

## E5. On-site and small scale wastewater treatment and disposal

### E5.1. Background

On-site wastewater systems are utilised for residential dwellings, commercial and industrial activities and facilities not serviced by a wastewater network or where the wastewater network does not have capacity to service the site. The on-site and small scale wastewater treatment and disposal provisions are regional provisions and apply to the discharge of domestic type wastewater and wastewater (excluding trade waste) via an on-site wastewater treatment system and land disposal.

This includes discharges from small communal on-site treatment and disposal systems that service more than one dwelling on different sites.

Wastewater networks/wastewater treatment plants are controlled by the relevant objectives and policies for wastewater networks in E1 Water quality and integrated management and rules for wastewater networks in E6 Wastewater network management.

Septic tanks and small package treatment plants are the most common mechanisms for treating and disposing of wastewater where there is no reticulated wastewater network. A range of treatment systems are available that treat wastewater effluent to a high quality and reduce potential adverse effects on the environment.

### E5.2. Objectives [rp]

The objectives are located in E1 Water quality and integrated management.

### E5.3. Policies [rp]

The policies are located in E1 Water quality and integrated management.

### E5.4. Activity table

Table E5.4.1 Activity table specifies the activity status for the discharge of wastewater onto or into land from on-site and small scale wastewater treatment and disposal systems pursuant to section 15 of the Resource Management Act 1991.

**Table E5.4.1 Activity table**

| Activity |                                                                                                                                                                                                                                                       | Activity status |
|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|
| (A1)     | Discharge of treated domestic type wastewater onto or into land within a site via a land application disposal system                                                                                                                                  | P               |
| (A2)     | Discharge of treated domestic type wastewater onto or into land via a land application disposal system that was a permitted activity and/or lawfully in existence without the need for a resource consent at the date of this rule becoming operative | P               |
| (A3)     | Discharge of treated domestic type wastewater from one dwelling without a permanent power supply onto or into land within a site via a land application disposal system                                                                               | P               |
| (A4)     | Discharge of treated domestic type wastewater onto or into land via one or up to three land application disposal systems within a site, in circumstances where the systems cannot be                                                                  | P               |

|      |                                                                                                                                                                                     |    |
|------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|
|      | reasonably combined                                                                                                                                                                 |    |
| (A5) | Discharges of up to 6m <sup>3</sup> per day of treated domestic type wastewater via a land application disposal system                                                              | RD |
| (A6) | Discharge of treated domestic-type wastewater and wastewater (excluding trade waste) that does not meet the relevant standards or is not provided for by any other rule in the Plan | D  |
| (A7) | Discharge of domestic type wastewater by new deep bore disposal                                                                                                                     | Pr |

### E5.5. Notification

- (1) Any application for resource consent for an activity listed in Table E5.4.1 Activity table above will be subject to the normal tests for notification under the relevant sections of the Resource Management Act 1991.
- (2) When deciding who is an affected person in relation to any activity for the purposes of section 95E of the Resource Management Act 1991 the Council will give specific consideration to those persons listed in Rule C1.13(4).

### E5.6. Standards

#### E5.6.1. General standards for all permitted activities and restricted discretionary activities

Activities listed as permitted activities or restricted discretionary activities in Table E5.4.1 Activity table must comply with the following permitted activity standards.

- (1) The wastewater discharge must not result in contamination of ground water at a point of extraction, any surface water, a stormwater drain, a neighbouring property, or cause a public health risk.
- (2) The construction of the on-site wastewater treatment system and the resulting discharge of treated wastewater must not disturb or otherwise adversely affect any place scheduled in the Historic Heritage Overlay or any site or place in the Sites and Places of Significance to Mana Whenua Overlay.
- (3) The wastewater treatment system must be maintained by a suitably qualified on-site wastewater service provider in accordance with Technical Publication 58 On-site Wastewater Systems: Design and Management Manual 2004 (TP58) recommendations, the manufacturer's recommendations or the suitably qualified on-site wastewater service provider's recommendations. At a minimum, the maintenance, where relevant to the specific system, must ensure that:
  - (a) septic tank outlet filters are checked and serviced regularly at intervals as recommended by the manufacturer;
  - (b) the secondary/ tertiary treatment plant and the land application disposal system is serviced six monthly by a suitably qualified on-site wastewater service provider;

- (c) primary/ septic tank(s) and the land application disposal system are inspected no less frequently than every three years and where necessary the tank(s) are pumped out by a suitably qualified on-site wastewater service provider when sludge and scum levels occupy 50 per cent of the tank volume; and
  - (d) records of each maintenance action must be retained and made available on the site for inspection by the Council or their agents.
- (4) Reserve disposal areas must be retained in a suitable state and condition that does not prevent their use for future effluent disposal.
- (5) There must be no activities, including heavy vehicle or stock access, over the wastewater disposal area that may adversely affect the disposal area.

#### **E5.6.2. Permitted activity standards**

All permitted activities in Table E5.4.1 Activity table must comply with the following activity specific standards as well as Standard E5.6.1 above.

##### **E5.6.2.1. Discharge of treated domestic type wastewater onto or into land within a site via a treatment and land application disposal system**

- (1) The wastewater design flow and actual flow must not be greater than 2m<sup>3</sup> per day.
- (2) The ratio of site area to wastewater discharge volume must be equal to or greater than 1.5m<sup>2</sup> per litre per day.
- (3) The site must not be contained or described in a title issued under the Unit Titles Act 2010 or a cross lease form of title.
- (4) The site investigation procedures, design, installation and operation of the on-site wastewater treatment and land application disposal system must be undertaken in accordance with Technical Publication 58 On-site Wastewater Systems: Design and Management Manual 2004 (TP58), and must in particular give effect to all of the following:
  - (a) the site assessment practices to determine the system suitability (Chapter 5 of Technical Publication 58 On-site Wastewater Systems: Design and Management Manual 2004 (TP58). The flow allowances used to establish system design flow must be at least 120 litres/person/day for dwellings and the maximum estimated water use for all other activities as specified in Chapter 6 of Technical Publication 58 On-site Wastewater Systems: Design and Management Manual 2004 (TP58);
  - (b) a minimum of secondary treatment that is in accordance with the design criteria and parameter ranges provided in Chapter 7 of Technical Publication 58 On-site Wastewater Systems: Design and Management Manual 2004 (TP58);

- (c) the land disposal system must comprise pressure compensating dripper irrigation with an area loading rate dependant on soil category, but no greater than 5mm/day; and
- (d) the provision and maintenance of a minimum reserve land disposal area (Chapter 5 of Technical Publication 58 On-site Wastewater Systems: Design and Management Manual 2004 (TP58)).

**E5.6.2.2. Discharge of treated domestic type wastewater onto or into land via a land application disposal system that was a permitted activity and/or lawfully in existence without the need for a resource consent at the date of this rule becoming operative**

- (1) The nature of the wastewater discharge must be the same as that existing at the date this rule becomes operative.
- (2) The wastewater discharge must not exceed 2m<sup>3</sup> per day and the design flow must be no greater than that existing at the date this rule becomes operative.
- (3) At a minimum, the wastewater treatment and land application disposal system must be maintained in accordance with its original design.

**E5.6.2.3. Discharge of treated domestic type wastewater from one dwelling without a permanent power supply to land within a site via a land application disposal system**

- (1) The wastewater design flow and actual flow must not be greater than 2m<sup>3</sup> per day.
- (2) The ratio of site area to wastewater discharge volume must be equal to or greater than 1.5m<sup>2</sup> per litre per day.
- (3) The site must not be contained or described in a title issued under the Unit Titles Act 2010 or a cross-lease form of title.
- (4) The site investigation procedures, design, installation and operation of the on-site wastewater treatment and land application disposal system must be undertaken in accordance with Technical Publication 58 On-site Wastewater Systems: Design and Management Manual 2004 (TP58), and must in particular give effect to all of the following matters:
  - (a) the site assessment practices to determine the system suitability and design parameters (Chapter 5 of Technical Publication 58 On-site Wastewater Systems: Design and Management Manual 2004 (TP58));
  - (b) the flow allowances used to establish system design flow, must be at least 100 litres/person/day (Chapter 6 of Technical Publication 58 On-site Wastewater Systems: Design and Management Manual 2004 (TP58));

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- (c) septic tanks (as standalone primary treatment units) must be fitted with an outlet filter;
- (d) the land disposal system must comprise a gravity loaded or siphon or pump dosed land application system appropriate to the soil conditions in accordance with Standard E5.6.2.3(4)(a) above;
- (e) the discharge quality standards to be achieved by the system (Chapter 7 of Technical Publication 58 On-site Wastewater Systems: Design and Management Manual 2004 (TP58); and
- (f) the provision and maintenance of a minimum reserve land disposal area (Chapter 5 of Technical Publication 58 On-site Wastewater Systems: Design and Management Manual 2004 (TP58)).

#### **E5.6.2.4. Discharge of treated domestic type wastewater onto or into land via one or up to three land application disposal systems within a site, in circumstances where the systems cannot be reasonably combined**

- (1) The design flow and actual flow for each system is not greater than 3m<sup>3</sup> per day.
- (2) The ratio of site area to discharge volume must be equal to or greater than 3m<sup>2</sup> per litre per day for the total combined flow of the discharge.
- (3) There must be no less than 100 per cent reserve wastewater disposal area per system available within the site.
- (4) The site investigation procedures, design, installation and operation of the on-site wastewater treatment and land application disposal system must be undertaken in accordance with Technical Publication 58 On-site Wastewater Systems: Design and Management Manual 2004 (TP58), and must, in particular, give effect to all of the following matters:
  - (a) the site assessment practices to determine the system suitability (Chapter 5 of Technical Publication 58 On-site Wastewater Systems: Design and Management Manual 2004 (TP58));
  - (b) the flow allowances used to establish system design flow must be at least 160 litres/person/day for dwellings and the maximum estimated water use for all other activities as specified in Chapter 6 of Technical Publication 58 On-site Wastewater Systems: Design and Management Manual 2004 (TP58);
  - (c) septic tanks (as stand-alone primary treatment units) must be fitted with an outlet filter;
  - (d) the land disposal system must comprise pressure compensating dripper irrigation or low pressure effluent distribution systems (LPED) or trenches or beds;

- (e) the discharge quality standards to be achieved by the system (Chapter 7 of Technical Publication 58 On-site Wastewater Systems: Design and Management Manual 2004 (TP58); and
- (f) the provision and maintenance of a minimum reserve land disposal area (Chapter 5 of Technical Publication 58 On-site Wastewater Systems: Design and Management Manual 2004 (TP58)).

#### **E5.7. Assessment – controlled activities**

There are no controlled activities in this section.

#### **E5.8. Assessment – Restricted discretionary activities**

##### **E5.8.1. Matters of discretion**

The Council will restrict its discretion to all the following matters when assessing a restricted discretionary resource consent application:

- (1) for discharges of up to 6m<sup>3</sup> per day of treated domestic type wastewater via a land application disposal system:
  - (a) the quality and design flow volume of wastewater;
  - (b) the design and performance of the wastewater treatment system;
  - (c) the design of the land disposal system, the disposal method, and the rate of land application;
  - (d) the avoidance, remediation or mitigation of adverse effects on the environment arising from the design or intended operation of the wastewater treatment and disposal system;
  - (e) the provision of a suitable land application reserve area;
  - (f) the effects on Mana Whenua values; and
  - (g) the proposed consent duration and any proposed monitoring.

##### **E5.8.2. Assessment criteria**

The Council will consider the relevant assessment criteria for restricted discretionary activities from the list below:

- (1) for discharges of up to 6m<sup>3</sup> per day of treated domestic type wastewater via a land application disposal system:
  - (a) whether the proposed the on-site disposal of wastewater is appropriate in terms of all of the following:
    - (i) the absence of wastewater network available to the site, or the practicality of connecting to such a network;

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- (ii) the on-site wastewater treatment and discharge is of a quality and volume that is suitable for the site conditions, including proximity to surface water bodies, stormwater drains and neighbouring properties;
- (iii) the on-site wastewater treatment and discharge is of a quality and volume that avoids significant adverse effects on surface water, groundwater quality, public health and amenity; and other potential adverse effects are remediated or mitigated; and
- (iv) the on-site wastewater treatment and discharge is of a quality and volume that any matters relating to the potential adverse effects of the discharge on Mana Whenua values are identified and addressed.

### **E5.9. Special information requirements**

There are no special information requirements in this section.