### BEFORE THE ENVIRONMENT COURT

IN THE MATTER of the Resource Management Act 1991

<u>AND</u>

<u>IN THE MATTER</u> of an appeal under clause 14, First Schedule

of the Act

BETWEEN THE LPG ASSOCIATION OF NEW

ZEALAND LIMITED

(ENV-2012-CHC-99)

<u>Appellant</u>

AND DUNEDIN CITY COUNCIL

Respondent

Environment Judge J R Jackson sitting alone pursuant to section 279 of the Act

In Chambers at Christchurch

### **CONSENT ORDER**

- [A] Under section 279(1)(b) of the Resource Management Act 1991, the Environment Court, by consent, orders that:
  - (1) the appeal is allowed to the extent that the Dunedin City Council is directed to amend Proposed Plan Change 13 (Hazardous Substances) to the Dunedin City Council District Plan as set out in Schedule 1<sup>1</sup>, attached to and forming part of this order;
  - (2) the appeal is otherwise dismissed.
- [B] Under section 285 of the Resource Management Act 1991, there is no order as to costs.



Additions underlined and deletions in strikethrough.

### **REASONS**

### Introduction

- [1] On 9 August 2012 the LPG Association of New Zealand Limited lodged an appeal against decisions of the Dunedin City Council on Proposed Plan Change 13 (Hazardous Substances) to the Dunedin City Council District Plan.
- [2] The court has now read and considered the consent memorandum of the parties dated 30 November 2012 which proposes to resolve the appeal.

### Other relevant matters

[3] Port Otago Limited and Mr Tony Parata have given notice of an intention to become a party under section 274 of the Resource Management Act 1991 ("the RMA" or "the Act") and have signed the memorandum setting out the relief sought.

### **Orders**

- [4] The court is making this order under section 279(1)(b) of the Act, such order being by consent, rather than representing a decision or determination on the merits pursuant to section 297. The court understands for present purposes that:
  - (a) all parties to the proceedings have executed the memorandum requesting this order;
  - (b) all parties are satisfied that all matters proposed for the court's endorsement fall within the court's jurisdiction, and conform to the relevant requirements and objectives of the Act including, in particular, Part 2.

WE SEAL OF

COURT OF

DATED at Christchurch

December 2012

J R Jackson

Environment Judge

Issued: 0 6 DEC 2012

2012-chc-99 lpg v dcc consent order

### 17 Hazards, Hazardous Substances and Earthworks

### Introduction

The City is subject to a wide range of potential hazards. Its topography (flood plains, steep to rolling hills), geology (clay and loess soils, mudstone formations and volcanic deposits), low lying coastal areas and its proximity to earthquake fault lines, present the City with a likelihood of the occurrence of natural hazards. Technological or 'human induced' hazards such as uncontrolled tussock fires, the failure of structures such as bridges and buildings, and the slumping of abandoned mine shafts are further hazards which could affect the City.

The Abbotsford slip in 1979 increased community awareness of potential land instability in the Green Island/Saddle Hill area. Heavy rainfalls have emphasised the vulnerability of the Taieri Plain and the lower Waikouaiti River to flooding, and of the Otago Peninsula to landslips and soil erosion.

Predicted rises in sea level may affect low-lying coastal areas. These include land developed for residential, industrial and recreational activities. The effects of sea level rise are not expected to be felt during the term of this District Plan. However, it is important to ensure that today's planning decisions allow for the predicted effects of sea level rise in order that life and property are not placed at risk. Council acknowledges that due to the level of development, land lying within the South Dunedin area enclosed by Victoria Road, the extended John Wilson Ocean Drive, Tainui Road, Ravelston Street, Royal Crescent, Portobello Road, Portsmouth Drive, Strathallan Street, Wilkie Road, South Road and Forbury Road will require mitigation works if the sea level rises. Such works are to be undertaken by the Council.

The impact of hazards increases as the number of people increases who are affected by the hazard, or the risk of hazard giving rise to an adverse event. The effects can be localised or widespread.

Hazardous substances and their storage, use, or transport are potential threats to the health and safety of the City's people and to the environment. Such substances include industrial, agricultural, horticultural and household chemicals, medical wastes, petroleum products including LPG and lubricating oils, and radioactive substances. [Amended by Plan Change 13, 1 July 2012]

The Council's role in hazards and hazardous substances management under the Resource Management Act 1991 is defined in section 31(b):

The control of any actual or potential effects of the use, development, or protection of land, including for the purpose of-

- (i) the avoidance or mitigation of natural hazards; and
- (ii) the prevention or mitigation of any adverse effects of the storage, use, disposal, or transportation of hazardous substances...

In accordance with sections 35(3) and 35(5)(j) of the Act, the Council is also required to keep reasonably available at its principal office, records of natural hazards and hazardous substances to enable the public to be better informed of their duties and of the functions, powers and duties of the local authority, and to enable them to participate effectively under the Act. [Amended by Plan Change 13, 1 July 2012]

The Regional Policy Statement for Otago outlines the responsibilities of the Dunedin City Council with regard to natural hazards and hazardous substances in accordance with section 62(1)(i) of the Act.

To address the matters above, the Council will use the measures in the District Plan and other relevant legislation, such as the Building Act 2004, the Civil Defence Emergency Management Act 2002, the Hazardous Substances and New Organisms Act 1996 and the Land Transport Act 1998. The Council also acknowledges that there are other non-statutory mechanisms that can be used to complement the legislative requirements. Examples of these include management and emergency response plans, New Zealand Gazette Notice 26 March 2004- Issue No. 35 et al, EPA Approved Codes of Practice (HSNOCoP), New Zealand Standards. To illustrate how the use of other legislation and non-statutory mechanisms outside the District Plan are particularly relevant, it is noted that the Council has limited ability to control the effects of the transportation of hazardous substances through the District Plan. While it is useful for the objectives and policies to refer to such effects so that the matter can be at least considered when assessing resource consent applications where the Council has unlimited discretion, the methods of implementation relating to transportation can only rely on other legislative provisions and non-statutory mechanisms. [Amended by Plan Change 13]

This section of the Plan also contains provisions to control earthworks. Earthworks are an essential part of the development of Dunedin's land and economy including the provision of infrastructure. Well-managed earthworks do not give rise to significant adverse environmental effects. However, without careful management, earthworks can result in injury to people and damage to property, exacerbate certain existing hazards, create new hazards, and, if carried out at contaminated sites, release hazardous substances into the environment. Earthworks can also result in adverse effects on rivers, lakes, streams, wetlands, coastal waters and groundwater, visual amenity and landscape, indigenous flora and fauna, high class agricultural soils, and archaeological and cultural sites. In addition, during construction, earthworks can cause adverse effects on local amenity and on locally, regionally and nationally important infrastructure, such as the transportation network, the reticulated water, foul sewer and stormwater networks and the National Grid.

The earthworks provisions in this section of the District Plan work alongside other mechanisms that control earthworks. The Rural and Indigenous Vegetation and Fauna sections of this Plan control the effects of earthworks and other activities on high class soils, Areas of Significant Conservation Value and other areas of coastal habitat, wetland, skink habitat and indigenous vegetation. Certain earthworks will be carried out as part of building work; these will be subject to the New Zealand Building Code and may require a building consent under the Building Act 2004. Other regulatory mechanisms through which earthworks of certain types are controlled include the Historic Places Act 1993, the Regional Plan: Waste for Otago, the Regional Plan: Water for Otago and the Otago Regional Council Flood Protection Management Bylaw 2008.

[Amended by Plan Change 11, 11/10/10]

Hazards, Hazardous Substances and Earthworks

### 17.1 Significant Resource Management Issues

### Issue 17.1.1

The City's geology and topography are such that natural hazards may occur.

Objective: 17.2.1

Policies: 17.3.1 - 17.3.6

### **Issue 17.1.2**

There is potential for technological hazards to occur within the City.

Objective: 17.2.1

Policies: 17.3.4, 17.3.7

### Issue 17.1.3

Development has occurred in or adjacent to areas where natural and technological hazards exist or may occur.

Objective: 17.2.1

Policies: 17.3.2 - 17.3.6

### **Explanation**

Hazard susceptibility varies across the City. The effects of hazards vary depending on where they occur, how many people could be affected and on the type of hazard. The significant natural hazards affecting or likely to affect the City are flooding, coastal erosion, sea level rise, land instability, wind, snow, earthquakes and fire hazards. Of these, flooding is the most commonly occurring natural hazard in the City, especially on the Taieri Plains and low-lying areas near the Waikouaiti River.

It is necessary to ensure that predicted rises in sea level are considered when deciding on further development in areas that may be at risk of inundation.

### **Explanation**

Human activities, for example gas and fuel storage, and abandoned mine shafts, disused sheep dips and toxic and hazardous substance waste storage can create hazards. Awareness of these hazards and their potential location is important in avoiding, remedying or mitigating any adverse effects on subdivision, land use activities, development and the environment. [Amended by Plan Change 13]

### **Explanation**

In the past, development in the City located where it was thought to be appropriate at the time. In some of these areas hazards have occurred which were unexpected or the causes of which were unknown. Such hazards may also occur in the future.



### Issue 17.1.4

The characteristics, location and impact of natural and technological hazards require better knowledge and understanding.

Objective: 17.2.1

Policy: 17.3.1

### Issue 17.1.5

Effective management needs to be implemented to avoid, remedy or mitigate the effects of hazards.

Objective: 17.2.1

Policies: 17.3.2 - 17.3.8

### **Issue 17.1.6**

The storage, use and transportation of hazardous substances have the potential for adverse effects on the environment.

Objective: 17.2.2

Policy: 17.3.8

### Explanation

Natural and technological hazards may occur without warning or may develop over a period of time. Studies of historical records of climate and events such as flooding, coastal processes, drought, heavy snowfalls, fire, earth movements and earthquakes, as well as knowledge of geology and soil types, and the location of fault lines, are factors in gaining a better understanding of the likelihood of a hazard event occurring and the best means to avoid, remedy or mitigate its effect.

### **Explanation**

Managing activities to avoid, remedy or mitigate hazards will minimise the costs of clean up and rehabilitation after an event as well as reducing adverse effects on the health and safety of the community.

### **Explanation**

Any activities that involve hazardous substances carry a degree of health and other risk to individuals or of damage to the environment. There is also a risk to the economic wellbeing of the City's people and long term commercial viability of the City and its businesses from hazardous substances. The Council has a role in ensuring that the effects of incidents involving hazardous substances are prevented or mitigated. This can be achieved, for example, by the appropriate siting of facilities, establishment of buffer zones and protected routes, together with a requirement for contingency planning by the user concerned. [Amended by Plan Change 13]



### **Issue 17.1.7**

Earthworks are an essential part of the development of Dunedin's land and economy. However, without careful management, earthworks can have a range of adverse effects on safety, property and the environment. [Inserted by Plan Change 11, 11/10/10]

Objective: 17.2.3

Policy: 17.3.9

### **Explanation**

Adverse effects of earthworks can include the following:

- Unstable cuts and fill may cause instability to land and buildings.
- Redirection of surface water may cause flooding or erosion.
- Exacerbation of existing instability and flooding hazards.
- The release of hazardous substances from contaminated land into the wider environment.
- Sedimentation of water bodies.
- Disturbance and contamination of groundwater.
- Adverse visual and amenity impacts.
- Impacts occurring during earthworks construction, including noise, vibration, dust, mud and impacts on infrastructure, such as the transportation network, the reticulated water, foul sewer and stormwater networks and the electricity transmission network.
- Loss of or damage to natural landforms, vegetation and habitats.
- Destruction, damage or modification of archaeological and cultural sites.
- Depletion of high class soils.

Hazards, Hazardous Substances and Earthworks

### 17.2 Objectives

### Objective 17.2.1

Ensure the effects on the environment of natural and technological hazards are avoided, remedied or mitigated.

Issues: 11.1.7, 17.1.1 - 17.1.5

Policies: 17.3.1 - 17.3.7

AER: 17.9.1

### Explanation

The Council has an obligation under the Act to control the effects of the use, development or protection of land including avoiding or mitigating the effects of natural hazards. Buildings, structures and people need to be protected from hazards. The Council must ensure it is able to respond adequately to the threat and effects of hazards within the City. This includes a response capacity for dealing with natural and post event hazards; for example structural engineering advice for seismically or fire affected buildings and infrastructural services and active participation in the NZ Fire Service chaired Hazardous Substances Technical Liaison Committee (HSTLC) and NZ Police chaired Emergency Services Coordinating Committee (ESCC). The Council also ensures that any proposed subdivision, land use activities or development will not cause or be affected by hazards. In assessing the effects of hazards, attention will be given to the acceptable level of risk and any potential adverse effects. [Amended by Plan Change 13]

There is a need to plan for known potential hazards and for anticipated hazards. This requires an understanding of hazards as well as up to 1 July 2012 information on those hazards which may affect the City. Effective planning is needed to reduce risks to people and resources. The responses will vary according to the characteristics of the hazard and the affected areas.

### Objective 17.2.2

Prevent or mitigate the adverse environmental effects and risks arising from facilities and activities involving the storage, use, or transportation of hazardous substances. [Amended by Plan Change 13, 1 July 2012]

Issue: 17.1.6
Policy: 17.3.8

AER: 17.9.2

### **Explanation**

Facilities or activities involving hazardous substances and hazardous wastes generated by the use of hazardous substances may cause adverse environmental effects when the substances are not controlled adequately or when they escape into the environment. Such releases, whether accidental, or through poor management practices, may cause environmental contamination (including contaminated sites) or injury. To avoid, remedy or mitigate potential adverse effects, these facilities and activities need to be located appropriately and managed correctly. In assessing the effects of hazardous substances, attention will be given to the acceptable level of risk and any potential adverse effects. [Amended by Plan Change 13, 1 July 2012]

### Objective 17.2.3

Earthworks in Dunedin are undertaken in a manner that does not put the safety of people or property at risk and that minimises adverse effects on the environment. [Inserted by Plan Change 11, 11/10/10]

Issue: 17.1.7 Policy: 17.3.9

AERs: 17.7.3, 17.7.4, 17.7.5

### **Explanation**

Earthworks are an essential part of the development of Dunedin's land and economy, but can have adverse effects on people, property and the environment if they are not well-managed. A balance can be struck between providing for earthworks and controlling their adverse effects, through the careful design and location of earthworks, the avoidance of significant works in sensitive locations and the implementation of appropriate mitigation measures.



### 17.3 Policies

### **Policy 17.3.1**

Gather and maintain accurate information about, and encourage research into, the location and causes of hazards and the risks associated with them, and the potential for adverse effects of hazards within the City.

Objective: 17.2.1

Methods: 17.4.1, 17.4.2, 17.4.5

### **Policy 17.3.2**

Control building and the removal of established vegetation from sites or from areas which have been identified as being, or likely to be, prone to erosion, falling debris, subsidence or slippage.

Objective: 17.2.1

Methods: 17.4.3 - 17.4.5

### **Policy 17.3.3**

Control development in areas prone to the effects of flooding.

Objective: 17.2.1

Methods: 17.4.3, 17.4.4

### **Explanation**

The community, the Council and other agencies need to be aware of hazards and the risks involved in order to make informed decisions and to avoid, remedy or mitigate the adverse effects of these hazards. An information base that is up to 1 July 2012 and comprehensive is essential for well-informed decision making.

Greater understanding of the natural hazards affecting or likely to affect the City, will enable better informed decisions to be made. There are many agencies with expertise and an interest in the natural hazards of the City and the region, and the Council will work with them to increase understanding.

### **Explanation**

Land movement affects significant areas of the City and, in many instances, stabilisation would be difficult. Intensive development of such areas is undesirable. In other areas where the causes of the land instability are understood and can be avoided, remedied or mitigated on a long term basis, further limited development may be allowed. An example of the way in which adverse effects can be avoided, remedied or mitigated is by the undertaking of tree planting in affected areas.

### **Explanation**

Areas of the City are contained within flood plains which are protected by protective works. Intensive development in such areas needs to be controlled and the ground and floor levels of new buildings defined to ensure that the effects of flooding on new developments are avoided or mitigated.

<sup>1</sup> Refer to the Hazards Register.

### **Policy 17.3.4**

Control development of areas located over underground mines.

Objective: 17.2.1

Methods: 17.4.3, 17.4.4

### **Policy 17.3.5**

Control development in those areas identified as being likely to be affected by a rise in sea level.

Objective: 17.2.1

Methods: 17.4.3 - 17.4.5, 17.4.9

### **Explanation**

While substantial records of mining in the area are available, these are of variable accuracy and detail. Accurate definition of all areas affected, or likely to be affected, is not possible. The effects of mining on the surface depend on the strata overlying the mines and their depth. Such information, while it can be inferred, is not always specifically known and indications of mine collapse have occurred on the surface in the past. Intensive development in such areas is undesirable unless the underlying features are determined and remedial actions are possible and taken.

### **Explanation**

A rise in sea level has been predicted as a probable consequence of global warming although the rate at which it will occur is subject to some debate. Sea level rise predictions based on present world environmental conditions continuing<sup>2</sup> is regarded as the best approach when considering long term planning and development issues.<sup>3</sup> Approval of development near the coast or in low-lying areas nearby should take this into account.

Monitoring by the scientific community of the effects of global warming and any consequent amendment to the prediction for a sea level rise may mean that requirements will change over time.

That is, the 'business as usual scenario', prepared by the UN - based 'Intergovernment Panel on Climate Change'.

The IPCC prediction (1990) is for a sea level rise of 0.2 m (range 0.1 to 0.3 m) by year 2030, and 0.66 m (range 0.3 to 1.1/m) by year 2100.

### **Policy 17.3.6**

Control development in those areas located within or adjacent to land affected by, or likely to be affected by, coastal hazards.

Objective: 17.2.1

Methods: 17.4.3 - 17.4.5, 17.4.9

### **Policy 17.3.7**

Encourage developers constructing new buildings or making substantial alterations to existing structures adjacent to arterial routes, to locate them so as to avoid the possibility of those routes being obstructed by debris resulting from the collapse of those structures.

Objective: 17.2.1
Method: 17.4.3

### **Policy 17.3.8**

Control activities involving the storage, use, and transportation of hazardous substances, and identify sites where hazardous substance processes and facilities which require resource consent\_are located. [Amended by Plan Change 13, 1 July 2012]

Objective: 17.2.2

Methods: 17.4.1, 17.4.2, 17.4.6 -

17.4.8, 17.4.10

17.5.1 - 17.5.4

### **Explanation**

Erosion and changes to the coastline are the result of continuing natural processes. Attempts to control these effects are often inadequate and in some instances have aggravated them. Measures which reinforce natural processes are more likely than others to be successful. Where development is proposed adjacent to the coastline, adequate buffer zones which provide long term security must be provided. Before any development is approved, the mechanism of any hazards affecting the land must be understood, and measures taken to avoid or mitigate them.

### **Explanation**

Access to critical facilities and the rapid evacuation of people and resources are vital if the community is to be able to respond in the event of an earthquake occurring. The prevention or avoidance of building collapses affecting the principal routes will aid the community response.

### **Explanation**

Local authorities have the responsibility to manage the effects of land use. The nature and scale of environmental effects and risk associated with hazardous substances are influenced by their location. This includes their proximity to sensitive environmental areas or residential areas, schools, hospitals, emergency services and arterial routes. Specific controls relating to the use, storage, and transportation of hazardous and environmentally damaging substances will affect the nature and scale of risk and environmental effects. While the Council has limited ability to control the effects of the transportation of hazardous substances through the District Plan, it is a matter that can be at least considered when assessing resource consent applications where the Council has unlimited discretion.

### **Policy 17.3.9**

Control earthworks in Dunedin according to their location and scale. [Inserted by Plan Change 11, 11/10/10]

Objective:

17.2.3

Methods:

17.4.4, 17.4.8, 17.4.12

Rules

17.7.1 – 17.7.5

### **Explanation**

The degree to which earthworks adversely affect safety, property and the environment is dependent on the scale and location of the activity.

Resource consent is required only where the scale and/or location of earthworks are such that adverse effects are likely. Where resource consent is required, the range of effects assessed is tailored to the scale and location of the earthworks. Appropriate mitigation measures will be imposed to minimise any potential adverse effects; such measures may include but will not be limited to reduction in the scale of the earthworks. Earthworks should not occur in any areas where it is not possible to avoid, remedy or mitigate their effects.

### 17.4 Methods of Implementation

In addition to the rules, the methods to be used to achieve the objectives and policies identified in this section include the following:

### Method 17.4.1 Hazards Register

Compile, maintain and provide access for the public to a Hazards Register containing information on the location and nature of identified or potential:

- flood prone areas, including tsunami hazard
- areas of land instability
- coastal sites susceptible to coastal erosion and sea level rise
- areas prone to subsidence or inundation
- geological hazards such as fault lines, and areas susceptible to amplified ground shaking and liquefaction
- · areas prone to high wind and heavy snowfalls
- areas prone to drought
- technological hazards such as underground mining activities, areas of infilling, closed landfills, disused gas works sites, former hazardous substances manufacturing or disposal areas.

The Hazards Register will be publicly available at the Dunedin City Council.

Policies: 17.3.1, 17.3.8

### Method 17.4.2 Hazardous Substances Register

Compile and maintain a Hazardous Substances Register<sup>4</sup> listing the locations and types of consented activities that generate, use, store, or transport hazardous substances, including explosives, flammable gases, liquids, and solids, oxidizers, toxics, corrosives, ecotoxics, and hazardous wastes exhibiting the preceding characteristics. The register will also include information on known contaminated sites. Enquiries regarding the Hazardous Substances Register should be directed to the Dunedin City Council. [Amended by Plan Change 13, 1 July 2012]

Policies: 17.3.1, 17.3.8

### Method 17.4.3 Land and Project Information Memoranda

Use the Land Information Memorandum and Project Information Memorandum processes to identify whether or not an activity or structure is proposed to be located on a site identified as hazard-prone in the Hazards Register, or a site which the Council has good cause to suspect may be prone to a hazard. The Council will encourage applicants to apply for Project Information Memoranda in advance of building consent and resource consent applications.

Policies: 17.3.2 - 17.3.7

<sup>4</sup> On 1 April 2004, all Dunedin City Council Dangerous Goods Licences expired. From this date they became the responsibility of the Environmental Protection Agency (EPA) under the Hazardous Substances and New Organisms Act 1996. All new licences for hazardous substances are now issued by independent Test Certifiers approved by the EPA. The Council no longer holds current information on the use of hazardous substances where resource consent is not required and hazardous substances may be present without the Council's knowledge. [Inserted by Plan Change 13, date]

### Method 17.4.4 Information Requirements for Hazardous Sites

Where any proposed activity that:

- (a) requires an application for resource consent and involves earthworks;
- (b) requires an application for subdivision consent or other resource consent where discretion is unrestricted; and/or
- (c) requires an application for building consent

is to be located on a site identified as hazard-prone in the Hazards Register or on a site that the Council, with good cause, suspects to be hazard-prone, the Council may, at its discretion, require that the relevant consent application includes the results of a site investigation and assessment carried out by a suitably qualified person. [Amended by Plan Change 11, 11/10/10]

Policies:

17.3.2 - 17.3.6, 17.3.9

### Method 17.4.5 Liaison

- (i) Liaise with other agencies, including EPA. Department of Labour, Ministries of Health and the Environment, Test Certifiers and affected landowners to gather, collate, share and provide information on known hazards, and develop measures to encourage sustainable land use practices in hazard-prone areas. [Amended by Plan Change 13, 1 July 2012]
- (ii) Liaise with agencies responsible for preparing industry and building codes of practice that avoid, remedy or mitigate hazards and improve the community's awareness, and encourage implementation of these codes of practice.

Policies:

17.3.1, 17.3.2, 17.3.5

### Method 17.4.6 Accords and Protocols

The Council will assess resource consent applications for the establishment and operation of hazardous processes and facilities within the City. Existing facilities will be subject to the same procedures should they expand or alter their operations or inputs. [Amended by Plan Change 13, 1 July 2012]

Policy:

17.3.8

### Method 17.4.7 Advocacy

- (i) Encourage the implementation of environmentally acceptable technologies in the storage, use, disposal, or transportation of hazardous substances.
- (ii) Encourage voluntary agreements on transport routes to avoid sensitive activities such as hospitals.

Policy:

17.3.8



17:13

### Method 17.4.8 Information, Education and Public Awareness

- (i) Produce brochures and advise the public about any relevant changes in legislation or controls administered by the Council that may affect hazardous processes and facilities.
- (ii) Promote increased awareness and knowledge among developers and operators of the environmental risks associated with hazardous substances.
- (iii) Provide advice and information to the public regarding the potential impacts of earthworks and methods for mitigating those impacts. [Amended by Plan Change 11, 11/10/10]

Policies: 17.3.8, 17.3.9

### Method 17.4.9 Works Programmes

Consider the implementation of works necessary to avoid, remedy or mitigate the potential adverse effects of natural hazards in particular areas of the City.

Policies: 17.3.5, 17.3.6

### Method 17.4.10 Management Plans

- (i) Require, where appropriate, the preparation and operation of site management and emergency response management plans for hazardous substances.
- (ii) The Council will encourage initiatives which involve formulating responses to natural hazards.

Policy: 17.3.8

### Method 17.4.11 Zoning

Ensure that the adverse effects of natural hazards can be avoided, remedied or mitigated by restricting the scale and density of development in potentially hazard prone areas through the use of zoning.

Policies: 4.3.7, 4.3.9, 6.3.4, 6.3.14, 17.3.2, 17.3.3, 17.3.4, 17.3.5.

[Inserted by Variation 9A, 2/3/04]

### Method 17.4.12 Guidelines

Provide guidelines with information on best management practices for earthworks activities, including:

- (i) An Accidental Discovery Protocol to be followed in the event that archaeological material is discovered during earthworks.
- (ii) Sediment control techniques.

Policy: 17.3.9

[Inserted by Plan Change 11, 11/10/10]

Hazards, Hazardous Substances and Earthworks

### 17.5 Rules: Hazardous Substances

### Notes to Plan Users:

- 1) In addition to these District Plan rules, the provisions of the following legislation may also be applicable to activities involving hazardous substances: [Inserted by Plan Change 13, 1 July 2012]
  - Hazardous Substances and New Organisms (HSNO) Act 1996 and regulations
  - Medicines Act 1981
  - Health and Safety in Employment Act 1992
  - Building Act 2004
  - Health Act 1956
  - Radiation Protection Act 1965
- 2) Compliance with the following District Plan provisions does not ensure compliance with the Hazardous Substances and New Organisms (HSNO) Act 1996 and often separate approvals will be required under this Act. Any permitted activity included within this section must also comply with sections 15 and 17 of the Resource Management Act 1991. In addition, activities involving hazardous substances may also require resource consent from the Otago Regional Council. [Inserted by Plan Change 13, 1 July 2012]
- 3) Table 17.1 contains maximum permitted quantity thresholds (plus, in certain cases, storage requirements) for the storage, use or transportation of different types of hazardous substance, as classified via the Hazardous Substance (Classification) Regulations 2001. The quantities vary according to District Plan zone and/or activity type. Where the requirements set out in this table are not met, resource consent will be required under Rule 17.5.2, 17.5.3 or 17.5.4 of this Plan. [Inserted by Plan Change 13, 1 July 2012]
- 4) Unless otherwise stated, if a hazardous substance falls into more than one HSNO sub-class and is therefore controlled by more than one maximum permitted quantity threshold, the base or primary class shall determine the maximum permitted quantity threshold. The base or primary class of a substance is the first classification listed beside any substance within New Zealand Gazette Notice No. 35, as well as on all HSNO required labelling and signage. [Inserted by Proposed Plan Change 13]
- 5) All volumes shall be aggregated i.e. as a permitted activity a site may hold the maximum threshold identified in Table 17.1 of each Class 1 plus Class 2 plus Class 3 and/or Class 4.1.3A-C plus Class 4.2A plus Class 4.3A etc. [Inserted by Plan Change 13, 1 July 2012]
- 6) The permitted quantity thresholds in this table apply per site, except for the Campus, Port 1 and 2, Airport, Industrial 1 zones and forestry and timber treatment activities in the Rural and Rural Residential zone, where the permitted quantity thresholds apply per hazardous sub-facility.

  Where more than one activity is carried out per site or hazardous sub-facility, each hazardous sub-facility shall comply with Rule 17.5.1 or the permitted quantity thresholds Table 17.1, otherwise resource consent will be required under Rule 17.5.2, 17.5.3 or 17.5.4 of this Plan. [Inserted by Plan Change 13, 1 July 2012]

### Notes to Plan Users (cont):

- 7) Central, Large Scale Retail and Local Activity Zones are included in Table 17.1 within the Group 2 section. [Inserted by Plan Change 13, 1 July 2012]
- 8) Where the volume or weight of a hazardous substance is affected by the temperature and pressure at which it is stored, the volume or weight shall be considered (for the purposes of this table) to be that present in conditions of 20°C and 101.3kPa. [Inserted by Plan Change 13, 1 July 2012]
- 9) The disposal of hazardous substances is adequately controlled by the HSNO Act and by the Regional Plan: Waste for Otago and is not controlled by the District Plan. [Inserted by Plan Change 13, 1 July 2012]
- 10) Where any site contains residential activity then Group 1: Residential Zone thresholds detailed in Table 17.1 shall exclusively apply, regardless of any other activity occurring on the site\_except for within the Group 4: Rural/Rural Residential zone, where Group 1: Residential Zone thresholds apply to the residential dwelling and curtilage only. [Inserted by Plan Change 13, 1 July 2012]
- 11) Schedule 12 of the Hazardous Substances (Dangerous Goods and Scheduled Toxic Substances)

  Transfer Notice 2004 (as amended) provides maximum quantities for the indoor storage and use of LPG.

<u>Location</u>	Max. Quantity of LPG	Max. size of cylinder
A detached house or single storey attached dwellings, and Multi-storey attached dwellings up to 3	20 kg per dwelling	10 kg cylinder
Multi-storey attached dwellings over 3 storeys	10 kg per dwelling	10 kg cylinder
Hotels, bars, restaurants, public buildings, places of worship, shops, offices and laboratories not attached to a dwelling	10 kg per 10 sq. m. of the indoor floor area, up to a maximum total quantity of 100 kg	<u>10 kg cylinder</u>
Hotels, bars, restaurants, public buildings, places of worship, shops, offices and laboratories that are attached to a dwelling	20 kg per premises	10 kg cylinder
Factories and warehouses	45 kg per 50 sq. m. of the indoor floor area, up to a	45 kg cylinder

Hazards, Hazardous Substances and Earthworks

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### Dunedin City District Plan

maximum total quantity of 180	
kg per occupancy	

Hazards, Hazardous Substances and Earthworks

### Rule 17.5.1 Permitted Activities (Policy 17.3.8)

The following activities are permitted activities:

- (i) The storage and use of hazardous substances for domestic purposes, associated with a lawfully established residential activity, excluding home occupation. The hazardous substance(s) must form part of a consumer product intended for domestic use. The product must be stored in the container or packaging in which it was sold, and used in accordance with the manufacturer's instructions. [Amended by Plan Change 13, 1 July 2012]
- (ii) The storage and use of fuel and other substances that are contained in the fuel system, electrical system or control system of motor vehicles, boats, aircraft and small engines. [Amended by Plan Change 1, 1 July 2012]
- (iii) The storage and use of agrichemicals within the Group 4: Rural/Rural Residential Zone, in accordance with NZS8409:2004. [Inserted by Plan Change 1, 1 July 2012]
- (iv) The storage and use of Class 3 fuels within the Group 4: Rural/Rural Residential Zone in accordance with the Environmental Protection Agency's Approved Practice Guide for Above-Ground Fuel Storage on Farms, September 2010. [Inserted by Plan Change 13, 1 July 2012]
- (v) The storage and use of fertiliser within the Group 4: Rural/Rural Residential Zone in accordance with the:
  - Fertiliser (Corrosive) Group Standard HSR002569, and
  - Fertiliser (Oxidising) Group Standard HSR002570, and
  - Fertiliser (Subsidiary Hazard) Group Standard HSR002571, and
  - Fertiliser (Toxic) Group Standard HSR002572, and
  - FertResearch's Code of Practice for Nutrient Management 2007 [Inserted by Plan Change 13, 1 July 2012]
- (vi) The storage and use of transformer cooling oils in electricity transformers. [Inserted by Plan Change 13, 1 July 2012]
- (vii) The transit and two-hour storage maximum of tracked hazardous substances transit and 72-hour storage maximum of non-tracked hazardous substances within the Port 1, Port 2 and Industrial 1 Zones. [Inserted by Plan Change 13, 1 July 2012]
- (viii) The storage of hazardous substances (excluding fixed installations) within the Group 6: Port Zone with either a Hazardous Substance Location Certificate or Transit Depot Certificate issued pursuant to the Hazardous Substances (Classes 1 to 5) Regulations 2001 and for Classes 6, 8, 9 in compliance with the HSNO Act 1996. [Inserted by Plan Change 13, 1 July 2012].
- (ix) Unless provided for by Rules 17.5.1(i)-(viii), the storage, use, or transportation of hazardous substances not exceeding the quantity limits and other requirements stipulated in Table 17.1. [Amended by Plan Change 13, 1 July 2012]

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## Table 17.1 (IMPORTANT - Table 17.1 must be read with Notes for Plan Users and Permitted Activity Rule 17.5.1)

Substance	TONIO L J. L	_				The second secon			
	THOMO SUD-Class and nazard	Substance	Group 1:	Group 2:	Group 3:	Group 4:	Group 5:	Group 6:	Group 7:
	classification		Residential	Activity,	Campus Zone,	Rural and Rural	Forestry and	Port Zone,	Airport Zone,
			Zones and	Industry,	excluding	Residential Zone,	timber treatment	excluding	excluding
			residential	Stadium,	residential	excluding	activities in the	residential	residential
			activities in all	Proposed	activities.	residential,	Rural and Rural	activities.	activities.
			other zones.	Harbourside		forestry and	Residential Zone.		
				Zones, exc.		timber treatment			
				00000000		activities.			
Explosives 1	1.1A-G, J, L	Gunpowder and black	15kg	15kg	0	15kg	0	0	0
	Mass explosion hazard	powder							
		Display fireworks	0						
		Industrial explosives	0	25kg	0	25kg	25kg	No threshold	0
		(e.g. TNT) and all other							
	1.2B-L	All	No thresholds						
. I.4	Projection hazard								
	1.3C,	Smokeless ammunition	15kg	50kg	0	15kg	15kg	No threshold	15kg
<u> </u>	F-L	reloading powder							)
F	Fire and minor blast hazard								
Explosives 1	1.3C,	Retail fireworks	No thresholds – re	fer to Hazardous Su	No thresholds - refer to Hazardous Substance (Fireworks) Regulations 2001	Regulations 2001			
I	F-L	All other 1.3	No thresholds						
1	Fire and minor blast hazard								
	1.4B-G, S	Safety ammunition and	25kg	50kg	5kg	25kg	15kg	50kg	No threshold
4	No significant hazard	marine flares							
		Retail fireworks	No thresholds – re	fer to Hazardous St	No thresholds - refer to Hazardous Substance (Fireworks) Regulations 2001	Regulations 2001			
		Sodium Azide	0						
		All other 1.4	No thresholds						
	1.5D Very insensitive, with	All	No thresholds						
#	mass explosion hazard								
	1.6N Extremely insensitive,	All	No thresholds						
н	no mass explosion hazard					•			

# Table 17.1 (IMPORTANT - Table 17.1 must be read with Notes for Plan Users and Permitted Activity Rule 17.5.1)

7	7	[Amended	Amended by Plan Change 13, 1 July 2012)	13, 1 July 2012]				1
HSNO sub-class and hazard classification	Substance	Group 1: Residential Zones and residential activities in all other zones.	Group 2: Activity, Industry, Stadium, Proposed Harbourside Zones, excluding residential activities.	Group 3: Campus Zone, excluding residential activities.	Group 4: Rural and Rural Residential Zone, excluding residential, forestry and timber treatment activities.	Group 5: Forestry and timber treatment activities in the Rural and Rural Residential Zone.	Group 6: Port Zone, excluding residential activities.	Group 7: Airport Zone, excluding residential activities.
2NH (Non-Hazardous)	All	$10\mathrm{m}^3$	200m³	200m³ 500 litres of non-flammable, non-toxic cryogenic liquids stored in accordance with AS1894:1997	200m³	200 <del>m</del> ³	200m³	200m³
2.1.1A High hazard flammable gases	LPG (inc. propane-based refrigerant) in cylinders or multi-vessel tanks.  See Note for Plan Users 11 with regard to indoor storage of LPG.	200kg Total Outdoor_Storage Quantity providing indeor_storage_is no more than 20kg per	200kg 450kg Total Outdoor Storage Quantity providing indoor—storage is no more than four 45kg eylinders.	450kg Total Outdoor Storage Quantity200kg Total—Storage Quantity providing indoor—storage is no more than four cylinders.	450kg Total Outdoor Storage Quantity-200kg Total Storage Quantity providing indoor storage is no more than four 45kg cylinders.	450kg Total Outdoor Storage Quantity200kg Total Storage Quantity providing indoor storage is no more than four 45kg cylindors.	600kg Total Outdoor Storage Quantity providing indoor—storage is no more than four——45kg cylinders.	450kg Total  Outdoor  Storage  Quantity240kg  Total—Storage Quantity providing indoor—storage is no more than four—45kg  cylinders.
	LPG propane-based refrigerant in commercial refrigeration receivers	0	50kg	50kg	50kg	50kg	50kg	50kg
2.1.1A High hazard flammable gases		ФФ	Ф	ФФ	ФФ	ФФ	ФФ	Ф
	Acetylene	1m³	2m³	30m³	$30\mathrm{m}^3$	30m³	30m³	30m³
	Hydrogen, methane and all other permanent gases	0	0	$30\mathrm{m}^3$	$100\mathrm{m}^3$	30m³	30m³	30m³



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# Table 17.1 (IMPORTANT – Table 17.1 must be read with Notes for Plan Users and Permitted Activity Rule 17.5.1)

		- <del></del>			T				<b>—</b>		
	Group 7: Airport Zone, excluding residential activities.	140kg		450 litres	50 litres (any storage except metal drums). 250 litres in Dangerous Goods cabinet	approved to AS 1940 420 litres in approved HSNO 'Type'				ion certificate is held	So litres (any storage except metal drums).     250 litres in Dangerous Goods cabinet approved to AS 1940.     420 litres in approved HSNO Type' stores.
	Group 6: Port Zone, excluding residentia I activities.	140kg		450 litres	<ul><li>50 litres (a drums).</li><li>250 litres in</li></ul>	approved to AS 1940 • 420 litres in approved	stores.			here a test locat	
	Group 5: Forestry and timber treatment activities in the Rural and Rural Residential Zone.	0		450 litres						to 5 litres each. ars of up to 20 litres wh	
2012]	Group 4: Rural and Rural Residential Zone, excluding residential, forestry and timber treatment activities.	0		450 litres						10 litres (any storage). 250 litres in Dangerous Goods cabinet approved to AS 1940. 450 litres in approved HSNO 'Type' stores. Large scale retail activities only: 1500 litres in containers of up to 5 litres each. Group 6: Port Zone are permitted to hold 1500 litres in containers of up to 20 litres where a test location certificate is held	
Amended by Plan Change 13, I July 2012]	Group 3: Campus Zone, excluding residential activities.	0		450 litres	2000 litres					10 litres (any storage). 250 litres in Dangerous Goods cabinet appr 450 litres in approved HSNO 'Type' stores. Large scale retail activities only: 1500 litres Group 6: Port Zone are permitted to hold 15	2000 litres
Amended by Plan	Group 2: Activity, Industry, Stadium, Proposed Harbourside Zones, excluding residential activities.	140kg		450 litres	• 50 litres (any storage except metal drums).	<ul> <li>250 litres in Dangerous Goods cabinet</li> </ul>	approved to AS 1940.	<ul> <li>420 litres in approved HSNO 'Type' stores.</li> </ul>	50 litre	10 litres (any storage)     250 litres in Dangerou     450 litres in approved     Large scale retail active     Group 6: Port Zone ar	So litres (any storage except metal drums).     250 litres in Dangerous Goods cabinet approved to AS 1940.     420 litres in approved HSNO 'Type' stores.
	Group 1: Residential Zones and residential activities in all other zones.	0	No thresholds	20 litres	• 10 litres inside dwelling.	dwelling. (No storage in metal drims)			0	10 litres	10 litres inside dwelling.     50 litres outside dwelling. (No storage in metal drums)
	Substance	Anhydrous ammonia refrigerant	All other 2.1.1B	All	Petrol				All other	All – c.g. acetone, paint spray thinners, pure alcohol	Petrol plus any 3.1B substance – cumulative total limit
Ž.	HSNO sub-class and hazard classification	2.1.1B Medium hazard flammable	gases	2.1.2A Flammable aerosols	3.1A Liquid: Very high hazard (flash point <23°C, initial	35°(				3.1B Liquid: High hazard (FP<23°C, IBP>35°C)	3.1A Petrol plus
V	Substance	Gases and aerosols	1		Flammable liquids (stored	ground in containers	with individual	capacity <450 litres)			

[Amended by Plan Change 13, 1 July 2012]

Table 17.1 (IMPORTANT - Table 17.1 must be read with Notes for Plan Users and Permitted Activity Rule 17.5.1)

· ·								
HSNO sub-class	Substance	Group 1:	Group 2:	Group 3:	Group 4:	Group 5:	Group 6: Port	Group 7: Airport
and hazard		Residential Zones	Activity,	Campus Zone,	Rural and Rural	Forestry and	Zone,	Zone, excluding
classification		and residential	Industry,	excluding	Residential Zone,	timber treatment	excluding	residential
		activities in all	Stadium,	residential	excluding	activities in the	residential	activities.
		other zones.	Proposed	activities.	residential, forestry	Rural and Rural	activities.	
			Harbourside		and timber	Residential Zone.		
			Zones, excluding		treatment activities.			
			residential					
			activities.					
3.1C Liquid: Medium hazard (FP>23°C, but	All – e.g. kerosene, aviation kerosene	<ul> <li>20 litres inside dwelling.</li> <li>50 litres outside</li> </ul>	<ul><li>10 litres (any storage)</li><li>250 litres in Dangerou</li><li>450 litres in annroved</li></ul>	10 litres (any storage). 250 litres in Dangerous Goods cabinet appr. 450 litres in amnoved HSNO, "Tyne, stores	10 litres (any storage). 250 litres in Dangerous Goods cabinet approved to AS 1940. 450 litres in annoved HSNO "Tynns" stores			
≤35°C)		dwelling.	Large scale retail a	activities only: 1500	Large scale retail activities only: 1500 litres in containers of up to 5 litres	to 5 litres		
3.1D Liquid: Low hazard (FP>60°C, but ≤93°C)	All – e.g. diesel, petroleum fuel oils	<ul> <li>20 litres inside dwelling.</li> <li>209 litres outside dwelling</li> </ul>	450 litres					
3.1A Liquid: Very	Petrol	0	Certified Single skin tanks: 0.     Certified Double skin tanks: 6.	Certified Single skin tanks: 0.		Certified Single skin tanks: 0	Certified Single skin tanks: 0.	Certified Single skin tanks: 0.
high hazard (flash				SKIII IGUKS. OOO IIUCS	•	Certified		e skili taliks: 000
point <23°C,						Double skin		
initial boiling						litres.		
point <35°C)	All others	0						American de Caracteria de Cara
3.1B Liquid: High	All - e.g. acetone, paint	0	Certified Single skin tanks: 0.	Certified Single skin tanks: 0.				
hazard (FP<23°C,	spray thinners, pure			SAIII LAIINS, 600 IILLES	٠			
IBP>35°C)	alcohol							
3.1C Liquid:	All - e.g. kerosene,	0	Certified Single si	Certified Single skin tanks: 450 litres.				the state of the s
Medium hazard	aviation kerosene			SKIII LAIIKS. 2000 IILK	Ŕ			
(FP≥23°C, but								
<35°C)								

# Table 17.1 (IMPORTANT – Table 17.1 must be read with Notes for Plan Users and Permitted Activity Rule 17.5.1) [Amended by Plan Change 13, 1 July 2012]

	-								
Substance		Substance	Group 1:	Group 2:	Group 3:	Group 4:	Group 5: Forestry	Group 6: Port Zone,	Group 7: Airport
	hazard classification		Residential	Activity, Industry,	Campus Zone,	Rural and Rural	and timber	excluding	Zone, excluding
			Zones and	Stadium, Proposed	excluding	Residential	treatment	residential	residential
			residential	Harbourside Zones,	residential	Zone, excluding	activities in the	activities.	activities.
			activities in all	excluding res	activities.	residential,	Rural and Rural		
			other zones.	activities.		forestry and	Residential Zone.		
						timber			
						treatment			
						activities.			
Flammable liquids (stored	3.1D Liquid: Low hazard (FP>60°C, but	All – e.g. diesel, petroleum fuel oils	<ul> <li>Certified Single skin tanks: 450</li> </ul>	<ul> <li>Certified Single skin tanks: 450 litres.</li> <li>Certified Double</li> </ul>	• Single skin tanks: 450 litres.	<ul> <li>Certified Single s</li> <li>Certified Double liftes</li> </ul>	Certified Single skin tanks: 450 litres. Certified Double skin tanks: 5000 litres	<ul> <li>Certified Single skin tanks: 450 lifres</li> </ul>	Certified Single skin tanks: 450 litree
above ground	<93°C)		litres.	skin tanks: 2000	Double skin	Certified Super v	Certified Super vault tanks constructed	Certified Double	• Certified
in containers			• Cerunea Double skin	Certified Super vault	tanks: 2000 litres.	to SWR1 standards: 30000 litres.	ds: 30000 litres.	skin tanks: 20000 litres.	Double skin tanks: 10000
with			tanks: 600 litres.	tanks constructed to SWRI standards:	<ul> <li>Super vault tanks</li> </ul>			Certified Super vault tanks	litres.
individual			Certified     Super vault	10000 litres.	constructed to			constructed to	vault tanks
capacity 7430 litres)			tanks		standards:			30000 litres	SWRI
			to South						30000 litres.
			Research						
			(SWRJ) standards: 10000 litres.						
Flammable	3.1A, 3.1B, 3.1C,	All	0						
liquids (stored	3.1D								
below ground)									
Flammable	3.2A, 3.2B & 3.2C	All	0						
liquids (any	Liquid desensitised								
storage)	explosive: High,								
	medium & low								
	hazard								
								The second secon	

### July 2012

Table 17.1 (IMPORTANT – Table 17.1 must be read with Notes for Plan Users and Permitted Activity Rule 17.5.1)

			(Ame	[Amenaea by Flan Change 13, 1 July 2012]	15, 1 July 2012J				
Substance	HSNO sub-class and hazard	Substance	Group 1:	Group 2: Activity,	Group 3:	Group 4:	Group 5:	Group 6:	Group 7:
A Commence of the Commence of	classification		Residential Zones	Industry, Stadium,	Campus Zone,	Rural and Rural	Forestry and	Port Zone,	Airport Zone,
			and residential	Proposed	excluding	Residential Zone,	timber treatment	excluding	excluding
			activities in all	Harbourside Zones,	residential	excluding	activities in the	residential	residential
			other zones.	excluding	activities.	residential, forestry	and Rural	activities.	activities.
				residential		and timber	Residential Rural		
				activities.		treatment activities.	Zone.		
Flammable	4.1.1A Readily combustible	All	0	50kg	50kg	50kg	50kg	50kg	50kg
solids	solids and solids that may								)
	cause fire through friction:								
	Medium hazard								
	4.1.1B Readily combustible	All	0	500kg	500kg	500kg	500kg	500kg	500kg
	solids and solids that may							<b>)</b>	)
	cause fire through friction:								
	Low hazard								
	4.1.2A&B Self-reactive:	All	0	50kg	50kg	50kg	50kg	50kg	50kg
	Types A&B						1	)	)
	4.1.2C-G Self-reactive: Types	All	0	500kg	500kg	500kg	500kg	500kg	500kg
	C-G				ı	)	)	0	0
	4.1.3A-C Solid desensitized	All	0		5kg	0			
	explosives								
Flammable	4.2A&B	All	0	50kg	50kg	50kg	50kg	50kg	50kg
solids	Spontaneously combustible –						1	ı	)
	Pyrophoric substances: High								
	hazard & Self-heating								
	substances: Medium hazard		:						
	4.2C	All	0	500kg	500kg	500kg	500kg	500kg	500kg
	Spontaneously combustible								1
	Self-heating substances: Low								
	hazard								

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Table 17.1 (IMPORTANT - Table 17.1 must be read with Notes for Plan Users and Permitted Activity Rule 17.5.1)

Substince         HSNO sub-class and hazard         Substance         Group 1:         Group 1:         Group 2: Activity, Stadium, and residential Zones           Industry, Stadium, classification         classification         activities in all Harbourside Zones, other zones.         Industry, Stadium, and residential Archange Zones, other zones.           High & medium hazard         4.3A&B         Solids that emit All O         0         Sokg           High & medium hazard         A.2A&B         A.1B         A.1B         Sokg           Flammable gas when wet: Itam         All         0         Sokg           Flammable gas when wet: Itam         All         0         Sokg           Pyrophoric substances: High hazard         All         0         Sokg           A.2C         Solids that emit all mid and are substances: Low hazard         All         0         Sokg           A.2C         Solids that emit all mid and hazard         All         0         Sokg           A.3C         Solids that emit all mid wet: Wet: High & medium hazard         All         0         Sokg	•		1777	timenaca of a tan Change 13, 1 Jany 2012	50 13, 1 July 2011				
classification  classification  definition  4.3A&B Solids that emit flammable gas when wet:  Low hazard & Self-heating substances: Medium hazard  4.2C  Spontaneously combustible - Pyrophoric substances: High hazard & Self-heating substances: Low hazard  4.2C  Spontaneously combustible - Self-heating substances: Low hazard  4.3C  Solf-heating substances: Low hazard  High & medium hazard  4.3C  Solids that emit All 0  High & medium hazard  High & medium hazard  4.3C  Solids that emit All 0		Substance	Group 1:	Group 2: Activity,	Group 3:	Group 4:	Group 5:	Group 6:	Group 7:
and residential activities in all other zones.  4.3A&B Solids that emit All 0  4.3C Solids that emit All 0  flammable gas when wet: High & medium hazard  A.2A&B  Spontaneously combustible - Pyrophoric substances: High hazard & Self-heating substances: Low hazard  4.2C  Spontaneously combustible - Self-heating substances: Low hazard  4.2C  Spontaneously combustible - Self-heating substances: Low hazard  4.2C  Spontaneously combustible - Self-heating substances: Low hazard  4.3C  Spontaneously combustible - Self-heating substances: Low hazard  4.3C  Spontaneously combustible - Self-heating substances: Low hazard  4.3C  Solids that emit All 0  4.3A&B Solids that emit All 0  4.3C  High & medium hazard  4.3C  Solids that emit All 0	classification		Residential Zones	Industry, Stadium,	Campus Zone,	Rural and Rural	Forestry and	Port Zone,	Airport Zone,
able 4.3A&B Solids that emit flammable gas when wet:  High & medium hazard  4.3C Solids that emit flammable gas when wet:  Low hazard  Aurent abstances: High hazard  4.2C Solids that emit flammable gas when wet:  Low hazard  Aurent abstances: High hazard  4.2C  Spontaneously combustible -  Pyrophoric substances: High hazard  4.2C  Spontaneously combustible -  Self-heating substances: Low hazard  4.2C  Spontaneously combustible -  Self-heating substances: Low hazard  4.3C  Spontaneously combustible -  Self-heating substances: Low hazard  4.3C  Solids that emit All 0  High & medium hazard  High & medium hazard  4.3C  Solids that emit All 0			and residential	Proposed	excluding	Residential Zone,	timber treatment	excluding	excluding
### All 0   50kg   ### All 0   50kg   ### All 0   0   50kg   ### All 0   0   50kg   ### All All 0   0   50kg   ### All 0   0   50kg   #### All 0   0   0   #### All 0   0   0   #### All 0   0   0   #### All 0   0   #### A			activities in all	Harbourside Zones,	residential	excluding	activities in the	residential	residential
High & medium hazard  4.3A&B Solids that emit All 0 50kg flammable gas when wet:  Low hazard  4.2A&B  Sportaneously combustible - Pyrophoric substances: High hazard & Self-heating substances: Medium hazard  4.2C  Solids that emit All 0 50kg 50kg 50kg 60kg 60kg 60kg 60kg 60kg 60kg 60kg 6			other zones.	excluding	activities.	residential, forestry	Rural and Rural	activities.	activities.
4.3A&B Solids that emit All 0 500kg flammable gas when wet: High & medium hazard 4.3C Solids that emit All 0 500kg flammable gas when wet: Low hazard A.2A&B Spontaneously combustible – Pyrophoric substances: High hazard & Self-heating substances: Low hazard  4.2C Spontaneously combustible – Self-heating substances: Low hazard A.2C Spontaneously combustible – Self-heating substances: Low hazard Hazard A.2C Spontaneously combustible – Self-heating substances: Low hazard High & medium hazard				residential		and timber	Residential Zone.		
4.3A&B Solids that emit flammable gas when wet:       All       0         High & medium hazard       All       0         4.3C Solids that emit flammable gas when wet:       All       0         Low hazard       All       0         spontaneously combustible - Pyrophoric substances: High hazard & Self-heating substances: Medium hazard       All       0         Spontaneously combustible - Self-heating substances: Low hazard       All       0         Self-heating substances: Low hazard       All       0         High & medium hazard       All       0         High & medium hazard       All       0         High & medium hazard       All       0				activities.		treatment activities.			
flammable gas when wet:  High & medium hazard  4.3C Solids that emit All 0  flammable gas when wet:  Low hazard  4.2A&B  Spontaneously combustible –  Spontaneously combustible –  Solf-heating substances: Low hazard  4.2C  Spontaneously combustible –  Self-heating substances: Low hazard  4.3C Solids that emit All 0  4.3C Solids that emit All 0  High & medium hazard  4.3C Solids that emit All 0	Solids that emit	п	0	50kg	50kg	50kg	50kg	50kg	50kg
High & medium hazard  4.3C Solids that emit All 0 flammable gas when wet:  Low hazard  4.2A&B Spontaneously combustible – Pyrophoric substances: High hazard & Self-heating substances: Low hazard  5.5pontaneously combustible – Self-heating substances: Low hazard  4.2C Spontaneously combustible – Self-heating substances: Low hazard  4.3C Spontaneously combustible – Self-heating substances: Low hazard  4.3C Solids that emit All 0 High & medium hazard  4.3C Solids that emit All 0									
flammable gas when wet:  Low hazard  Spontaneously combustible – Pyrophoric substances: High hazard & Self-heating substances: Low hazard  Spontaneously combustible – Self-heating substances: Low hazard  4.2C  Spontaneously combustible – Self-heating substances: Low hazard  High & medium hazard  4.3C  Solids that emit All 0  High & medium hazard  High & medium hazard  All 0  All All 0	medium hazard								
flammable gas when wet:  Low hazard  4.2A&B  Spontaneously combustible – Pyrophoric substances: High hazard & Self-heating substances: Medium hazard  4.2C  Spontaneously combustible – Self-heating substances: Low hazard  4.3C  Solids that emit High & medium hazard  4.3C  Solids that emit High & medium hazard  All  O  High & medium hazard  All  O  4.3C  Solids that emit All  O	that emit	Ħ	0	500kg	500kg	500kg	500kg	500kg	500kg
Low hazard  able 4.2A&B  Spontaneously combustible – Pyrophoric substances: High hazard & Self-heating substances: Medium hazard  4.2C  Spontaneously combustible – Self-heating substances: Low hazard  4.3A&B Solids that emit All 0  High & medium hazard  4.3C Solids that emit All 0	ble gas when wet:								
Spontaneously combustible – Pyrophoric substances: High hazard & Self-heating substances: Medium hazard  4.2C Spontaneously combustible – Self-heating substances: Low hazard  4.3A&B Solids that emit All 0 High & medium hazard  4.3C Solids that emit All 0	zard								
Spontaneously combustible – Pyrophoric substances: High hazard & Self-heating substances: Medium hazard 4.2C Spontaneously combustible – Self-heating substances: Low hazard  4.3A&B Solids that emit All 0 flammable gas when wet: High & medium hazard  4.3C Solids that emit All 0		П	0	50kg	50kg	50kg	50kg	50kg	50kg
ces: Medium hazard All 0  acously combustible – ating substances: Low 3 Solids that emit All 0  she gas when wet: medium hazard Solids that emit All 0  Solids that emit All 0	eously combustible -								
ces: Medium hazard All 0 aeously combustible – ating substances: Low 3 Solids that emit All 0 amedium hazard Solids that emit All 0	oric substances: High								
ces: Medium hazard All 10 12 12 13 15 16 17 18 18 18 18 18 18 18 18 18 18 18 18 18	ચ								
ating substances: Low ating substances: Low 3 Solids that emit All 0 she gas when wet: medium hazard Solids that emit All 0	ces: Medium hazard								
ating substances: Low  ating substances: Low  3 Solids that emit All 0  ble gas when wet: medium hazard  Solids that emit All 0	A	П	0	500kg	500kg	500kg	500kg	500kg	500kg
ating substances: Low  3 Solids that emit All 0  ble gas when wet: medium hazard Solids that emit All 0	eously combustible -								
S Solids that emit All 0 ble gas when wet: medium hazard Solids that emit All 0	iting substances: Low								
emit All 0 wet: emit All 0									
wet: emit All 0	emit	TI	0	50kg	50kg	50kg	50kg	50kg	50kg
& medium hazard Solids that emit All 0									
Solids that emit All 0	medium hazard								
	that emit	Ħ	0	500kg	500kg	500kg	500kg	500kg	500kg
flammable gas when wet:	ble gas when wet:								
Low hazard	zard								

### Dunedin City District Plan

Table 17.1 (IMPORTANT - Table 17.1 must be read with Notes for Plan Users and Permitted Activity Rule 17.5.1)

Substance HSNO sub-class and classification  Cassification  Oxidising 5.1.1A-C Liquids & All substances solids  5.1.2A Gases Oxygen (Excought in accord in HSNO requirements and used in HSNO requirements in accord in HSNO requirements in accord in All and used in HSNO requirements in accord in according to a substances in according to a substance in according to a	Substances	Group 1: Residential	Group 2: Activity, Industry, Stadium,	Group 3:	Group 4:	Group 5: Forestry and timber	Group 6: Port Zone, excluding	Group 7: Airport Zone, excluding
classification classification 5.1.1A-C Liquids & solids 5.1.2A Gases 5.1.2A Gases 6.1A-G Organic Peroxide: Types A-G 6.1A-C Acutely toxic		Residential	Industry, Stadium,	Campus Zone.		and timber	excluding	Zone, excluding
classification 5.1.1A-C Liquids & solids 5.1.2A Gases 5.1.2A Gases 6.2A-G Organic Peroxide: Types A-G 6.1A-C Acutely toxic		Tonos and		town and among	Kural and Kural		0	
5.1.1A-C Liquids & solids 5.1.2A Gases 5.1.2A Gases 6.2A-G Organic Peroxide: Types A-G 6.1A-C Acutely toxic		ZOUCS AUU	Proposed Harbourside	excluding	Residential Zone,	treatment activities	residential	residential
5.1.1A-C Liquids & solids 5.1.2A Gases 5.1.2A Gases 5.2A-G Organic Peroxide: Types A-G 6.1A-C Acutely toxic		residential	Zones, excluding	residential	excluding	in the Rural and	activities.	activities.
5.1.1A-C Liquids & solids 5.1.2A Gases 5.1.2A Gases 6.2A-G Organic Peroxide: Types A-G 6.1A-C Acutely toxic		activities in all	residential activities.	activities.	residential, forestry	Rural Residential		
5.1.1A-C Liquids & solids 5.1.2A Gases 5.1.2A Gases 6.2A-G Organic Peroxide: Types A-G 6.1A-C Acutely toxic		other zones.			and timber	Zone.		
solids 5.1.2A Gases 5.1.2A Gases 5.2A-G Organic Peroxide: Types A-G 6.1A-C Acutely toxic					treatment activities.			
5.1.2A Gases 5.2A-G Organic Peroxide: Types A-G 6.1A-C Acutely toxic		10 litres if	200 litres if liquid,	200 litres if	No threshold	200 litres if liquid,	200 litres if liquid,	200 litres if
5.1.2A Gases 5.2A-G Organic Peroxide: Types A-G 6.1A-C Acutely toxic		liquid, 10kg	200kg if solid	liquid, 200kg if		200kg if solid	200kg if solid	liquid, 200kg if
5.1.2A Gases 5.2A-G Organic Peroxide: Types A-G 6.1A-C Acutely toxic noes		if solid		solid				solid
5.2A-G Organic Peroxide: Types A-G 6.1A-C Acutely toxic	Oxygen (Except as stored and	5.5m³	1000m³	$500 \mathrm{m}^3$	200m³	200m³	200m³	200m³
5.2A-G Organic Peroxide: Types A-G 6.1A-C Acutely toxic	used in accordance with HSNO							
5.2A-G Organic Peroxide: Types A-G 6.1A-C Acutely toxic	requirements within medical							
5.2A-G Organic Peroxide: Types A-G 6.1A-C Acutely toxic	es)							
5.2A-G Organic Peroxide: Types A-G 6.1A-C Acutely toxic	Nitrous oxide (Except as stored	0	30 x 8-gram nitrous	0				
5.2A-G Organic Peroxide: Types A-G 6.1A-C Acutely toxic	and used in accordance with		oxide cartridges for					
5.2A-G Organic Peroxide: Types A-G 6.1A-C Acutely toxic	requirements within		catering purposes					
5.2A-G Organic Peroxide: Types A-G 6.1A-C Acutely toxic	medical facilities)		only					
5.2A-G Organic Peroxide: Types A-G 6.1A-C Acutely toxic	ine	0						ŀ
Peroxide: Types A-G 6.1A-C Acutely toxic noes	All - e.g. MEKP Polyester	0.5 litres	16 litres	0.5 litres	0.5 litres	0.5 litres	0.5 litres	0.5 litres
6.1A-C Acutely toxic	catalyst							
	drous ammonia	0	140kg	0	0	0	140kg	140kg
· • • • • • • • • • • • • • • • • • • •	erant							
CINOLIL	Chlorine	0	0	0	0	0	0	0
All oth	All other substances	0	20 litres if liquid,	20 litres if	20 litres if liquid,	20 litres if liquid,	20 litres if liquid,	20 litres if liquid
			20kg if solid	liquid, 20kg if	20kg if solid	20kg if solid	20kg if solid	20 kg if solid
				solid				
6.1D&E Sodium	Sodium Chloride	5kg	200kg	1000kg	1000kg	1000kg	1000kg	1000kg
6.1D&E All other	All other substances	1kg	200kg	1000kg	200kg	1000kg	1000kg	1000kg

# Table 17.1 (IMPORTANT - Table 17.1 must be read with Notes for Plan Users and Permitted Activity Rule 17.5.1)

	(6)		lAme	Amenaea oy rian Change 13, 1 July 2012	13, 1 July 2012]				
Substance	HSNO sub-class and hazard	Substances	Group 1:	Group 2:	Group 3:	Group 4:	Group 5: Forestry	Group 6: Port Zone,	Group 7: Airport
man of American Application of the Control of the C	classification		Residential	Activity, Industry,	Campus Zone,	Rural and Rural	and timber	excluding	Zone, excluding
			Zones and	Stadium, Proposed	excluding	Residential Zone,	treatment activities	residential	residential
			residential	Harbourside Zones,	residential	excluding	in the Rural and	activities.	activities.
			activities in all	excluding residential	activities.	residential, forestry	Rural Residential		
			other zones.	activities.		and timber	Zone.		
						treatment activities.			
Toxic	6.3A&B Skin irritant	All	lkg	2000kg	1000kg	2000kg	1000kg	1000kg	1000kg
substances	6.4A Eye irritant	Cement, Hydrated Lime and Burnt Lime	400kg	50 tonne	1000kg	30 tonne	30 tonne	100 tonne	1000kg
		Sodium Chloride	5kg	200kg	1000kg	1000kg	1000kg	1000kg	1000kg
		All Others	lkg	2000kg	1000kg	2000kg	1000kg	1000kg	1000kg
	6.5A&B Respiratory &	Cement, Hydrated Lime	400kg	50 tonne	1000kg	30 tonne	30 tonne	100 tonne	1000kg
	contact sensitizers	and Burnt Lime				***************************************			
		All Others	1kg	2000kg	1000kg	2000kg	1000kg	1000kg	1000kg
	6.6A&B Human mutagens	All	lkg	2000kg	1000kg	2000kg	1000kg	1000kg	1000kg
	6.7A&B Carcinogens	All	1kg	200kg	1000kg	200kg	1000kg	1000kg	1000kg
	6.8A-C Human reproductive	All	0	0	0	0	0	0	0
	or developmental toxicants								
	6.9A&B Substances affecting	All	0	0	0	0	0	0	0
	human target organs or								
	systems								
Radioactive	These substances are	; All	Quantities spe	Quantities specified in the 'Type A' transport package limit, as identified in the International Atomic Energy Agency(IAEA) Regulations for the	ansport package lim	it, as identified in the I	nternational Atomic E	inergy Agency(IAEA)	Regulations for the
materials	controlled through the		Safe Transpor	Safe Transport of Radioactive Material. Examples: domestic smoke detectors, demonstration radioactive sources in school laboratories.	l. Examples: domes	tic smoke detectors, de	monstration radioactiv	e sources in school lab	oratories.
	Radiation Protection Act								
	1965 rather than through								
	HSNO.								



# Table 17.1 (IMPORTANT - Table 17.1 must be read with Notes for Plan Users and Permitted Activity Rule 17.5.1)

( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( )			lame	Lamerinea by I can Ciange 10, I daily 2012	10, 1 outy 2012				
Substance	HSNO sub-class	Substance	Group 1:	Group 2: Activity,	Group 3:	Group 4:	Group 5:	Group 6:	Group 7:
	and hazard		Residential Zones	Industry, Stadium,	Campus Zone,	Rural and Rural	Forestry and	Port Zone,	Airport Zone,
	classification		and residential	Proposed	excluding	Residential Zone,	timber treatment	excluding	excluding
			activities in all	Harbourside Zones,	residential	excluding	activities in the	residential	residential
			other zones.	excluding	activities.	residential,	Rural and Rural	activities.	activities.
				residential		forestry and	Residential Zone.		
				activities.		timber treatment			
						activities.			
Corrosives	8.1A Substances	All	5 litres	1000 litres	1000 litres	1000 litres	5000 litres	1000 litres	1000 litres
	corrosive to metals								
	8.2A-C	Cement, Hydrated Lime and	400kg	50 tonne	1000kg	30 tonne	30 tonne	100 tonne	1000kg
	Substances	Burnt Lime							
	corrosive to skin	All	5 litres	1000 litres	1000 litres	1000 litres	5000 litres	1000 litres	1000 litres
	8.3A Substances	Cement, Hydrated Lime and	400kg	50 tonne	1000kg	30 tonne	30 tonne	100 tonne	1000kg
	corrosive to the	Burnt Lime							
	eye	All	5 litres	1000 litres	1000 litres	1000 litres	5000 litres	1000 litres	1000 litres
Ecotoxics	9.1A-D Aquatic		See base Class thresholds	splot					
	ecotoxics and		NB- Where a substa	NB- Where a substance requires resource consent and also has an ecotoxic class, the ecotoxcity shall be taken into consideration as part of	onsent and also ha	s an ecotoxic class, the	e ecotoxcity shall be t	taken into consid	eration as part of
	9.2A-D Soil		Assessment Matter 17.6.8	17.6.8					
	ecotoxics								
	9.3A-C Terrestrial	All							
	vertebrate		See base Class thresholds	holds					
	ecotoxics		NB- Where a subst	NB- Where a substance requires resource consent and also has an ecotoxic class, the ecotoxcity shall be taken into consideration as part of	onsent and also ha	s an ecotoxic class, th	e ecotoxcity shall be 1	taken into consic	leration as part of
			Assessment Matter 17.6.8	17.6.8		the state of the s			
	9.4 A-C Terrestrial	All	See base Class thresholds	holds					
	invertebrate		NB- Where a subst:	NB- Where a substance requires resource consent and also has an ecotoxic class, the ecotoxicity shall be taken into consideration as part of	onsent and also ha	s an ecotoxic class, the	e ecotoxicity shall be	taken into consid	leration as part of
	ecotoxics		Assessment Matter 17.6.8	17.6.8					
	,	, ,	1 6 7 6						

Table 17.2 [Deleted by Plan Change 13, 1 July 2012]
Table 17.3 [Deleted by Plan Change 13, 1 July 2012]

### **Rule 17.5.2** Controlled Activities (Policy 17.3.8)

The following activities are controlled activities:

- (i) The single vessel tank storage of HSNO sub-class 2.1.1A LPG, including
  - (a) propane-based refrigerant, in below-ground or above-ground tanks;
  - (b) the storage of HSNO sub class 2.1.1A LPG, including propane based refrigerant, in 222kg cylinder installations;
  - (be) the storage of HSNO sub-class 2.1.1A LPG propane-based refrigerant in commercial refrigeration receivers, in quantities exceeding those permitted in Rule 17.5.1; and
  - (cd) the storage of HSNO sub-class 3.1A-D liquid petroleum fuels in belowground tanks; is controlled in respect of:
  - (a) Location and design of storage tanks.
  - (b) Monitoring systems.
  - (c) Emergency response plans.
  - (d) Site security and containment.

### **Assessment Matters**

In assessing any application the Council will, in addition to the matters contained in the Fourth Schedule of the Act, have regard to:

- For storage of petrol and/or diesel, adherence to the Environmental Protection Authority (EPA) Approved Code of Practice HSNOCOP 13-2, "Code of Practice for the Management of Existing Stationary Container Systems up to 60,000 litres Capacity".
- For storage of LPG, including siting of LPG facilities, adherence to the Hazardous Substances (Classes 1-5 Controls) Regulations 2001 and to AS/NZS 1596:2008 "The Storage and Handling of LP Gas".
- Any unusual soil or other underground conditions of the site which contribute to risks of tank or pipework failure.
- The nature of activities and density of use in the vicinity of the site, including any potential for synergistic enhancement of risk from use on the same or adjacent sites of quantities of the same substance or the co-storage and/or use of other hazardous substances.
- (ii) The storage in belowground tanks of HSNO sub-class 9.1A-D aquatic ecotoxics and/or HSNO sub-class 9.2A-D soil ecotoxics is controlled in respect of:
  - (a) Location and design of storage tanks or cylinders.
  - (b) Monitoring systems.
  - (c) Emergency response plans.
  - (d) Site security and containment.

### **Assessment Matters**

In assessing any application the Council will, in addition to the matters contained in the Fourth Schedule of the Act, have regard to:

- For storage of aquatic or soil ecotoxics, adherence to the Environmental Protection Authority (EPA) Approved Code of Practice HSNOCOP 13-2, "Code of Practice for the Management of Existing Stationary Container Systems up to 60,000 litres Capacity".
- (iii) The storage, use or transportation of radioactive materials not exceeding 100 times the quantities specified in the 'Type A' transport package limit (as identified in the International Atomic Energy Agency (IAEA) 'Regulations for the Safe Transport of Radioactive Material') is controlled in respect of: [Amended by Plan Change 13, 1 July 2012]
  - (a) Location and design of facility.
  - (b) Monitoring systems.
  - (c) Emergency response plans.
  - (d) Site security and containment.

(Example: industrial radiography)

### **Assessment Matters**

In assessing any application the Council will, in addition to the matters contained in the Fourth Schedule of the Act, have regard to:

- Adherence with requirements of the National Radiation Laboratory.
- The nature of activities and density of use in the vicinity of the site.

### Rule 17.5.3 Discretionary Activities (Restricted) (Policy 17.3.8)

The following activities are discretionary activities (restricted):

- (i) The multi vessel tank storage of HSNO sub-class 2.1.1A LPG, including propane-based refrigerant
- (ii) The storage, use or transportation in the Group 6: Port Zone, which does not comply with Permitted Activity Rule 17.5.1. [Amended by Plan Change 13, 1 July 2012].

Council's discretion under this rule is restricted to:

- (a) Matters relating to public safety.
- (b) Avoidance of environmental effects arising from potential spillage of hazardous substances stored.
- (c) Location and design of storage tanks.
- (d) Monitoring systems.
- (e) Emergency response plans.
- (f) Site security and containment.

Hazards, Haz

### **Rule 17.5.4 Discretionary Activities (Unrestricted)** (*Policy 17.3.8*)

The following activities are discretionary activities (unrestricted):

(i) The storage, use or transportation of hazardous substances other than provided for in Rule 17.5.1, Rule 17.5.2 or Rule 17.5.3 [Amended by Plan Change 13, 1 July 2012].

In addition to an assessment of effects as contained in the Fourth Schedule of the Act, the Council will require applicants to prepare a site management plan and an emergency response plan to be submitted with any application for resource consent required under this rule.



### 17.6 Assessment of Resource Consent Applications: Hazardous Substances [Amended by Plan Change 13, 1 July 2012]

In assessing any applications, in addition to the matters contained in the Fourth Schedule of the Act, the Council will have regard to, but not be restricted by the following matters:

### 17.6.1 Intensity

The nature and size of the development or activity.

### 17.6.2 Nature of the Hazardous Substance

The nature of the hazardous substance.

### 17.6.3 Information

Knowledge and understanding of the hazardous substance and its effects.

### 17.6.4 HSNO Act 1996

Ability to comply with the HSNO Act 1996

### **17.6.5** Location

Location of the site or sub-facility with respect to population, services, schools, emergency services, hospitals and arterial routes.

### 17.6.6 Design and location

Location and design of storage tanks and associated plant.

### 17.6.7 Transportation

Ability to transport the hazardous substances to, and from, the facility is a safe and secure manner.

### 17.6.8 Risk

The sensitivity of the surrounding environment and the acceptable level of risk and includes the assessment of site management plans and emergency response plans.

### 17.6.9 Consequences of Hazardous Substance

Consequences to people, infrastructure and the environment of any failure, escape or activation of the hazard or hazardous substance.

### 17.6.10 Cumulative Effects

The cumulative effects on people, infrastructure and the environment arising from storing, using or disposing of hazardous substances.

### 817.6.11 Alternative locations and methods

Consideration of alternative locations and methods of storing, using or disposing of hazardous substances.

### 17.6.12 Mitigation

Whether mitigation measures are appropriate, reliable and able to be adequately monitored.

### 17.6.13 Long Term Measures

The long term performance and management requirements of protective or mitigation measures.

### 17.6.14 Codes of Practice

Industry codes of practice and other procedures which may be used to assess activities involving hazardous substances.



### 17.6a Assessment of Resource Consent Applications:

Hazards [Amended by Plan Change 13, 1 July 2012]

In assessing any applications, in addition to the matters contained in the Fourth Schedule of the Act, the Council will have regard to, but not be restricted by the following matters:

### 17.6a.1 Intensity

The nature and size of the development or activity.

### 17.6a.2 Nature of Hazard

The nature of the hazard.

### 17.6a.3 Information

Knowledge and understanding of the hazard and its effects.

### 17.6a.4 Location

Location with respect to population, services, schools, emergency services, hospitals and arterial routes.

### 17.6a.5 Mitigation

Whether mitigation measures are appropriate and reliable.

### 17.6a.6 Risk

The acceptable level of risk.

### 17.6a.7 Drainage

Drainage of the area.

### 17.6a.8 Long Term Measures

The long term performance and management requirements of protective or mitigation measures.

### 17.6a.9 Consequences of Hazard

Consequences to people, infrastructure and the environment of any failure or activation of the hazard.

### 17.6a.10 Climate

Climatic conditions.

### 17.6a.11 Suitability of Site

How the applicant has addressed matters relating to natural hazards which may affect the suitability of the site for the proposed activity.

### 17.9 Anticipated Environmental Results

The anticipated environmental results are:

### 17.9.1

The avoidance or mitigation of adverse effects resulting from natural hazards on infrastructure, the physical environment, and people's health and safety.

Objective: 17.2.1

### 17.9.2

The prevention or mitigation of adverse effects of the storage, use, or transportation of hazardous substances.

Objective: 17.2.2

### 17.9.3

Earthworks do not result in loss of life or injury, or in damage to property. [Inserted by Plan Change 11, 11/10/10]

Objective: 17.2.3

### 17.9.4

Earthworks do not cause sedimentation of surface water bodies, coastal water or stormwater networks, or contamination of groundwater. [Inserted by Plan Change 11, 11/10/10]

Objective: 17.2.3

### 17.9.5

Earthworks do not cause adverse visual impacts, and do not result in loss of or damage to natural landforms, vegetation, habitats, or archaeological sites. [Inserted by Plan Change 11, 11/10/10]

Objective: 17.2.3