

## **E35. Rural production discharges**

### **E35.1. Background**

Farming activities generate various waste products and contaminants that have the potential to pollute rivers, streams and groundwater. Many of the activities which produce these contaminants are essential for the operation of rural production activities.

However, these activities can give rise to increased levels of suspended sediment, chemicals, nutrients and bacteria from faecal matter. Some of the most common discharges from rural production activities that need to be managed are the disposal of effluent from dairy sheds, as well as, leachate from offal holes, silage storage and composted materials.

The application of fertiliser to land is a critical component of a productive farming unit. However, the runoff of fertiliser into rivers and streams and seepage into groundwater is a contributor to nutrient enrichment in Auckland's rural streams and coastal water. This in turn can affect the biological values of the water and can encourage the growth of unwanted aquatic vegetation. Nitrate contamination from rural production activities in the south Auckland volcanic aquifers is also a matter of concern.

The principal management approach is one that focuses on containing discharges from rural production activities onsite, and treating the discharges using appropriate measures. The use of best industry practices for the application of potential contaminants such as fertiliser form the basis for controlling these types of discharges.

The National Policy Statement for Freshwater Management 2012 requires that freshwater objectives for quality and quantity are established and environmental flows or levels set for all freshwater bodies in Auckland. The standards and methods in this section will be reviewed and updated by a plan change or plan changes to meet the requirements of the National Policy Statement for Freshwater Management.

### **E35.2. Objective [rp]**

- (1) Discharges from rural production activities are managed to protect the life supporting capacity of land and water resources.

### **E35.3. Policies [rp]**

- (1) Avoid more than minor adverse effects of discharges from rural production activities on water bodies, aquifers and artificial watercourses.
- (2) Enable dairy effluent discharges to land provided that discharge systems are designed and operated to minimise overland flow to surface water bodies and leaching of nutrients and other contaminants to groundwater.
- (3) Enable discharges of fertilisers to land where:
  - (a) its application is in accordance with best industry practice; and
  - (b) the rate of application does not exceed the assimilative capacity of the soil and its vegetative cover; and

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- (c) the vulnerability of the south Auckland volcanic aquifer to potential groundwater contamination has been considered and any effects are avoided or minimised.
- (4) Avoid the discharge of contaminants generated from rural production activities directly into surface water, intermittent streams and artificial watercourses that connect to surface water.
- (5) Manage discharges from rural production activities to land that could run overland into water where:
- (a) best industry practice will be used to avoid more than minor effects on land, water bodies and groundwater; and
  - (b) adverse effects on Mana Whenua values associated with freshwater resources, including wāhi tapu, wāhi taonga and mahinga kai are avoided where practicable, or otherwise minimised; and
  - (c) there are no hazardous substances or human waste/sewage in the discharge; and
  - (d) offal holes, silage storage facilities, and stockpiled and composted vegetative material or animal waste are appropriately sited and constructed; and
  - (e) silage storage facilities are sealed and silage stacks covered; and
  - (f) leachate is collected, stored and appropriately disposed of to land or off-site; and
  - (g) there is no offensive or objectionable odour or dust beyond the boundary of the property where the contaminants are being discharged.

### E35.4. Activity table

Table E35.4.1 Activity table specifies the activity status for the application and discharge of contaminants from rural production activities onto or into land and/or into water pursuant to section 9(2) and section 15 of the Resource Management Act 1991.

**Table E35.4.1 Activity table**

Activity		Activity status
<b>Discharges of dairy farm effluent onto or into land and/or into water</b>		
(A1)	Discharge of dairy effluent onto or into land that complies with Standard E35.6.1.1 and Standard E35.6.1.2	P
(A2)	Discharge of dairy effluent onto or into land that does not comply with Standard E35.6.1.1 or Standard E35.6.1.2	D
(A3)	Discharge of treated dairy effluent into water	D
(A4)	Discharge of untreated dairy effluent to water	Pr
<b>Application and discharge of fertiliser onto or into land</b>		
(A5)	Application and discharge of fertiliser onto or into land that	P

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	complies with Standard E35.6.1.1 and Standard E35.6.1.3	
(A6)	Application and discharge of fertiliser that does not comply with Standard E35.6.1.1 or Standard E35.6.1.3	D
<b>Other rural production activities</b>		
(A7)	The use of land to stockpile and compost vegetative material or animal waste and the discharge of vegetative material or animal waste onto or into land that complies with Standard E35.6.1.1 and Standard E35.6.1.4	P
(A8)	The use of land as a silage storage facility and the discharge of silage leachate onto or into land that complies with Standard E35.6.1.1 and Standard E35.6.1.5	P
(A9)	The emergency discharge of milk onto or into land but not directly into water that complies with Standard E35.6.1.1	P
(A10)	The discharge of greenhouse nutrient solution onto or into land where the total floor area of the greenhouse is up to 1 hectare and that complies with Standard E35.6.1.1 and Standard E35.6.1.6	P
(A11)	The discharge of greenhouse nutrient solution onto or into land where the total floor area of the greenhouse is greater than 1 hectare and that complies with Standard E35.6.2.1	C
(A12)	The disposal of dead stock and offal onto or into land that complies with Standard E35.6.1.1 and Standard E35.6.1.7	P
(A13)	The discharge of other liquid contaminants onto or into land where the discharge volume is up to 10m <sup>3</sup> per discharge system per day that complies with Standard E35.6.1.1	P
(A14)	Rural production discharges that do not meet the permitted activity standards or controlled activity standards	D
(A15)	Any other rural production discharge onto or into land or into water not otherwise provided for	D

#### **E35.5. Notification**

- (1) An application for resource consent for a controlled activity listed in Table E35.4.1 Activity table above will be considered without public or limited notification or the need to obtain written approval from affected parties unless the Council decides that special circumstances exist under section 95A(4) of the Resource Management Act 1991.
- (2) Any application for resource consent for an activity listed in Table E35.4.1 Activity table and which is not listed in E35.5(1) will be subject to the normal tests for notification under the relevant sections of the Resource Management Act 1991.
- (3) 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).

## **E35.6. Standards**

### **E35.6.1. Permitted activity standards**

All permitted activities in Table E35.4.1 Activity table must comply with the following general and activity specific standards.

#### **E35.6.1.1. General standards for all permitted activities**

- (1) There must be no direct discharge or runoff to surface water, intermittent streams or artificial watercourses that connect to surface water.
- (2) Discharges must not result in surface ponding of more than three hours in duration.
- (3) The application rate of nitrogen from any combination of dairy effluent (excluding urine from grazing animals), nitrogenous fertiliser and other nitrogen discharges from the other rural production activities must not:
  - (a) exceed 150kg nitrogen/hectare/year and 30kg nitrogen/hectare/31 days onto grazed pasture underlain by sandy and volcanic soils; or
  - (b) exceed 200kg nitrogen/hectare/year and 50kg nitrogen/hectare/31 days onto grazed pasture underlain by soils other than those listed above; or
  - (c) exceed the reasonable nitrogen requirements of the crop being grown on ground other than grazed pasture.

#### **E35.6.1.2. Discharge of dairy effluent onto or into land**

- (1) All new and modified feedpads and permanent standoff pads must be sealed and the permeability of the sealing layer must not exceed  $1 \times 10^{-9}$  m/s.
- (2) Certification of the permeability of the sealing layer of all new and modified feedpads and permanent standoff pads must be submitted to the Council upon completion of the system.
- (3) Effluent from dairy sheds and feedpads must discharge into an effluent storage system and the effluent storage system must comply with all of the following:
  - (a) the volume of all systems constructed or modified after 30 September 2013 will be determined using the Dairy Effluent Storage Calculator for the Auckland Region 2012;
  - (b) all new and modified effluent storage systems must be sealed and the permeability of the sealing layer must not exceed  $1 \times 10^{-9}$  m/s;

- (c) confirmation of the storage system volume and certification of the permeability of the sealing layer must be submitted to the Council upon completion of the system; and
- (d) any effluent storage system that meet the following criteria must not be solely made up of sump storage:
  - (i) effluent storage systems in place from 30 September 2021; or
  - (ii) new or modified effluent storage systems.
- (4) Stormwater diversion must be in place to direct stormwater from ancillary roof areas and hardstand areas which do not hold animals or animal products away from the effluent storage system.
- (5) Effluent from standoff pads must be contained within the pad area, and either discharged to the effluent storage system or directly applied to the effluent discharge field or disposed of in a lawful manner off-site.
- (6) To determine the area to be irrigated, a nutrient budget must be undertaken using best practice methods to plan and carry out the effluent discharge.

Note 1

The OVERSEER® model would satisfy best practice for this purpose.

**E35.6.1.3. Application and discharge of fertiliser onto or into land**

- (1) Fertiliser must not be discharged onto or into land within 20m of any of the following:
  - (a) a Wetland Management Area as identified in the Wetland Management Areas Overlay;
  - (b) the shoreline of any lake in a Natural Lake Management Area as identified in the Natural Lake Management Areas Overlay; or
  - (c) a stream in a Natural Stream Management Area as identified in the Natural Stream Management Areas Overlay.
- (2) The storage, use and disposal of fertiliser must be in accordance with The Fertiliser Association of New Zealand's Code of Practice for Nutrient Management (2013).

**E35.6.1.4. The use of land to stockpile and compost vegetative material or animal waste and the discharge of vegetative material or animal waste onto or into land**

- (1) The stockpiling and compost of vegetative material or animal waste must occur:

- (a) on a sealed surface with a permeability not exceeding  $1 \times 10^{-9}$  m/s; and
- (b) on a surface that collects all discharges.

**E35.6.1.5. The use of land as a silage storage facility and the discharge of silage leachate onto or into land**

- (1) All new and modified silage storage facilities must be situated on a sealed pad and the sealing layer must not exceed  $1 \times 10^{-9}$  m/s.
- (2) The silage facility must be securely covered to prevent stormwater from entering it.
- (3) Silage storage facilities must not be located within 20m of a surface water body, floodplain or the coastal marine area.

**E35.6.1.6. Discharge of greenhouse nutrient solution onto or into land where the total floor area of the greenhouse is up to 1 hectare**

- (1) The discharge of greenhouse nutrient solution must be in accordance with the A Code of Practice for The Management of Greenhouse Nutrient Discharges (June 2007).

**E35.6.1.7. Disposal of dead stock and offal onto or into land**

- (1) The disposal must be into an offal hole, shallow trench or by composting.
- (2) The material must not originate from a commercial animal processing business.
- (3) Offal holes or trenches must not be located within 20m of a surface water body, floodplain or the coastal marina area.

**E35.6.2. Controlled activity standards**

All activities listed as a controlled activity in Table E35.4.1 Activity table must comply with the following controlled activity standards.

**E35.6.2.1. The discharge of greenhouse nutrient solution onto or into land where the total floor area of the greenhouse is greater than 1 hectare and that complies with Standard E35.6.2.1**

- (1) The nutrient solution must be discharged to a defined disposal area.
- (2) The discharge system must incorporate secure storage.

**E35.7. Assessment – controlled activities**

**E35.7.1. Matters of control**

The Council will reserve its control to all of the following matters when assessing a controlled activity resource consent application:

(1) for the discharge of greenhouse nutrient solution onto or into land where the total floor area of the greenhouse is greater than 1 hectare and that complies with Standard E35.6.2.1:

(a) the effects on the environment as a result of all of the following:

- (i) the disposal area;
- (ii) the collection treatment and disposal equipment;
- (iii) the storage system; and
- (iv) monitoring requirements.

#### **E35.7.2. Assessment criteria**

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

(1) for the discharge of greenhouse nutrient solution onto or into land where the total floor area of the greenhouse is greater than 1 hectare and that complies with Standard E35.6.2.1:

(a) whether the disposal area is suitable, including consideration of adjacent water bodies and land uses;

(b) whether the equipment for the collection, treatment and disposal of any discharge is adequate; and

(c) whether the capacity and security of the storage is suitable taking into account all of the following:

- (i) the design and construction methods and materials used;
- (ii) the potential for adverse effects on any adjacent natural resource overlay areas including the Wetland Management Areas Overlay, the Water Supply Management Areas Overlay, the Natural Stream Management Areas Overlay, the High-use Stream Management Areas Overlay, the Natural Lake Management Areas Overlay and the Quality-sensitive Aquifer Management Areas Overlay ; and
- (iii) the measures to avoid, remedy or mitigate more than minor adverse effects on surface and groundwater water bodies.

#### **E35.8. Assessment – restricted discretionary activities**

There are no restricted discretionary activities in this section.

#### **E35.9. Special information requirements**

There are no special information requirements in this section.