigation equipment details;
- Methods to prevent effluent run-off from the disposal area;
- Dimensions from boundaries, buildings, water courses and gullies and domestic water sources in adjoining properties;
- Any other relevant information required by Council and identified after a site inspection;
- All trenches and/or irrigation lines to run parallel with contours of the allotment; and
- Only approved effluent materials to be used in the disposal system (coded as per AS/ANZ 1547:2012).

2.3 Disposal Area Sizing

2.3.1 The size of a disposal area shall be sized in accordance with the AS.1547-2012. The minimum size of a disposal area (transpiration or landscaped) shall be 300m2

2.4 Properties of Disposal Area

- 2.4.1 Topsoil shall have a minimum depth of 100mm
 - In determining the area of the disposal area only those portions that have a ground slope of less than 10% shall be considered
 - · Gullies shall not be permitted in the disposal area

3 OWNERS RESPONSIBILITIES

3.1 Undertakings and Requirements for Owners

- 3.1.1 The owners shall be responsibile to ensure that the installation complies with Department of Housing and Public Works license conditions, with the *Plumbing and Drainage Act 2002* and these Council guidelines and conditions of permit.
- 3.1.2 During the currency of the permit, a permit fee in accordance with a scale of fees in respect of sanitary and sullage waste disposal systems determined by the Council from time to time, shall be paid each 12 months by the permit holder. Extra fees are payable where Council audit tests fail to meet license requirements. When a property changes title, a permit will be transferred to the new property owner.
- 3.1.3 The owner of sewage household treatment plant (HSTP) shall enter into a maintenance contract with the supplier of the system, or other agent, to ensure the proper operation and maintenance of the unit

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- 3.1.4 Copies of the entire contractor's normal service reports shall be submitted to Council on a three monthly basis or as per plant approval requirements.
- 3.1.5 Effluent disposal areas are to be completely prepared (Planted and Landscaped) and the disposal system fully installed to the satisfaction of Council <u>prior</u> to the Final Plumbing and Drainage Inspection and commissioning of the treatment system.

3.2 Fees

3.2.1 Application Fee

Current fees are listed in Council's fees and charges. The application fee has three components:

- Application Fee
- Annual Fee
- A contribution to a biological test that will be carried out after six (6) months.

3.2.2 Annual Fees

The value of the annual fee will vary depending on the results of the biological testing. This test may be the required test carried out during the first year or from random audit tests.

The failure of a test will neccessitate further testing and consequently attract an increased fee to compensate for further testing.

3.2.3 Compliance Testing Fee Contribution and ensuring compliance with permit conditions

This fee will be levied, based on the performance of the plant. The following examples indicate how the fee could vary.

First test complies No extra test fees until a random test fails

First test failure Contribution for testing fee for test in next 12 monthly period

(as per Council's current listed fee)

Second test complies No extra text fees until a random test fails

Second test failure Contribution for two testing fees for 6 monthly tests (as per

Council's current listed fee)

Note 1:

If six (6) monthly tests comply, unit then returns to 12 monthly testing with no extra fees until random tests fail.

Note 2:

Council reserves the right to take action under the *Health Act* to require plants to comply with license requirements and order the owner to carry out extra testing to ensure compliance.

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3.3 Rectification of a Malfunctioning System

3.3.1 When Council becomes aware that a plant and system is not producing effluent in accordance with the required standard, the owner will be given two (2) weeks to have the plant operating satisfactorily (biological test by owners will be necessary to prove performance in accordance with the standards)

If no action is taken to improve the performance of a plant then Council may take action under the Health Act to require the plant to operate in accordance with its licence and as a last resort the dwelling could be declared not fit for human habitation.

3.4 Lack of Compliance with Conditions of Permit

- 341 Should the owner fail to comply with the conditions of the permit; eg.
 - (1)Disposal of effluent outside the disposal area; or
 - (2)Non submission of maintenance reports;
 - Then Council will prosecute under its powers of the Plumbing and Drainage Act 2002. This action will be taken after the gathering of sufficient evidence.
 - Failure to rectify the situation within 14 days of receiving a notice from Council.

3.5 Advice to Purchaser

3.5.1 Should the property be offered for sale in the future it is the present owner's responsibility to advise prospective purchasers of the existence of the plant and of the requirements relating to continuing maintenance and the need to acquaint any future purchasers.

3.6 Special Requirements Relating to an Individual Application

Where 10% or more of a brand of sewerage treatment plants are failing to produce effluent in accordance with license requirements, no additional plants of that manufacture can be installed. Also the maximum number of plants not performing satisfactorily shall not exceed

3.7 Conditions of Permit for Installation & Operation

- The unit installed shall be as authorised by the Department of Housing and Public Works shall comply with any amendments to their conditions of approval.
 - Plant to be operated in accordance with manufacturers requirements
 - Effluent shall meet the following minimum standards:
 - a) BOD5 not to exceed 20mg/l in any sample;
 - b) Suspended solids not to exceed 30mg/l in any sample;
 - Free residual chlorine to be no less than 0.5mg/l in any sample;
 - d) E.Colli limited as follows:

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- geometric mean of 5 samples taken at 30 minute intervals not to exceed 200/100ml
- ii. any single sample not to exceed 1000/100ml
- Effluent disosal system to be installed, operated and maintained in accordance with approved plan.
- Treated effluent shall be disposed of on-site within the delcared disposal area. Although the minimum disposal area shall be as approved by Council, it shall be the responsibility of the owner to ensure that there is no failure of the system. Should there be insufficient area for disposal the Council may require the owner to construct additional disposal area at the owner's expense.
- A commissioning certificate for the treatment plant/system is required.
- Plant shall be registered annually by payment of a permit fee and payment of a compliance and testing fee if applicable.
- Council staff to be permitted access without notice during normal working hours for physical inspection of plant and system and the taking of biological samples.
- Council may carry out tests it considers necessary to ensure compliance with effluent standards.
- The owner shall carry out, at his expense, any necessary repairs or modifications to his/her installation to ensure it operates within the standards.
- Operation of the plant shall be adjusted so that deviation from approved operating standards are rectified within two (2) weeks of advice being received by owner.
- The owner shall be responsibile for the operation and maintenance of the installation to the satisfaction of Council. Accordingly, the owner shall enter into an annual maintenance contract with the supplier of the equipment, or other approved organisation, to ensure the proper operation of the unit. Inspections and maintenance by the maintenance contractor shall be carried out at least once every three months or as the Chief Executive Approval, and a report shall be sent to Council's Plumbing Services section with reference to permit number within 14 days of the due date of service. The report shall comprise of the contractor's normal service report.
- Results of the quarterly maintenance reports to be supplied every three months.

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Associated Documents

AS/NZ 1547:2012

Document Control

- General Manager, Environment, Planning and Development can approve amendments to this guideline. Please forward any requests to change the content of this document to the Manager.
- Approved amended documents must be submitted to the Office of the Chief Executive Officer to place the document on the Policy, Guidelines and Procedures Register.