

## Part 9

# Hazardous facilities and contaminated land

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## 9.1 Introduction

The council has a duty under section 31 of the RMA to "control any actual or potential effects of the use, development or protection of land including... (ii) the prevention or mitigation of any adverse effects of the storage, use, disposal or transportation of hazardous substances and (iia) the prevention or mitigation of any adverse effects of the development, subdivision, or use of contaminated land."

The use, storage, transportation and disposal of potentially hazardous substances has long been an integral part of the normal activities of a community. In some instances accidental discharge to the surrounding environment has resulted in land contamination. These substances, whether singularly or in combination, have the potential to adversely affect the health and safety of the community, and the wellbeing and sustainability of the local natural and physical environment.

There are other legislative requirements for hazardous substances, such as the Hazardous Substances and New Organisms Act 1996 (HSNO). The focus of the HSNO legislation and regulations is on the characteristics of the substance itself regardless of the location. This includes containment, packaging, identification, tracking, competency, emergency preparedness and disposal. The HSNO Act provides the means to set conditions on the management of hazardous substances, which apply irrespective of location. The control of potential adverse environmental effects at a particular site are dealt with under the RMA and are the focus of this part of the Plan. They are:

- effects on the receiving natural environment caused by contamination, toxic effects on ecosystems or ecological communities, and other environmental damage
- effects on human health, including immediate and long term risk to people and communities.

For hazardous substances, the effects on the physical and natural resources caused by fire and explosion must also be considered.

The use of land associated with hazardous substances is called a 'hazardous facility'. Hazardous facilities are not limited to industrial installations and activities, but include many activities associated with primary food production (eg agriculture, horticulture and viticulture), transport activities (including petrol stations and garages, as well as the storage, loading and unloading of vehicles used for the transportation of hazardous substances) and smaller scale commercial land use.

In addition to the provisions of this Plan dealing with hazardous substances, contaminated and potentially contaminated land, the following must also be adhered to:

- The relevant rules and provisions of the Regional Plan and Regional Policy Statement, administered by the Auckland Regional Council.
- Regulations for hazardous substances under the Hazardous Substances and New Organisms Act 1996, administered primarily by the Environmental Risk Management Authority and the Department of Labour.

Note: definitions of some of the technical terms used in this part of the Plan can be found in [clause 9.7](#).

## 9.2 Resource management issues

The significant resource management issues which need to be addressed in the Plan are:

1. How to provide for the use, storage, transportation and disposal of hazardous substances in the islands, recognising that these can be a necessary part of primary production, manufacturing, business and domestic activities.
2. How to manage the risks associated with the use, storage, transportation and disposal of hazardous substances in the islands, so as to avoid adverse effects on the environment.
3. How to manage and facilitate remediation of land which may have been contaminated as the result of past activities in a way which avoids adverse effects on the environment.

## **9.3 Objectives and policies**

### **9.3.1 Objective for the management of hazardous facilities**

To avoid or mitigate the risks of adverse effects created by hazardous facilities on the environment.

#### **Policies**

1. By requiring hazardous facilities to be designed, located, constructed and operated to avoid adverse effects on people and the environment and to minimise risk to people and the environment.
2. By controlling the location and operation of hazardous facilities to ensure that they do not give rise to levels of risk that are incompatible with the nature of surrounding land use activities.
3. By preventing the establishment of hazardous facilities where the risks created by the facilities cannot be adequately avoided or mitigated, having regard to the acceptable levels of risk associated with the nature of the surrounding land use activities and the sensitivity of the surrounding natural environment including the downstream environment.
4. By requiring the preparation and operation of emergency contingency plans for hazardous facilities where appropriate.
5. By ensuring the cumulative effects of activities involving the use of hazardous substances do not pose unacceptable risks to human health and the environment.
6. By requiring that hazardous substances and waste be disposed of at facilities which:
  - are specifically designed to handle the disposal of hazardous substances
  - use techniques that avoid adverse effects on human health and the environment.
7. By promoting a cleaner production ethic appropriate to the environment of the islands.

#### **Explanation**

Hazardous substances can be toxic, flammable, highly reactive, corrosive, and ecotoxic. Therefore, all activities involving the manufacture, storage, use, transportation and disposal of hazardous substances have the potential to create adverse effects on people and the environment if the substances react, degrade or are inadvertently released because of inadequate management or an accidental spillage. To avoid or mitigate these effects, hazardous facilities and activities need to be managed correctly, designed and located appropriately and have processes in place for dealing with incidents.

The transport of hazardous substances is dealt with by other legislation, regulation and codes of practice such as the Transport Act 1962, the Land Transport Act 1998, the Land Transport (Dangerous Goods) Rule 2005 and NZS 5433:1999 Transport of Dangerous Goods on Land. In some circumstances, land use controls may be used to address site and location specific issues.

### **9.3.2 Objective for the management of contaminated land**

To avoid or mitigate the risk of adverse effects created by the use, redevelopment or remediation of contaminated and potentially contaminated land on human health and the environment.

#### **Policies**

1. By minimising and controlling the adverse effects arising from contaminated land.
2. By ensuring remediation of contaminated land is carried out to a level that is appropriate for the proposed development and likely future use of the land as a prerequisite to its redevelopment.
3. By identifying those sites that may be subject to potential contamination as a result of historical land uses.

## 9.4 Resource management strategy

The Plan adopts measures that minimise the risks to people, property and the natural environment including the risk of future contamination of land by activities that use hazardous substances. The Plan also introduces measures that ensure safe and effective remediation and redevelopment of sites that are identified as contaminated or potentially contaminated as a result of historical land use activities.

### 9.4.1 Hazardous facilities

There are relatively few significant hazardous facilities in the islands. The provisions of this Plan are designed to control adverse effects of hazardous facilities which may pose more than minor risks in relation to adjacent environments and land uses. The Plan uses a hazardous facilities consent status table to determine whether a resource consent is required for new or significantly increased hazardous facilities. The table takes into account the following:

- the nature and quantity of the hazardous substances being used
- proximity to sensitive receiving environments including watercourses and wetlands
- proximity to more sensitive land uses
- the characteristics of the land unit or settlement area within which the activity is occurring.

### 9.4.2 Contaminated land

Any activity, which seeks to remediate or redevelop contaminated, or potentially contaminated land, will be assessed as a restricted discretionary activity. This will ensure that proper and safe measures are undertaken and that remediation practices will not lead to further degradation of the site, surrounding environment or present a risk to human health.

Not all the contaminated land on the islands has been identified. As a guideline for identifying potentially contaminated land, the council uses the hazardous activities and industries list (HAIL) contained in [appendix 8 – Lists for hazardous facilities and contaminated land](#). The HAIL is a revision of the list of industrial activities first published in the Australian and New Zealand Environment and Conservation Council guidelines (1992). It is intended to identify most situations in New Zealand where hazardous substances could cause and in many cases have caused land contamination. It lists 52 specific land uses that can potentially cause contamination.

Prior to development occurring on land identified as contaminated or potentially contaminated, the Plan requires owners to take steps to make the site safe for the proposed end land use. A discharge consent from the Auckland Regional Council will also be required in situations where soil contaminants on site have been demonstrated to be discharging to the environment and creating adverse environmental effects, either in context of existing soil contamination or as a direct result of development works. In any event, for sites that exhibit contamination problems, the council may use its enforcement powers under the RMA to ensure that no adverse effect on human health and the environment occurs.

## 9.5 Rules – hazardous facilities

### 9.5.1 Hazardous facilities consent status table

#### 9.5.1.1 Explanation and table

The activity status of any hazardous facility, except those activities exempt under [clause 9.5.1.2](#), is determined by the thresholds indicated in the consents status table ([table 9.1](#)) below. The thresholds determine whether a consent is required or whether the activity can be carried out as a permitted activity within a particular land unit or settlement area.

Table 9.1 specifies the cumulative quantities of hazardous substances which can be used and stored for each hazard category above which the specified type of consent is required. It should be noted that many substances have more than one hazard and the consent status must be determined for each hazard class.

The quantity thresholds defining the consent status in table 9.1 are to be applied to the sum of all substances proposed to be used or stored in one facility within one hazard grouping. The measures are mainly in tonnes (t) apart from gases (except for LPG) where a cubic metre (m<sup>3</sup>) measure is given as indicated in the table. The cubic metre measures are at standard atmospheric temperature and pressure (STP).

**Table 9.1: Hazardous facilities consent status**

P = Permitted RD = Restricted discretionary D = Discretionary

For the purposes of this table, the land units and settlement areas have been grouped as follows:

**Group A** Land units: commercial 5, 6 and 7; Matiatia

Settlement areas: Medlands quarry area

**Group B** Land units: landform 3 and 5; commercial 1, 2 and 3; Matiatia; rural 1, 2 and 3

Settlement areas: Claris airport area, Claris light industry area

**Group C** Land units: landform 1, 2, 4, 6, and 7; island residential 1 and 2; commercial 4; recreation 1, 2 and 3, conservation, Pakatoa, Rotoroa

Settlement areas: all areas not otherwise listed under group B or C

| Hazardous substance property | Class | HSNO subclass <sup>1</sup>               | Land units and settlement areas (by group) |   |                                |                                |                                      |                              |                              |                              |
|------------------------------|-------|--|--|---|--------------------------------|--------------------------------|--------------------------------------|------------------------------|------------------------------|------------------------------|
|                              |       |  | Group A                                    |   |                                | Group B                        |                                      |                              | Group C                      |                              |
|                              |       |  | Activity status                            |   |                                | Activity status                |                                      |                              | Activity status              |                              |
|                              |       |  | P  | RD                                      | D                              | P                              | RD                                   | D                            | P                            | D                            |
| Explosive                    | 1     | 1.1 (all-storage)                        | <0.05t                                     | 0.05–0.1t                               | >0.1t                          | <0.02t                         | 0.02–0.04t                           | >0.04t                       | 0                            | >0                           |
|                              |       | 1.2 (all-storage)                        | <0.5t                                      | 0.5–1t                                  | >1t                            | <0.2t                          | 0.2–0.4t                             | >0.4t                        | 0                            | >0                           |
|                              |       | 1.3 (all-storage)                        | <1.5t                                      | 1.5–3t                                  | >3t                            | <0.5t                          | 0.5–1t                               | 1t                           | 0                            | >0                           |
|                              |       | 1.2/1.3 with 1.1 <sup>2</sup>            | <0.05t                                     | 0.05–0.1t                               | >0.1t                          | <0.02t                         | 0.02–0.04t                           | 0.04t                        | 0                            | >0                           |
| Flammable (gases) (aerosols) | 2     | 2.1 (all)                                | <1t/<br><2,000m <sup>3</sup>               | 1–2t/<br>2,000–4,000m <sup>3</sup>      | >2t/<br>>4,000m <sup>3</sup>   | <0.5t/<br><1,000m <sup>3</sup> | 0.5–1t/<br>1,000–2,000m <sup>3</sup> | >1t/<br>>2,000m <sup>3</sup> | ≤0.02t/<br>≤40m <sup>3</sup> | >0.02t/<br>>40m <sup>3</sup> |
|                              |       | 2.1 (within 50m of msl <sup>3</sup> )    | <0.2t/<br><400m <sup>3</sup>               | 0.2–0.5t/<br>400 – 1,000m <sup>3</sup>  | >0.5t/<br>>1,000m <sup>3</sup> | <0.1t/<br><200m <sup>3</sup>   | 0.1–0.2t/<br>200–400m <sup>3</sup>   | >0.2t/<br>>400m <sup>3</sup> | -                            | -                            |
|                              |       | All other non-hazardous                  | <5t/<br>10,000m <sup>3</sup>               | 5–10t/<br>10,000 – 20,000m <sup>3</sup> | >10t/<br>>20,000m <sup>3</sup> | <2t/<br><4,000m <sup>3</sup>   | 2–4t/<br>4,000–8,000m <sup>3</sup>   | >4t/<br>>8,000m <sup>3</sup> | ≤0.1t/<br>≤200m <sup>3</sup> | >0.1t/<br>>200m <sup>3</sup> |
|                              |       | LPG                                      | <3t  | 3–6t                                    | >6t                            | <1.5t                          | 1.5–3t                               | >3t                          | ≤0.1t                        | >0.1t                        |
|                              |       | LPG (within 50m of msl <sup>3</sup> )    | <1t  | 1–2t                                    | >2t                            | <0.5t                          | 0.5–1t                               | >1t                          | -                            | -                            |
| Flammable (liquids)          | 3     | 3.1A, 3.1B                               | <6t  | 6–12t                                   | >12t                           | <2t                            | 2–4t                                 | >4t                          | ≤0.1t                        | >0.1t                        |
|                              |       | 3.1A/B (within 50m of msl <sup>3</sup> ) | <2t  | 2–4t                                    | >4t                            | <0.6t                          | 0.6–1.2t                             | >1.2t                        | -                            | -                            |
|                              |       | 3.1C                                     | <20t                                       | 20–40t                                  | >40t                           | <6t                            | 6–12t                                | >12t                         | ≤0.3t                        | >0.3t                        |
|                              |       | 3.1D                                     | <60t                                       | 60–120t                                 | >120t                          | <20t                           | 20–40t                               | >40t                         | ≤1t                          | >1t                          |
|                              |       | 3.2 (all)                                | <3t  | 3–6t                                    | >6t                            | <1t                            | 1–2t                                 | >2t                          | ≤0.05t                       | >0.05t                       |
| Flammable (solids)           | 4     | 4.1 (all)                                | 3t   | 3–6t                                    | >6t                            | <1t                            | 1–2t                                 | >2t                          | ≤0.05t                       | >0.05t                       |
|                              |       | 4.2 (all)                                | <1t  | 1–2t                                    | >2t                            | <0.4t                          | 0.4–1t                               | >1t                          | ≤0.02t                       | >0.02t                       |
|                              |       | 4.3 (all)                                | <1t  | 1–2t                                    | >2t                            | <0.4t                          | 0.4–1t                               | >1t                          | ≤0.02t                       | >0.02t                       |
| Oxidising capacity           | 5     | 5.1.2 gases                              | <1,000m <sup>3</sup>                       | 1,000–2,000m <sup>3</sup>               | >2,000m <sup>3</sup>           | <400m <sup>3</sup>             | 400–1,000m <sup>3</sup>              | >1,000m <sup>3</sup>         | ≤40m <sup>3</sup>            | >40m <sup>3</sup>            |
|                              |       | 5.1.1 (all)                              | <3t  | 3–6t                                    | >6t                            | <1.5t                          | 1.5–3t                               | >3t                          | ≤0.05t                       | >0.05t                       |
|                              |       | 5.2 (all)                                | <1t  | 1–2t                                    | >2t                            | <0.5t                          | 0.5–1t                               | >1t                          | ≤0.02t                       | >0.02t                       |

| Hazardous substance property | Class | HSNO subclass <sup>1</sup>                       | Land units and settlement areas (by group) |                       |                    |                    |                       |                    |                               |                               |
|------------------------------|-------|--|--|-----------------------|--------------------|--------------------|-----------------------|--------------------|-------------------------------|-------------------------------|
|                              |       |  | Group A                                    |                       |                    | Group B            |                       |                    | Group C                       |                               |
|                              |       |  | Activity status                            |                       |                    | Activity status    |                       |                    | Activity status               |                               |
|                              |       |  | P  | RD                    | D                  | P                  | RD                    | D                  | P                             | D                             |
| Toxic                        | 6     | 6.1A   | <0.5t                                      | 0.5–1t                | >1t                | <0.2t              | 0.2–0.4t              | >0.4t              | 0                             | >0                            |
|                              |       | 6.1 gases  | <300m <sup>3</sup>                         | 300–600m <sup>3</sup> | >600m <sup>3</sup> | <100m <sup>3</sup> | 100–200m <sup>3</sup> | >200m <sup>3</sup> | 0                             | >0                            |
|                              |       | 6.1A (within 50m of msl <sup>3</sup> )           | <0.2t                                      | 0.2–0.4t              | >0.4t              | <0.1t              | 0.1–0.2t              | >0.2t              | 0                             | >0                            |
|                              |       | 6.1B, 6.3–6.9                                    | <6t  | 6–12t                 | >12t               | <2t                | 2–4t                  | >4t                | ≤0.05t                        | >0.05t                        |
|                              |       | 6.1B, 6.3–6.9 (within 50m of msl <sup>3</sup> )  | <2t  | 2–4t                  | >4t                | <1t                | 1–2t                  | >2t                | –                             | –                             |
|                              |       | 6.1C   | <20t                                       | 20–40t                | >40t               | <6t                | 6–12t                 | >12t               | ≤0.3t                         | >0.3t                         |
|                              |       | 6.1C (within 50m of msl <sup>3</sup> )           | <6t  | 6–12t                 | >12t               | <2t                | 2–4t                  | >4t                | ≤0.05t                        | >0.05t                        |
| Corrosive                    | 8     | 8.1, 8.2A, 8.3                                   | <6t  | 6–12t                 | >12t               | <2t                | 2–4t                  | >4t                | ≤0.05t                        | >0.05t                        |
|                              |       | 8.2B/C   | <20t                                       | 20–40t                | >40t               | <10t               | 10–20t                | >20t               | ≤0.3t                         | >0.3t                         |
| Eco-toxic                    | 9     | 9.1A–9.4A  | <1t  | 1–2t                  | >2t                | <0.5t              | 0.5–1t                | >1t                | ≤0.1t/<br>≤0.01t <sup>7</sup> | >0.1t/<br>>0.01t <sup>7</sup> |
|                              |       | 9.1A–9.4A (within 30m of a water system or MHWS) | <0.3t                                      | 0.3–0.6t              | >0.6t              | <0.1t              | 0.1–0.3t              | >0.3t              | ≤0.03t                        | >0.03t                        |
|                              |       | 9.1B–9.4B  | <20t                                       | 20–40t                | >40t               | <10t               | 10–20t                | >20t               | ≤3t/<br>≤0.03t <sup>4</sup>   | >3t/<br>>0.03t <sup>4</sup>   |
|                              |       | 9.1B–9.4B (within 30m of a water system or MHWS) | <6t  | 6–12t                 | >12t               | <3t                | 3–6t                  | >6t                | ≤1t/<br>≤0.03t <sup>4</sup>   | >1t/<br>>0.03t <sup>4</sup>   |
|                              |       | 9.1C–9.4C  | <60t                                       | 60–120t               | >120t              | <30t               | 30–60t                | >60t               | ≤10t/<1t <sup>4</sup>         | >10t/>1t <sup>4</sup>         |
|                              |       | 9.1C–9.4C (within 30m of a water system or MHWS) | <20t                                       | 20–40t                | >40t               | <10t               | 10–20t                | >20t               | ≤3t/<1t <sup>4</sup>          | >3t/>1t <sup>4</sup>          |
| High BOD5 (>10,000mg/l)      | –     | –  | <100t                                      | 100–200t              | >200t              | <40t               | 40–80t                | >80t               | ≤40t/<2t <sup>4</sup>         | >40t/>2t <sup>4</sup>         |
|                              |       | (within 30m of a water system or MHWS)           | <40t                                       | 40–80t                | >80t               | <20t               | 20–40t                | >40t               | ≤40t/<2t <sup>4</sup>         | >40t/>2t <sup>4</sup>         |

**Notes:**

- The classification of individual substances can be found in a substance register held by the Environmental Risk Management Authority (ERMA). A list of the most common hazardous substances and their subclasses is contained in clause 4.0 of [appendix 8 – Lists for hazardous facilities and contaminated land](#).
- Class 1.2 and 1.3 substances are to be treated as class 1.1 substances if they are stored with any class 1.1 substances. The threshold applies to storage of explosives only; their use is considered to be controlled adequately through the HSNO Regulations.
- 'Msl' means 'more sensitive land use'. This includes any people oriented activities such as child care centres, schools and visitor accommodation. For example, this may apply where a bulk LPG storage facility is proposed to locate within a rural or commercial land unit but in close proximity to a school or other people oriented activity.
- The second figure is the reduced threshold applying in the following land units and settlement areas:
  - landforms 1, 2, 4, 6 and 7, and in the conservation land unit
  - Tryphena reserve and coastal margin area, Medland and Claris dune and wetland conservation areas, Okupu reserve and dune protection area.



**References:**

1. The classification used in the table is based on the criteria specified in the Hazardous Substances (Classification) Regulations 2001.
2. The grouping of substances and quantities adopted for the table is based on those developed for the hazardous facilities screening procedure (HFSP) (Land Use Planning Guide for Hazardous Facilities, Ministry for the Environment, 2002).

**9.5.1.2 Exemptions for retailing and storing fuel**

The activities listed below are exempt from [table 9.1 – Hazardous facilities consent status](#). However they still require a consent under [clause 9.5.3](#) and must comply with the minimum performance standards in [clause 9.5.5](#).

1. The retail sale of fuel, up to a storage of 100,000 litres of petrol and up to 50,000 litres of diesel in underground storage tanks, provided it can be demonstrated that the Code of Practice for the Design, Installation and Operation of Underground Petroleum Systems published by the Department of Labour (Occupational Safety and Health) 1992 is adhered to.
2. The retail sale of LPG, with storage of up to 6 tonnes of LPG in a single vessel, provided it can be demonstrated that the AS/NZ 1596:2002 The Storage and Handling of LP Gas is adhered to.

**9.5.1.3 Exemptions for facilities for disposing of solids from septic tanks and other wastewater treatment and disposal systems**

1. The treatment of solids from septic tanks and other wastewater treatment and disposal systems is exempt from [table 9.1: Hazardous facilities consent status](#).
2. The storage of septic tank waste is not exempt from table 9.1 and must comply with the minimum performance standards in [clause 9.5.5](#).

**Explanation**

While the solids from septic tanks and other wastewater treatment and disposal systems may contain substances which are defined as hazardous substances under HASNO and the Plan, their treatment and disposal is a matter controlled by the council's bylaw and by the Auckland Regional Council. As outlined in [clause 4.8](#), the bylaw and ARC requirements are sufficient to avoid, remedy or mitigate the adverse effects of the treatment and disposal of solids from septic tanks and other waste water treatment and disposal systems. However, because the storage of septic tank waste includes substances with a high BOD5 (five day biochemical oxygen demand), it is not exempt from [table 9.1: Hazardous facilities consent status](#) and must comply with the minimum performance standards in [clause 9.5.5](#).

**9.5.2 Permitted activities**

The following are permitted activities provided they comply with the minimum performance standards in [clause 9.5.5](#):

1. Any hazardous facility involving hazardous substances in quantities below the threshold for permitted activities in [table 9.1 – Hazardous facilities consent status](#).
2. Any use or storage of radioactive materials with an activity below that specified as an exempt activity in part 2 of the Radiation Protection Regulations 1982.

**9.5.3 Restricted discretionary activities**

The following are restricted discretionary activities provided they comply with the minimum performance standards in [clause 9.5.5](#):

1. Any hazardous facility involving hazardous substances in quantities within the range for a restricted discretionary activity in [table 9.1 – Hazardous facilities consent status](#).

2. The retail sale of fuel, up to a storage of 100,000 litres of petrol and up to 50,000 litres of diesel in underground storage tanks, provided it can be demonstrated that the Code of Practice for the Design, Installation and Operation of Underground Petroleum Systems, Department of Labour (Occupational Safety and Health) 1992 is adhered to.
3. The retail sale of LPG, with storage of up to 6 tonnes (single vessel storage) of LPG, provided it can be demonstrated that the AS/NZ 1596:2002 The Storage and Handling of LP Gas is adhered to.

#### **Matters of discretion**

The council has restricted its discretion to considering the matters set out in [clause 9.5.6](#).

#### **Notification requirements**

Except as provided by section 94C(2) of the RMA, applications for a resource consent for the restricted discretionary activities listed above will be considered without the need to obtain written approval for, or serve notice on affected persons (in accordance with section 94D(2) and (3) of the RMA).

### **9.5.4 Discretionary activities**

The following are discretionary activities:

1. Any hazardous facility involving hazardous substances in quantities within the range for a discretionary activity in [table 9.1 – Hazardous facilities consent status](#).
2. Activities involving hazardous substances which would otherwise be permitted or restricted discretionary except that they do not comply with one or more minimum performance standards in [clause 9.5.5](#).
3. Any other hazardous facility that is not otherwise identified as permitted or restricted discretionary.

### **9.5.5 Minimum performance standards for hazardous facilities**

The minimum performance standards in [clauses 9.5.5.1 to 9.5.5.5](#) apply to all hazardous facilities.

#### **Explanation**

The purpose of the performance standards is to reduce contamination with hazardous substances resulting from the accidental or deliberate discharge of such substances to land or water. The performance standards should lead to the construction of facilities in such a manner that the number of spillages of hazardous substances is minimised, and the spillages that do occur have less severe adverse effects.

#### **9.5.5.1 Spill containment system**

Any part of the site where a hazardous substance spill may occur must have an appropriate spill containment system. The spill containment system must be:

1. Constructed from impervious materials that are resistant to the hazardous substances involved and, for pooling hazardous substances:
  - a. Able to contain the maximum volume of the largest tank used, plus an allowance for stormwater or water for fire-fighting.
  - b. Or where drums or other smaller containers are used, able to contain half of the maximum volume of substances stored.
2. Designed, constructed and managed so that any spill or release of any hazardous substance, and any stormwater that may enter and become contaminated in the spill containment system, is prevented from discharging into or onto land, ground water, any water body or potable water supply.

Suitable means of compliance include graded floors and surfaces, bunding, roofing, sumps, fire water catchments, overfill protection and alarms, and similar systems.

**9.5.5.2 Stormwater grate marking**

All stormwater grates must be clearly marked, to ensure that hazardous substances are not inadvertently released into any receptor including streams, soakage pits and septic tanks, which are not specifically designed for carrying hazardous substances.

**9.5.5.3 Washdown areas**

Any area where the washing of vehicles, equipment or containers that are or may have become contaminated with hazardous substances takes place, must be designed, constructed and managed to prevent any contaminated wash water from discharging into or onto land or water (including groundwater, stormwater and potable water supplies).

Suitable means of compliance include roofing, sloped pavements, interceptor drains, containment and diversion valves, oil-water separators, sumps and similar systems.

**9.5.5.4 Underground storage tanks**

1. Any underground storage tank must be designed and constructed to contain any leakage. A leak detection system must be integral to the design of the tank backed up with an effective monitoring program.
2. Underground tanks for the storage of petroleum products must be designed, constructed and managed to prevent leakage, spills and resulting adverse effects on people, ecosystems and property. The tanks must be:
  - a. Constructed from impervious materials resistant to the hazardous substances to be stored.
  - b. Equipped with secondary containment facilities in areas of environmental sensitivity.
  - c. Serviced by a leak detection or monitoring system that is capable of detecting a failure or breach in the structural integrity of the primary containment vessel.
3. Compliance with the Code of Practice for Design, Installation and Operation of Underground Petroleum Systems, Department of Labour, OSH 1992, must be demonstrated.

**Note:**

The removal of underground storage tanks which have been used for the storage of hazardous substances is a restricted discretionary activity (see [clause 9.6.3](#)).

**9.5.5.5 Signage**

The following standards apply to all hazardous facilities which require signage under the HSNO legislation:

1. Such facilities must have adequate signage to identify the nature and location of the hazardous substances present.
2. Where such facilities are immediately adjacent to a more sensitive land unit or part of a settlement area on which members of the public can congregate (including land units providing for schools, play grounds and similar activities), additional specific signage must be provided on the boundary of the facility facing that area to alert the public to the dangers of hazardous substances being on the site.

**9.5.6 Matters of discretion for restricted discretionary activities**

The council has restricted its discretion to considering the following matters:

1. Compliance with the performance standards outlined in [clause 9.5.5](#) and any relevant codes of practice.
2. The safety of the routes to be used for transporting hazardous substances on to and off the site where this forms a significant part of the operation.
3. Separation distances, the type of environment and the number of people potentially at risk

from the proposed facility. The council may have regard to site characteristics and surrounding land uses including proximity to people oriented activities (such as recreation reserves and schools) and sensitive natural areas including the downstream receiving environment and marine protected areas.

4. Methods and procedures to ensure that potential hazards and exposure pathways arising from the proposed facility have been adequately identified and provided for.
5. Procedures to detect and respond to the following events in a manner which avoids adverse effects on people and the environment:
  - fire including provision for adequate fire-fighting water supply
  - accidental spillage or release of hazardous substances
  - change or deterioration of plant or machinery
  - changes in environmental condition resulting from the operation of the facility.
6. Procedures for the management of waste containing hazardous substances.
7. Measure used to address any risk of cumulative or synergistic effects of different substances, including cumulative risks.

### 9.5.7 Assessment criteria for discretionary activities

In addition to the matters set out in [clause 9.5.6](#), the council's assessment of an application for a discretionary activity will include consideration of the following matters:

1. Whether the risks presented by the hazardous facility to people, ecosystems, and property have been assessed fully and systematically, and whether they are able to be avoided, remedied and mitigated satisfactorily. In considering this the council will have regard to:
  - a. The proposed site and layout, with a description of the nature and scale of the proposed facility and associated operations.
  - b. The quantities of hazardous substances proposed to be used, stored, transported and disposed of on the site.
  - c. Site drainage and off site infrastructure, including the biophysical characteristics of the site and surrounding area (eg drainage and roads).
  - d. Potential cumulative effects with neighbouring hazardous facilities.
2. Whether the proposed site design, construction and operation of the facility is appropriate to prevent the accidental release, or loss of control, of hazardous substances, and whether adequate emergency and spill contingency plans are provided.
3. The degree to which an assessment of the probability and potential consequences of an accident, leading to a release of a hazardous substance or loss of control, has been undertaken including an assessment of the acceptability of the assessed risks including cumulative risks.
4. Whether waste management plans have been prepared where there are significant quantities of wastes containing hazardous substances resulting from the activity.
5. The degree to which an evaluation of alternatives (eg alternative sites, locations, substances, quantities, processes, equipment and site management techniques) has been carried out, to determine whether there are any alternatives to the proposal, particularly where it is possible that the activity is likely to result in significant environmental effects.
6. The degree to which cleaner production techniques have been considered and adopted.
7. Whether a suitable site management system has been proposed. Where appropriate, the council will consider whether the site management system is consistent with national or international site management standards and codes of practice, including:
  - New Zealand Chemical Industry Council's (NZCIC) responsible care programme

- ISO 9000 and ISO 14001 systems.

## **9.6 Rules – contaminated land**

### **9.6.1 Determining whether land may be contaminated**

The council considers land to be contaminated if site investigation shows that the land meets the criteria listed in the definition of 'contaminated land' contained in the RMA (see [part 14 – Definitions](#)). The council uses the Ministry for the Environment's hazardous activities and industries list (HAIL) as guidance to assist in identifying potentially contaminated land. HAIL identifies activities that are considered likely involve the use, storage or disposal of hazardous substances in a manner that results in land contamination.

[Appendix 8 – Lists for hazardous facilities and contaminated sites](#), includes a list of potentially contaminated sites known to the council at the time of notification of this Plan.

Where council is aware of contamination or potential contamination, it holds this information in its databases – in particular in its geographic information system (GIS). The information on council's GIS is available to the public on request. That information will assist in determining whether a consent is required under this part of the Plan, or whether it would be prudent to carry out a site investigation to confirm the presence or absence of contamination prior to lodging an application to subdivide, redevelop or remediate the land.

### **9.6.2 Permitted activities – site investigation**

The taking of ground water and soil samples for the investigation of contaminated land or potentially contaminated land to determine the presence or degree of contamination is a permitted activity.

### **9.6.3 Restricted discretionary activities**

The following are restricted discretionary activities:

1. Any activity which remediates contaminated land or removes underground storage tanks.
2. Any redevelopment of contaminated or potentially contaminated land. Redevelopment includes the addition of new buildings or additions to existing buildings. It does not include the ongoing activities or occupation of the site for the same activity and minor additions and alterations to existing dwellings.

#### **Exception**

Provided that this does not apply where any site identified in clause 3.0 of [appendix 8 – Lists for hazardous facilities and contaminated land](#), has been investigated and proven not to be contaminated or has been remediated to a level which is safe for the intended use.

#### **Notification requirements**

Except as provided by section 94C(2) of the RMA, applications for a resource consent to remediate or redevelop contaminated or potentially contaminated land, or remove underground storage tanks, will be considered without the need to obtain written approval for, or serve notice on affected persons (in accordance with section 94D(2) and (3) of the RMA).

### **9.6.4 Matters of discretion for restricted discretionary activities**

The council has restricted its discretion to considering the following matters:

1. The extent and nature of contamination.
2. Earthworks including any methods to control the release of contaminants into the environment.
3. The health and safety of on site workers and the wider community.
4. The suitability of the land for its proposed end use.

5. The manner in which the work including any remediation will be undertaken.
6. The treatment and disposal of contaminated soil.
7. The adequacy of any remediation.

#### **9.6.5 Assessment criteria for restricted discretionary activities**

The council's assessment of an application for a restricted discretionary activity will consider the matters set out in [clauses 9.6.5.1](#) and [9.6.5.2](#).

Reference to the Ministry for the Environment's Contaminated Land Management Guidelines Nos 1–5 will assist applicants in achieving compliance with the criteria set out below.

##### **9.6.5.1 Assessment criteria for all restricted discretionary activities**

1. The extent and nature of any contamination of land or ground water and the potential sources of contamination.
2. The degree to which earth moving or removal will be undertaken, including any methods to control the release of contaminants into the environment (eg sediment control, site covering and dust control).
3. Whether contaminated or potentially contaminated soil or ground water will be able to be treated or disposed of.
4. The degree to which the health and safety of the community and workers during site works will be provided for including, if necessary, the presence of public exclusion zones, site security and location of worker amenity facilities.
5. The degree to which measures will be employed to avoid remedy or mitigate any adverse effects on human health, water quality, or the downstream receiving environment.
6. Whether the land is suitable for its intended end use.

##### **9.6.5.2 Additional assessment criteria for specific activities**

###### **Remediation of contaminated or potentially contaminated land and the removal of underground storage tanks**

In addition to the criteria set out in [clause 9.6.5.1](#), the council's assessment of an application to remediate contaminated or potentially contaminated land, or to remove underground storage tanks, will consider the following matters:

1. Whether the methodology by which the land will be remediated will avoid adverse effects on the natural environment, during and after the remediation process, giving special consideration to the nature of the downstream receiving environment including marine protected areas.
2. The extent to which the effects of remediation are acceptable.

###### **The redevelopment of contaminated or potentially contaminated land**

In addition to the criteria set out in [clause 9.6.5.1](#), the council's assessment of an application to redevelop contaminated or potentially contaminated land, will consider the following matter:

- whether adequate measures will be taken to ensure the safe operation of the proposal on the land.

#### **9.6.6 Subdivision of contaminated land**

Refer to [part 12 – Subdivision](#) for the rules for subdividing contaminated or potentially contaminated land.

## 9.7 Definitions

The definitions which particularly relate to this part of the Plan are listed below. These definitions are in addition to those contained in [part 14 – Definitions](#).

|  |   |
|--|---|
| <b>Acute toxicity</b>                    | means adverse effects caused by a toxic agent occurring within a short time following exposure to that agent.   |
| <b>BOD5</b>                              | means '5 day biochemical oxygen demand' which is a measure of the amount of oxygen required by organisms to consume organic matter over a five day period.  |
| <b>Bund</b>                              | means a spill containment system comprising a sealed area that is fully enclosed by a perimeter wall.   |
| <b>Chronic toxicity</b>                  | means adverse effects caused by a toxic agent which occur either after prolonged exposure or an extended period after initial exposure.   |
| <b>Cleaner production</b>                | means the employment of techniques to reduce the need for raw materials, energy and the amount of wastes generated. These techniques may include the use of recyclable materials, the use of less hazardous substances, and the use of renewable resources. |
| <b>Contaminant and contaminated land</b> | have the same meanings as in the RMA.   |
| <b>Contamination</b>                     | means a condition or state which represents or potentially represents an adverse health or environmental impact because of the presence of potentially hazardous substances.  |
| <b>Eco-toxicity</b>                      | means adverse toxic effects on ecosystems or ecological communities.  |
| <b>Emergency plans</b>                   | means a document serving as an emergency response guide which identifies the elements required to respond to an emergency, and defines the responsibilities and specific tasks of key personnel in an emergency.  |
| <b>Hazard</b>                            | means any intrinsic property of a substance which makes it capable of causing adverse effects to people, the environment or property.   |

**Hazardous facility**

means activities involving hazardous substances and sites.

It includes any of the following:

1. Sites where hazardous substances are used, stored or disposed of.
2. Vehicles used for transporting hazardous substances.

It does not include any of the following:

1. The incidental use and storage of hazardous substances in minimal domestic scale quantities.
2. Hazardous activities which do not involve hazardous substances but which may pose a risk to people or the natural environment due to a physical or biological hazard (eg earthworks, electromagnetic radiation, genetically modified organisms and flour dust).
3. Network utility pipelines used for the transfer of hazardous substances such as gas, oil and sewage.
4. Infectious substances.
5. Retail premises which sell hazardous substances for the domestic use (eg supermarkets, hardware shops, pharmacies).
6. Fuel in motor vehicles, boats and small engines.
7. Facilities using genetically modified organisms.

**Hazardous substance**

means any of the following:

1. Substances with one or more of the following intrinsic properties:
  - an explosive nature
  - an oxidising nature
  - a corrosive nature
  - flammability
  - acute and chronic toxicity
  - ecotoxicity with or without bioaccumulation.
2. Substances which in contact with air or water (other than air and water where the temperature or pressure has been artificially increased or decreased) generate a substance with any one or more of the properties specified in item 1 above.
3. Substances which when discharged to surface or ground waters, have the potential to deplete oxygen as a result of the microbial decomposition of organic materials (eg milk or other food stuffs).
4. Radio-active substances except smoke detectors.

**Incident**

means a sudden event that is prevented from resulting in an accident by mitigating circumstances.



|                                      |  |
|--------------------------------------|--|
| <b>Marine protected areas</b>        | means a part of the marine environment given legal protection in order to ensure the preservation of marine flora and fauna, habitats and ecosystems. In addition, marine protected areas may support a variety of associated uses, including scientific study, education, public use and enjoyment and tourism. A range of mechanisms are available for the legal protection of marine areas, including regulations or Taiapure under the Fisheries Act 1983, and marine reserves under the Marine Reserves Act 1971. |
| <b>Off site effects</b>              | means effects on people, property, and the natural environment outside of the boundary of a hazardous facility.  |
| <b>Potentially contaminated land</b> | means land which has been identified as having been used for an activity that is considered likely to cause land contamination as a result of hazardous substance use, storage or disposal. It may include activities as identified in the HAIL list contained at clause 2.0 of <a href="#">appendix 8 – Lists for hazardous facilities and contaminated land</a> .  |
| <b>Process</b>                       | means the same as 'use'.   |
| <b>Separation distance</b>           | means the distance from the edge of the area where hazardous substances are stored or used, to the nearest site boundary. The edge for building enclosures or unbunded storage tanks is the nearest wall to the nearest boundary. The edge for outside storage areas is the nearest curb or bund wall to the nearest boundary.   |
| <b>Site management system</b>        | is a means of ensuring the ongoing safety of a hazardous facility through sound management. A site management system includes safety policy, provides a description of organisational structure and responsibilities, including operating, emergency and monitoring procedures, and includes performance auditing.   |
| <b>Spill containment system</b>      | means a permanent structure which will contain hazardous substances in the event of a spill, and prevent them from entering the stormwater drainage system, any water body or land.  |
| <b>Substance storage</b>             | means the keeping of a substance or mixture of substances in a container, either above ground or underground.  |
| <b>Use</b>                           | means the manufacturing, processing or handling of a substance or mixture of substances for a particular activity without necessarily changing the physical state or chemical structure of the substance involved. This includes mixing, blending and packaging operations, but does not include the filling of or drawing off of substances from bulk storage tanks unless any processing plant is permanently connected to the bulk storage.   |