

## **E13. Cleanfills, managed fills and landfills**

### **E13.1. Background**

Cleanfills, managed fills and landfills support the use of land and the disposal of fill and waste generated by residential, commercial, industrial and rural activities in Auckland.

Cleanfills involve the deposit of natural materials such as clay, gravel, sand, soil and rock which have been excavated for areas of land which do not contain contaminants at levels greater than background concentrations, and which have no adverse effects on the environment. Managed fills involve the deposit of cleanfill material, contaminated clay, soil, rock and other inert materials that may have contaminants that exceed background concentrations. Landfills involve the disposal of material not suitable for diversion or cleanfills and managed fills.

### **E13.2. Objectives [rp]**

- (1) Cleanfills, managed fills and landfills are sited, designed and operated so that adverse effects on the environment, are avoided, remedied or mitigated.
- (2) Human health is protected from the adverse effects of operational or closed cleanfills, managed fills and landfills.

### **E13.3. Policies [rp]**

- (1) Avoid significant adverse effects and remedy or mitigate other adverse effects of cleanfills, managed fills and landfills on lakes, rivers, streams, wetlands, groundwater and the coastal marine area.
- (2) Require cleanfills, managed fills and landfills to be sited, and where appropriate, designed and constructed, to avoid the risk of land instability.
- (3) Require cleanfills, managed fills and landfills to be designed and operated in accordance with relevant industry best practice.
- (4) Avoid adverse effects from new landfills.
- (5) Manage closed managed fills and landfills (including the closure of) to:
  - (a) protect the integrity of the site including the containment of contaminants; and
  - (b) require aftercare that is appropriate to the nature and requirements of the site including the type of material that was deposited during its operative period.

### **E13.4. Activity table**

Table E13.4.1 Activity table specifies the activity status of discharges from cleanfills, managed fills and landfills pursuant to section 15 of the Resource Management Act 1991.

**Table E13.4.1 Activity Table**

<b>Activity</b>		<b>Activity status</b>
<b>Cleanfills</b>		
(A1)	Discharges from cleanfills where less than 250m <sup>3</sup> per year is deposited	P
(A2)	Discharges from cleanfills where 250m <sup>3</sup> per year or more is deposited	C
(A3)	Discharges from cleanfills where 250m <sup>3</sup> per year or more is deposited and that do not comply with Standard E13.6.2.1	RD
<b>Managed fills</b>		
(A4)	Discharges from managed fills	C
(A5)	Discharges from managed fills that do not comply with Standard E13.6.2.2	RD
(A6)	Discharges from closed managed fills	P
(A7)	Discharges from closed managed fills that do not comply with Standard E13.6.1.1	C
(A8)	Discharges from aftercare activities on closed managed fills	P
<b>Landfills</b>		
(A9)	Discharges from new landfills	NC
(A10)	Discharges from operative landfills	D
(A11)	Discharges from landfills that closed before 1 October 1991	P
(A12)	Discharges from closed landfills that do not comply with Standard E13.6.1.3 or Standard E13.6.1.4	C
(A13)	Discharges from aftercare activities on closed landfills	P

**E13.5. Notification**

- (1) An application for resource consent for a controlled activity listed in Table E13.4.1 Activity table 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 E13.4.1 Activity table and which is not listed in E13.5(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).

## **E13.6. Standards**

### **E13.6.1. Permitted activities**

Activities listed as a permitted activity in Table E13.4.1 Activity table must comply with the following specified permitted activity standards.

#### **E13.6.1.1. Discharges from closed managed fills**

- (1) Discharge of contaminants to water when measured at the down-gradient edge of the closed managed fill site must not exceed the 80 per cent trigger values of Table 3.4.1 Trigger values for toxicants at alternative levels of protection of the Australian and New Zealand Environment and Conservation Council Guidelines for Fresh and Marine Water Quality 2000.

#### **E13.6.1.2. Discharges from aftercare activities on closed managed fills**

- (1) Discharges of contaminants to water must not exceed the 80 per cent trigger values of Table 3.4.1 Trigger values for toxicants at alternative levels of protection of the Australian and New Zealand Environment and Conservation Council Guidelines for Fresh and Marine Water Quality 2000.
- (2) The closed managed fill cover, if any, must be reinstated to the same or better standard.

#### **E13.6.1.3. Discharges from landfills that closed before 1 October 1991**

- (1) Discharges of contaminants to water when measured at the down-gradient edge of the closed landfill site must not exceed the 80 per cent trigger values of the Table 3.4.1 Trigger values for toxicants at alternative levels of protection of the Australian and New Zealand Environment and Conservation Council Guidelines for Fresh and Marine Water Quality 2000.

#### **E13.6.1.4. Discharges from aftercare activities on closed landfills**

- (1) Discharges of contaminants to water must not exceed the 80 per cent trigger values of Table 3.4.1 Trigger values for toxicants at alternative levels of protection of the Australian and New Zealand Environment and Conservation Council Guidelines for Fresh and Marine Water Quality 2000.
- (2) The closed landfill cover must be reinstated to the same or better standard.

### **E13.6.2. Controlled activities**

Activities listed as a controlled activity in Table E13.4.1 Activity table must comply with the following specified controlled activity standards.

**E13.6.2.1. Discharges from cleanfills where 250m<sup>3</sup> per year or more is deposited**

- (1) Cleanfills must not be sited or operated on land with a high risk of instability.
- (2) A site investigation report and site management plan must be provided to the Council and site operation records must be available for inspection by the Council.

**E13.6.2.2. Discharges from managed fills**

- (1) The concentrations of contaminants must not exceed the permitted activity levels specified in E30 Contaminated land.
- (2) Managed fills must not be sited or operated on land with a high risk of instability.
- (3) A site investigation report and site management plan must be provided to the Council and site operation records must be available for inspection by the Council.

**E13.6.2.3. Discharges from closed managed fills that do not comply with Standard E13.6.1.1**

- (1) A site investigation (closed managed fill) report and site aftercare plan must be provided to the Council.

**E13.6.2.4. Discharges from closed landfills that do not comply with Standard E13.6.1.3 or Standard E13.6.1.4**

- (1) A site investigation (closed landfill) report and aftercare plan must be provided to the Council.

**E13.7. Assessment – controlled activities**

**E13.7.1. Matters of control**

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

- (1) discharges from cleanfills where 250m<sup>3</sup> per year or more is deposited:
  - (a) the adequacy of the site investigation report including:
    - (i) appropriateness of the site.
  - (b) the adequacy of the site management plan including:
    - (i) operation of the site;
    - (ii) placement and compaction of cleanfill material;
    - (iii) daily operating procedures;
    - (iv) cleanfill acceptance controls and monitoring;

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- (v) response to natural hazards and unexpected discharges; and
  - (vi) conditioning of wet material.
- (c) the adequacy of the proposed site operation records including:
- (i) load inspection records; and
  - (ii) monitoring, testing and sampling documentation.
- (2) discharges from managed fills:
- (a) the adequacy of the site investigation report including:
- (i) appropriateness of the site;
  - (ii) risk assessment; and
  - (iii) discharge and contaminant limits.
- (b) the adequacy of the site management plan including:
- (i) operation of the site;
  - (ii) placement and compaction of managed fill material;
  - (iii) managed fill acceptance criteria;
  - (iv) daily operating procedures;
  - (v) environmental controls and monitoring;
  - (vi) response to natural hazards and unexpected discharges; and
  - (vii) conditioning of wet material.
- (c) the adequacy of the proposed site operation records including:
- (i) load inspection records; and
  - (ii) monitoring, testing and sampling documentation.
- (d) siting and methods to avoid, remedy or mitigate adverse effects on lakes, rivers, streams, wetlands, groundwater and the coastal marine area.
- (3) discharges from closed managed fills that do not comply with Standard E13.6.1.1.1:
- (a) the adequacy of the site investigation (closed managed fill) report including:
- (i) site sampling;
  - (ii) laboratory analysis; and
  - (iii) risk assessment.
- (b) the adequacy of the site aftercare plan including:
- (i) aftercare activities to address the risk posed by the contaminants to the environment; and

- (ii) timing and standard of aftercare activities.
- (4) discharges from closed landfills that do not comply with Standard E13.6.1.3 or Standard E13.6.1.4:
  - (a) the adequacy of the site investigation (closed landfill) report including:
    - (i) site sampling;
    - (ii) laboratory analysis; and
    - (iii) risk assessment.
  - (b) the adequacy of the site aftercare plan including:
    - (i) aftercare activities to address the risk posed by the contaminants to the environment; and
    - (ii) timing and standard of aftercare activities.

#### **E13.7.2. Assessment criteria**

The Council will consider the relevant assessment criteria below for controlled activities.

- (1) discharges from cleanfills where 250m<sup>3</sup> per year or more is deposited:
  - (a) the extent to which the site investigation report, site management plan and proposed site operation records control siting and monitor the acceptance and placement of cleanfill material to avoid, remedy or mitigate known or potential adverse effects.
- (2) discharges from managed fills:
  - (a) the extent to which the proposal will avoid, remedy or mitigate any adverse effects from actual and potential discharges from the site;
  - (b) the extent to which the site investigation report and site management plan include measures to avoid, remedy or mitigate known or potential adverse effects including:
    - (i) preventative measures prior to establishment, operation or discharge;
    - (ii) site management, including how the importation of material to the site will be controlled;
    - (iii) protection of lakes, rivers, streams, wetlands, groundwater and the coastal marine area; and
    - (iv) aftercare of the managed fill.
  - (c) where managed fills are sited or operated in, on or adjacent to lakes, rivers, streams, wetlands, groundwater and the coastal marine area, whether significant adverse effects on water are avoided and other effects are remedied and mitigated.

- (3) discharges from closed managed fills that do not comply with Standard E13.6.1.1:
  - (a) the extent to which the site aftercare plan will avoid, remedy or mitigate any adverse effects from discharges from the closed managed fill.
- (4) discharges from closed landfills that do not comply with Standard E13.6.1.3 or Standard E13.6.1.4:
  - (a) the extent to which the site aftercare plan will avoid, remedy or mitigate any adverse effects from discharges from the closed landfill.

### **E13.8. Assessment – restricted discretionary activities**

#### **E13.8.1. Matters of discretion**

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

- (1) discharges from cleanfills that do not comply with Standard E13.6.2.1:
  - (b) the adequacy of the site investigation report including:
    - (i) the appropriateness of the site; and
    - (ii) risk assessment.
  - (c) the adequacy of the site management plan including:
    - (i) the operation of site;
    - (ii) the placement and compaction of cleanfill material;
    - (iii) daily operating procedures;
    - (iv) cleanfill acceptance controls and monitoring;
    - (v) response to natural hazards and unexpected discharges;
    - (vi) reporting requirements;
    - (vii) management for disposal of non-complying material; and
    - (viii) conditioning of wet material.
  - (d) the adequacy of the site operating record including:
    - (i) load inspection records;
    - (ii) monitoring, testing or sampling documentation;
    - (iii) training procedures; and
    - (iv) record of non-complying material disposal.
  - (e) the requirement for and condition of financial bond;
  - (f) the timing and nature of resource consent conditions reviews; and
  - (g) the design and construction of the cleanfill.

(2) discharges from managed fills that do not comply with Standard E13.6.2.2:

(a) the adequacy of the site investigation report including:

- (i) appropriateness of site;
- (ii) discharge and contaminant limits; and
- (iii) risk assessment.

(b) the adequacy of the site management plan including:

- (i) the operation of the site;
- (ii) the placement and compaction of managed fill material;
- (iii) managed fill acceptance criteria;
- (iv) daily operating procedures;
- (v) environmental controls and monitoring;
- (vi) hazard and unexpected discharge response procedures;
- (vii) reporting requirements;
- (viii) management for disposal of non-complying material; and
- (ix) conditioning of wet material.

(c) the adequacy of the proposed site operating record including:

- (i) load inspection records;
- (ii) monitoring, testing or sampling documentation;
- (iii) training procedures; and
- (iv) record of non-complying material disposal.

(d) the requirement for and conditions of a financial bond;

(e) the timing and nature of resource consent conditions reviews; and

(f) the design and construction of the managed fill.

#### **E13.8.2. Assessment criteria**

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



- (1) discharges from cleanfills that do not comply with Standard E13.6.2.1:
  - (a) the extent to which the proposal will avoid, remedy or mitigate any adverse effects from actual and potential discharges from the cleanfill;
  - (b) the extent to which the site investigation report and site management plan include measures to avoid, remedy or mitigate known or potential adverse effects including:
    - (i) preventative measures prior to establishment, operation or discharge;
    - (ii) site management, including how the importation of material to the site will be controlled; and
    - (iii) protection of lakes, rivers, streams, wetlands, groundwater and the coastal marine area.
- (2) discharges from managed fills that do not comply with Standard E13.6.2.2:
  - (a) the extent to which the proposal will avoid, remedy or mitigate any adverse effects from actual and potential discharges from the managed fill.
  - (b) the extent to which the site investigation report and site management plan include measures to avoid, remedy or mitigate known or potential adverse effects including:
    - (i) preventative measures prior to establishment, operation or discharge;
    - (ii) site management, including how the importation of material to the site will be controlled;
    - (iii) protection of lakes, rivers, streams, wetlands, groundwater and the coastal marine area; and
    - (iv) aftercare of the managed fill.

### **E13.9. Special information requirements**

There are no special information requirements in this section.