20 HAZARDOUS SUBSTANCES & CONTAMINATED SITES

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20 HAZARDOUS SUBSTANCES & CONTAMINATED SITES

20.1 INTRODUCTION

20.1.1 Hazardous Substances

The Hazardous Substances and New Organisms Act 1996 (HSNOA) defines a hazardous substance as any substance which has one of the following properties:

- an explosive nature
- flammability
- ability to oxidise (ie. to accelerate a fire)
- corrosiveness
- toxicity (including chronic toxicity)
- eco-toxicity, with or without bio-accumulation (ie. can kill living things either directly or by building up in the environment)
- generates a hazardous substance on contact with air or water

The use and storage of substances with these characteristics are an integral part of contemporary life. However, by definition their use and storage without taking adequate precautions can have adverse effects on water, soil and eco-systems, and the health, safety and social and economic wellbeing of the community. It is therefore appropriate for the District Plan to promote the sustainable management of these physical resources, by use of controls designed to reduce risks from the use and storage of hazardous substances, while avoiding duplication with areas of control provided for under other legislation eg. regulations under the Radiation Protection Act 1965, the HSNOA and the Transport Act 1962. (An outline of the legislation governing hazardous substances is given for information at Appendix 20A.)

The extent of hazardous substance use and storage in the District is unknown. The Council has records of flammable and oxidising substances, because they have been licensed under the Dangerous Goods Act 1974, but no records of the storage or use of explosives and corrosives such as acids and caustic materials, or of toxic substances, including eco-toxic substances such as 1080 and pesticides. Since the amount of service and manufacturing industry in the District is relatively small, the quantum of corrosives, toxic and eco-toxic substances used by this type of industry is assumed to be relatively small. The small number of localised contaminated sites resulting from their use by industry is, however, likely to be offset to a degree by the physically more extensive contamination resulting from the use made of eco-toxic substances by horticulture, farming and forestry.

Because the emphasis of the Resource Management Act is on sustainable management and the avoidance, remediation and mitigation of environmental effects, it is appropriate that the control mechanisms for hazardous substances focus on both the substances and the facilities or activities generating the effect, rather than on the intrinsic properties of the hazardous substances alone.

20.1.2

Contaminated Sites

The Council has compiled a list of some 130 sites which are potentially contaminated. This list includes sites known to be contaminated and those where the possibility of contamination has been inferred from the known history of the site. The sites have been prioritised into high, moderate and low risk categories according to the contaminant, pathway and interceptor model. The high risk sites are predominantly those which have been, or are, used for copper/chrome/arsenic timber treatment, while the low risk sites mainly comprise those which have contained underground storage tanks for petrol and diesel. The list may be added to as further contaminated or potentially contaminated sites come to the Council's notice, and likewise entries may be removed as contaminated sites are either managed or remediated.

20.2 RESOURCE MANAGEMENT ISSUES

Four significant resource management issues have been identified:

Issue
20.2.1

People's health, safety and property can be adversely affected by hazardous substances.

Health and safety

Human health, safety and property can by adversely affected by, and in extreme cases death can result from, the inadvertent or deliberate release of hazardous substances during their use, storage, transport or disposal.

Issue
20.2.2

Natural ecosystems can be adversely affected by hazardous substances.

Natural ecosystems

The health, and in some cases the continued existence, of living elements of natural eco-systems can be adversely affected by the inadvertent or deliberate release of hazardous substances during their use, storage, transport or disposal.

Issue
20.2.3

Land, air and water can be adversely affected by hazardous substances.

Contamination

Land, water (both surface and underground) and air can be contaminated by the inadvertent or deliberate release of hazardous substances during their use, storage, transport or disposal.

Risks

The risks can be either long term risks to human health and the environment (such as heavy metals and organochlorine compounds that accumulate in the food chain), or short term risks (such as from volatile, explosive or flammable substances which rapidly evaporate, or from toxic materials that rapidly break down). Some substances, although contaminants and therefore undesirable, will pose substantially less risk to human health and the environment. The problems will differ from site to site, both in nature and in degree of risk.

Explosion, fire contact

Some adverse effects of hazardous substances on human and other living organisms do not involve contamination. Examples are effects of explosions and fire, or of direct contact with corrosive substances. Control of potential effects of this nature is frequently the province of specific legislation (eg. the HSNOA), which focuses on aspects such as the adequacy of containment vessels. Controls of this sort provide a "first level" of protection which may be all that is warranted in some cases. However, other adverse effects of hazardous substances are experienced by living organisms through the contamination by these substances of land, air and water. Therefore it is necessary to focus on preventing contamination of these media.

Issue
20.2.4

Contaminants on and in sites contaminated by hazardous substances can adversely affect the range of possible uses of land, air and water.

Contaminated sites

Contaminants on and in contaminated sites may limit the range of potential

uses of those sites and neighbouring land, and may contaminate air and surface and underground water.

Limit uses

Sites which are contaminated with hazardous substances can present a problem for their owners and the community. Some such sites became contaminated when used for a purpose (eg. timber treatment or refuse disposal) that was not itself sensitive to the contaminant, but as a result of the contamination the land cannot be used for more sensitive purposes eg. housing. Less commonly, adverse effects of the contaminants may also limit the range of uses of nearby land (eg. where there is a danger of explosion, or where contaminants may migrate through the ground from the contaminated site). Migration of contaminants, sometimes through the air, but more commonly through leachate, can pollute surface and underground water, with adverse effects on downstream eco-systems and users of water.

Prevention

Prevention of these adverse effects can be addressed at three stages. The first is when a proposal to use land for a purpose which has the potential to contaminate is first developed and evaluated. The second is when the activities which have this potential to contaminate land are being undertaken. The third is after the activity has ceased. Prevention at this third stage can be particularly difficult to implement. Often the costs cannot be offset by revenue from some productive use of the land. Also, the responsibility for undertaking a clean-up, and funding it, can be difficult to establish, particularly in the case of so called "orphan sites", where the original contaminator is either bankrupt or cannot be found, or where the contamination took place before the Resource Management Act came into force in 1991.

Issues from other chapters

Readers should note that issues from the following chapters are also relevant.

Chapter 7 - Rural
Chapter 8 - Residential
Chapter 9 - Business
Chapter 10 - Open Space
Chapter 11 - Inland Water
Chapter 12 - Special Zones
Chapter 14 - Scheduled Activities

20.3 OBJECTIVES

Objective 20.3.1

To avoid, remedy or mitigate the adverse effects of the use, storage, transportation and disposal of hazardous substances on human health and safety, and on physical resources and property.

(This objective relates to Issue 20.2.1)

Objective 20.3.2

To avoid, remedy or mitigate the adverse effects of the use, storage, transportation and disposal of hazardous substances on land, air, water, and natural ecosystems.

(This objective relates to Issues 20.2.2 and 20.2.3)

Objective 20.3.3

To avoid, remedy or mitigate the adverse effects on human health and safety, economic and social wellbeing, physical resources and property, natural ecosystems and land, air and water created by the hazardous substances present on contaminated sites.

(This objective relates to Issue 20.2.4)

Objectives from other chapters

Readers should note that Objectives from the following chapters are also relevant:

Chapter 7 - Rural
Chapter 8 - Residential
Chapter 9 - Business
Chapter 10 - Open Space
Chapter 11 - Inland Water
Chapter 12 - Special Zones
Chapter 14 - Scheduled Activities

20.4 POLICIES

Policy 20.4.1

Hazardous facilities and sub-facilities should be located and designed, and procedures for handling materials and dealing with emergencies should be such, that the use, storage, disposal and transport of hazardous substances do not give rise to levels of risk to human health, safety and property that are incompatible with the way in which surrounding land is used or may be used or developed.

Explanation and Reasons
This policy seeks to achieve Objective 20.3.1.

Although the use of hazardous substances may provide benefits to people and communities by meeting needs for products and services, any facilities or activities involving hazardous substances also represent a risk to people and communities. In some cases, this risk may be of particular concern because of the proximity of sensitive "people intensive" activities such as schools, recreational venues or residential areas. In such circumstances, the ability to control the location and design of hazardous facilities, to require the adoption of emergency procedures and to require signage to indicate the nature and location of hazardous substances present on site are necessary to ensure that potential effects of low probability but high potential impact are avoided (eg. explosive events in the vicinity of a school). Assessment of site suitability may include consideration of the risk to land uses along the route that vehicles delivering hazardous substances must take to reach or depart from the site.

Policy 20.4.2

Hazardous facilities and sub-facilities should be located and designed, and the procedures for handling materials and dealing with emergencies should be such, that the potential of the storage, use, disposal and transport of hazardous substances to lead to the contamination of water, soil and air, and the bio-accumulation of contaminants in plants, animals and ecosystems is avoided, remedied or mitigated.

Explanation and Reasons
This policy seeks to achieve Objective 20.3.2.

Under the Resource Management Act, local authorities have a duty to control the adverse effects of land use activities on the environment. The uncontrolled or unintended release of hazardous substances, whether accidental or brought about by poor management practices, may cause environmental contamination and damage.

The nature and scale of environmental effects and risks associated with hazardous facilities, and the transport of hazardous substances to them, are influenced by their location, for example, their proximity to sensitive environmental areas or residential areas.

The design of hazardous facilities and sub-facilities - whether, for example, storage areas are roofed or bunded to contain leaks, or whether wash-down water carrying

hazardous substances is kept separate from sewerage or stormwater systems - also directly affects this level of risk to the environment.

Management practices, such as procedures for handling hazardous substances, can also affect the likelihood of the substances escaping into the environment, regardless of the design of the hazardous facility itself.

Policy
20.4.3

All contaminated sites in the District should be managed in such a way that their actual and potential adverse effects on human health and soil and water quality are avoided, remedied or mitigated.

Explanation and Reasons
This policy seeks to achieve Objective 20.3.3.

The actual and potential risks to human health and soil and water quality from sites contaminated with hazardous substances by past or present activity, can be significant. Under the RMA landowners are required to manage and/or remediate discharges from their sites to ground or groundwater.

Owners, intending developers and prospective purchasers need to be aware of the constraints that use and re-use of the land may face. This could include the consideration of the potential adverse effects of excavation and earthmoving, which might result in the remobilisation of contaminants so that they are no longer contained on-site (eg. methane gas release from disturbing old landfill sites). How owners and developers would deal with the adverse effects of removing contaminated soils off-site would also need to be taken into account.

In places where ongoing pollution of water or air is originating from contaminated sites and there are no proposals from the owner to remedy the situation, it may be necessary for public agencies to undertake decontamination themselves. Public funds are available to Regional Councils from the Central Government "Contaminated Sites Remediation Fund" to investigate and remediate contaminated sites where the environmental effects are significant or remediation is beyond the financial capacity of the landowners.

Policy
20.4.4

Policies from the following chapters are also relevant*:*

Chapter 7 - Rural
Chapter 8 - Residential
Chapter 9 - Business
Chapter 10 - Open Space
Chapter 11 - Inland Water
Chapter 12 - Special Zones
Chapter 14 - Scheduled Activities

20.5 STRATEGY

20.5.1 Hazardous Substances

The strategy for hazardous substances is to manage them in such a way that the economic and social benefits of their use can be realised without creating adverse effects on human health and safety or on the natural environment.

20.5.2 Contaminated Sites

The strategy for existing contaminated sites is to work through the market to achieve management or remediation of contaminated sites where this is financially feasible and necessary for the proposed future land use. Therefore management or remediation will normally occur only when demanded by a new use of the site (either in response to the needs of the new user or as a condition of resource consent) or where funding is available or some external factor such as changed conditions for acceptance abroad of New Zealand produce. Where the cost of management or remediation is greater than the market value of the land in a contaminant free state, the strategy will be to explore with the Regional Council the use of public money to deal with the greatest effects. Sites that are eligible for clean up pose or are likely to pose a high risk to human health, or are located in environmentally or culturally sensitive areas or where landowners do not have the financial resources to undertake the work themselves, may be eligible for funding from the Ministry for the Environment.

20.6 IMPLEMENTATION

20.6.1 District Plan Regulatory Methods

20.6.1.1 Hazardous Substances

The approach of the Plan to preventing adverse effects of hazardous substances on the environment is to deal with the land and buildings where hazardous substances are used and stored (termed hazardous facilities or sub-facilities), rather than with the substances themselves. This recognises that it is the location, design and management of the hazardous facilities and sub-facilities along with the qualities and nature of the substances that determines how serious adverse effects may be, depending on the sensitivity of the environment and populations that might be affected and how well the potentially adverse effects of the hazardous substances will be controlled.

The rules for hazardous facilities management focus on:

(a) **controlling the location and management** of hazardous facilities and sub-facilities, based on the premise that these facilities should be established only where they will not pose an unacceptable risk to human health, the natural environment, and the physical resources of the surrounding area;

(b) **controlling the design** of hazardous facilities and sub-facilities, based on the concept that premises should be designed and managed in a manner that avoids or mitigates adverse effects, including unacceptable risk to the environment and human health.

Premises or facilities handling most hazardous substances are to be screened using the Hazardous Facilities Screening Procedure (HFSP). This procedure focuses on the potential adverse effects of the use or storage of hazardous substances in a given area or environment. In doing so, it takes into account the hazard of a substance, site-specific conditions and the risk it poses. Hazard is principally defined by the intrinsic properties of a substance, and risk is defined by the probability of the release of the substance, combined with the potential consequences of that release.

The process then compares the degree of hazard expected with the degree of hazard regarded as tolerable in relation to the use of surrounding land. The threshold level regarded as tolerable for surrounding land is predetermined for each zone. This threshold level is termed the Consent Status Index. Where the level is expected to be exceeded by an activity using a hazardous substance, a resource consent will be required, and the extent of the hazard, the likely effects on nearby land, water, air and public health, and measures to mitigate it, can then be assessed.

Where the level of hazard is below the threshold, the activity will be classified as a Permitted Activity, provided that specified measures are taken to guard against a hazard occurring in case of accidental escape of the hazardous substance.

Existing facilities will not be subject to the HFSP, unless they expand or alter their operations in such a way or to such an extent that they are no longer covered by the existing use provisions of sections 10, 10A and 20 of the Act. It

is unlikely that the replacement of tanks or other equipment would attract screening by the HFSP, unless it would allow a considerable increase in the storage or use of hazardous substances.

Some defined categories of activity using hazardous substances are exempt from the need to obtain resource consent or comply with the performance standards applicable to permitted activities. This is either because the way in which the substance is used, or the small quantities used, make control by the District Plan inappropriate; or in the case of radioactive substances and genetically modified organisms, because the HFSP does not measure the type of hazard presented. Also, some hazardous facilities (notably vehicle fuel dispensing facilities up to a certain size) are exempt from the need to be tested by the HFSP if they are constructed and operated in accordance with industry codes of practice, or the relevant New Zealand Standard.

The Council has tried to ensure that this District Plan does not exercise control over hazardous substances where this is already exercised for the same purpose by another regulatory body or under other legislation (see Appendix 20A). However, at the time of public notification of the Plan (28 November 2000) the legislation affecting hazardous substances was still being developed. When the process is complete and results in further legislation or regulation, the Plan may need to be changed to fit the new legislative environment.

20.6.1.2 **Radioactive Materials**

Specific rules are set for activities involving radioactive material to ensure that the scale and location of such activities are appropriate and to take account of public concerns.

Radioactivity has been deliberately excluded from the Hazardous Facility Screening Procedure for two reasons. Firstly, the type and degree of risk that is posed by radioactive material is different from, and additional to, that of other chemical compounds. Radioactive material is covered by separate legislation (Radiation Protection Act 1965), and is currently accepted as being well managed. Secondly, the use, storage and transport of radioactive material is controlled and licensed by the Department of Health, through the Radiation Protection Act 1965.

However, while the licensing of uses and users is properly the responsibility of Central Government, the Council will still control the location of these activities in order to ensure the protection of neighbouring residents and workers.

The level set for Prohibited Activities will exclude facilities such as nuclear power plants.

20.6.1.3 **Contaminated Sites**

Sites that are eligible for clean-up, pose or are likely to pose a high risk to human health or are located in environmentally or culturally sensitive areas, or where landowners do not have the financial resources to undertake the work themselves, may be eligible for funding from the Ministry for the Environment. Proposals to undertake work on, or use sites listed in the Council's "Register of

Potentially Contaminated Sites" (as at 28 November 2000), including proposals to remove or immobilise the contaminants, will require a resource consent. The purpose of this is to require the developer to assess the nature of the contamination and any effects that the proposal may have on the health of people and ecosystems, both within and beyond the site, and on other properties. It will also enable the Council to assess the impact of the proposal and if necessary impose conditions on a consent in order to limit adverse effects, or refuse consent.

20.6.2 Non Regulatory Methods

20.6.2.1 Hazardous Substances

Non-regulatory methods for implementing the strategy principally comprise the holding of on-site discussions with hazardous substance users initiated by Council's Hazardous Substances Officer to determine appropriate practice, and reliance, where possible, on industry codes of practice. The Council will also provide "quick check" tables in pamphlets for different industries giving levels of hazardous substances that are acceptable as Permitted Activities in various zones, and listing performance standards that have to be met.

20.6.2.2 Contaminated Sites

The Council will maintain a register of sites that are known to be or are suspected of being contaminated, unless it becomes practical to use the relevant section of an Auckland Regional Council register. Regardless of which approach is adopted, the Council will liaise with the Regional Council to share information on sites that are either known to be, or may be contaminated.

The Council will provide enquirers, particularly those seeking Land or Project Information Memoranda (LIMs and PIMs), with such details as it holds of sites on the register. This will help potential users of such sites make informed judgements as to the implications of buying or using them. In the case of sites known to be contaminated, it will warn them of the possible need to deal with the contamination before they make use of the land. In the case of suspected contaminated sites, it will warn them of the possible need to investigate whether contamination exists.

The Council will also prepare publicity material drawing attention to the need to be aware of possible contamination on sites, and advising on how to minimise the attendant risks.

There may be sites where contamination is causing a severe problem to neighbours, the wider community and/or the environment, but where clean up or immobilisation is beyond the ability of the owner, or no owner can be found to take responsibility. In such cases, where the District Council rather than the Regional Council has the functional responsibility, it will explore the possibility of initiating the necessary clean up or immobilisation, drawing funding from its own or regional or central government sources.

20.7 ANTICIPATED ENVIRONMENTAL RESULTS

The environmental results anticipated from the implementation of the objectives, policies and methods are:

(a) The avoidance of harm to human life, property and the environment from the use, storage, transport and disposal of hazardous substances.

(b) A reduction in the number of accidents and the extent of adverse environmental effects due to the release of hazardous substances.

(c) Adoption of better site management and operational practices in respect of hazardous substances.

(d) Fewer newly contaminated sites and the progressive remediation of existing contaminated sites.

20.8 DESCRIPTION OF ZONES

There are no zones for hazardous substance use or contaminated sites. The rules in this chapter apply to all land in the District, regardless of zoning.

Rule 20.9

RULES - ACTIVITIES

Rule 20.9.1
Application of Rules

Application of Rules

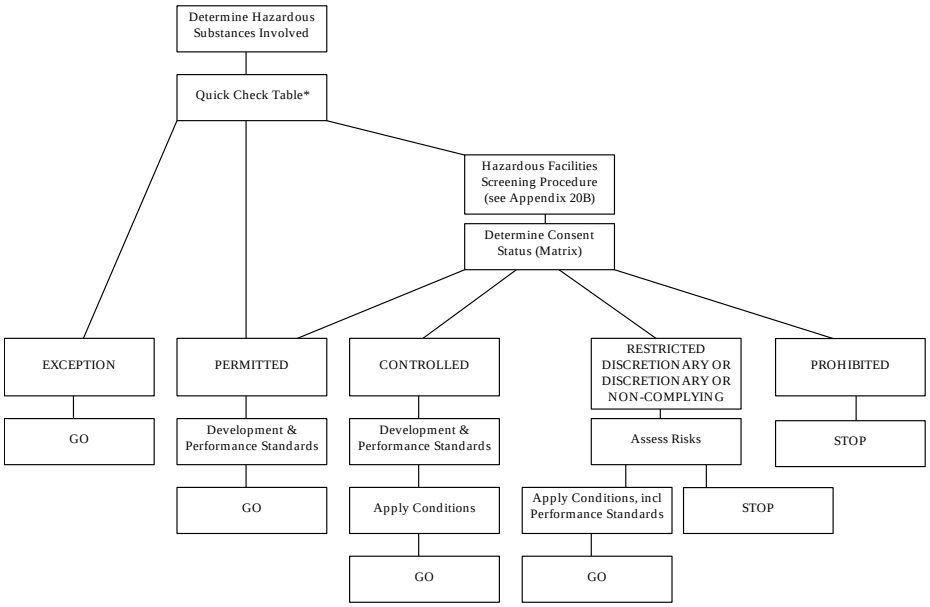
Throughout the District, hazardous substances, including radioactive substances, may be manufactured, mixed, packaged, stored, loaded, unloaded, used or handled, and contaminated sites may be used or developed, in accordance with the requirements of Rule 20.9.3.1 (Exceptions) and Rules 20.9.4 to 20.9.9 (Permitted, Controlled, Restricted Discretionary, Discretionary, Non-complying and Prohibited Activities).

Note: The following terms used in Rule 20.9 are defined in Chapter 3 – Definitions: effects ratio, consent status index, hazardous substance , hazardous facility, hazardous sub-facility, quantity ratio, site

Rule 20.9.2
Consent Procedure

Consent Procedure

The consent procedure is as outlined in the following diagram.



* Quick Check Tables are contained in the Council's pamphlets "Guide to Hazardous Substances Rules in the District Plan", available free from the Council's Orewa office.

Rule 20.9.3
General Matters relating to Hazardous Facilities and Sub-Facilities

General Matters relating to Hazardous Facilities and Sub-Facilities
(excluding facilities using radioactive substances)

Rule 20.9.3.1
Exceptions

Exceptions

The following hazardous substances, facilities and activities are not subject to the provisions of this chapter:

(a) Fuel contained in tanks of motor vehicles, agricultural and forestry equipment, boats, aircraft and small engines.

(b) Storage and use of hazardous substances in domestic quantities. (For the purposes of this clause "stored in domestic quantities" means, in relation to flammable substances, up to 50 litres of substances with a flash point lower than 23º celsius and up to 100 litres of substances with a flash point of between 23º and 60º celsius, stored in containers with a capacity no greater than 15 litres.)

(c) Storage for retail sale of hazardous substances packaged in domestic quantities. (For the purposes of this clause "packaged in domestic quantities" means, in relation to flammable substances, substances with a flash point of up to 60º celsius, packaged in containers with a capacity no greater than 15 litres.)

(d) Storage of compressed gases in the following quantities:

(i) LPG - 100kg
(ii) Other flammable gases - 100m³
(iii) Oxygen - 200m³
(iv) Toxic gases - 250kg

(e) Storage on rural land of superphosphate or lime or similar fertiliser for application onto pasture.

(f) Milk, other than at an industrial milk collection or processing facility.

(g) Storage of up to 50,000 litres of liquid organic food or beverages, other than milk.

(h) Gas and oil pipelines.

(i) Electricity zone substations, distribution substations and transformers containing up to 1,000 litres of oil.

(j) Solid hazardous wastes contained in waste disposal facilities.

(k) Trade waste or sewage stored, transported, treated or disposed of in normal and trade waste sewage treatment or disposal facilities authorised by Rodney District Council or Auckland Regional Council.

(l) Facilities using genetically modified or new organisms.

(m) Use and storage of agrichemicals in accordance with the New Zealand Standard NZ8409:2004 Management of Agrichemicals.

(n) Temporary military training activities subject to compliance with the New Zealand Defence Force "Code of Practice for the Management of Hazardous Substances in association with military training activities"

Explanation and Reasons

The exemptions cover hazardous substances held or used in such a manner that control by this part of the District Plan is not warranted. This is either because of the small quantities of substances involved, or the impracticality of exercising control, or because industry codes of practice provide adequate levels of security, or because controls under other parts of the Resource Management Act and other legislation deal with the hazard.

Rule 20.9.3.2
Calculation of Quantity Ratios

Calculation of Quantity Ratios

(a) Quantity Ratios are to be calculated for proposed hazardous facilities and sub-facilities, including significant extensions to existing facilities, using the Hazardous Facilities Screening Procedure (HFSP) (as included in the publication *"Land Use Planning Guide for Hazardous Facilities: a resource for local authorities and hazardous facility operators",* Ministry for the Environment, 2000). This publication includes a step-by-step guide to the procedure. A brief outline of the procedure is given at Appendix 20B. A copy of the publication is held by the District Hazardous Substances Officer and is also available at the Council's Orewa office, and information on the chemical composition of proprietary chemical products is contained in the manufacturer's Material Safety Data Sheets (MSDS), which are available to purchasers of these products.

(b) The Quantity Ratio calculated for a hazardous facility or sub-facility determines the consent status of that facility by comparing it with the Consent Status Index for the zone in which the facility is to be located, as given in the table in Rule 20.9.3.3.

(c) Where a proposal is to create a hazardous facility that can be broken down into hazardous sub-facilities, the HFSP Quantity Ratios shall be calculated for each sub facility, and these ratios shall be used to determine the consent status.

Rule 20.9.3.3
Consent status for hazardous facilities and sub-facilities

Consent status for hazardous facilities and sub-facilities

The consents status for hazardous facilities and sub-facilities is to be determined from the following matrix, except as otherwise indicated by Rules 20.9.3.1 (Exceptions) and 20.9.3.4 (Sites Close to Zone Boundaries),:

In this table the symbol < means "less than", and the symbol > means "more than".

CONSENT STATUS FOR HAZARDOUS FACILITIES AND SUB-FACILITIES			
ZONE	***Consent Status Index for Permitted Activities*** ***(subject to performance standards at Rule 20.10)***	***Consent Status Index for Controlled Activities*** ***(subject to performance standards at Rule 20.10)***	***Consent Status Index for Restricted Discretionary (RD) and Discretionary (D) Activities***
Sites of 2 hectares or more in the General Rural, East Coast Rural, Landscape Protection Rural, Dune Lakes and Islands General Zones, Future Urban Zone, the Kawau Island Zone (Bush Policy Area), Special 28 (Kelly Park), and the Omaha Flats Rural Policy Area in the Special 22 Zone [Amendment 63]	**< 0.75**	**0.75 – 1.50**	**> 1.50 (RD)**
Sites smaller than 2 hectares in the General Rural, East Coast Rural, Landscape Protection Rural, Dune Lakes and Islands General Zones, Future Urban Zone, the Kawau Island Zone (Bush Policy Area), Special 28 (Kelly Park) and the Omaha Flats Rural Policy Area in the Special 22 Zone [Amendment 63]	**< 0.50**	**0.50 - 1.00**	**> 1.00 (RD)**
Countryside Living Rural and Countryside Living Town Zones	**< 0.50**	**0.50 - 1.00**	**> 1.00 (RD)**
Industrial Special 2, 4, 5, 12, 13 and 15 Zones and the Light Industrial Policy Area in the Special 20 Zone	**< 0.50**	**0.50 - 1.00**	**> 1.00 (RD)**
Mixed Business Special 3, 6 and 7 Zones Knowledge Economy Business Park Policy Area in the Special 19 Zone, Special 35 Gateway Business Policy Area	**< 0.20**	**0.20 - 0.40**	**> 0.40 (RD)**
Retail Service Special 1, 9 and 21 Zones and Future Business Zone, and the Commercial Policy Area in the Special 20 Zone Knowledge Economy Mixed Use Centre Policy Area, Local Shops Policy Area, Neighbourhood	**< 0.10**	**0.10 - 0.20**	**> 0.20 (RD)**

Shops Policy Area, Silverdale North Commercial Policy Area in the Special 19 Zone and Huapai Local Shops Policy Area in the Special 29 Zone, the Local Shops Policy Area in the Special 33 Zone, the Special 25 and the Special 26 Zones. [Amendment 127] [Amendment 123]			
Open Space 3, 4 & 5; Residential Low Intensity and Special 14 Zones Kawau Island Zone (Settlement Policy Area), and the Point Wells Omaha Flats Lifestyle Policy Area in the Special 22 Zone [Amendment 63]	**< 0.05**	**0.05 - 0.10**	**> 0.10 (RD)**
Residential Landscape Protection Residential Medium Intensity Residential High Intensity Residential Eastern Peninsula Residential Physical Limitations Orewa Beachfront Residential [Amendment 101] Open Space 1 & 2, and Special 8, 10, 11, 16, 17 and 18 Zones. Garden Residential Policy Area in the Special 19 Zone, the Point Wells Seaside Garden Settlement Policy Area in the Special 22 Zone and the Special 35 Gateway Residential Policy Area. All Residential Policy Areas in the Special 29 Zone and the Special 33 Zone. [Amendment 63] [Amendment 127] [Amendment 137] [Amendment 123]	**< 0.10**	**0.10 – 0.20**	**0.20 (RD)**

Explanation and Reasons

The Consent Status Matrix indicates the levels of risk considered acceptable or requiring consent for each zone. The Consent Status Indices for Rural, Industrial, Mixed Business, Retail Service and High, Medium and Low Intensity Residential Zones are the levels that are widely agreed is appropriate for such zones. The Consent Status Index for the two main residential zones (High and Medium Intensity), allows most home occupations to be undertaken without consent, but industries seeking sites in these residential zones may exceed the Index and so require consent. At the other end of the scale, the Consent Status Index for rural zones reflects the generally large size of rural sites and resultant high degree of buffering. The lower Consent Status Index of smaller rural sites reflects the lesser degree of buffering. Sites in the Residential Landscape Protection and Open Space 1 and 2 Zones are subject to low Consent Status Indices, because of the risk to vegetation and ecosystems characteristic of those zones from eco-toxic and flammable materials.

The Consent Status Indices will act as signals to hazardous facilities operators as to

the most appropriate zones for their activity. These signals are seen to offer operators some certainty over the regulatory requirements they face. In addition, the community will be given some certainty about where hazardous facilities are likely to be sited and the level of public participation invited.

Rule 20.9.3.4
Sites Close to Zone Boundaries

Sites Close to Zone Boundaries

(a) Where a zone with a Permitted Activity Consent Status Index of more than 0.1 adjoins a zone where the comparable Consent Status Index is less than 0.1, the Consent Status Index for Permitted Activities in the first zone within 30 metres of the common boundary with the second zone shall be 0.1.

This rule does not apply to zones that are separated by a road or railway, as such zones are not, for the purposes of this rule, considered to be "adjoining".

(b) Any hazardous facility or sub-facility with a quantity ratio of more than 0.1 wishing to establish in the 30 metre band described above, shall be a restricted discretionary activity.

Explanation and Reasons

This rule recognises the need to provide a compromise between the expectations of the owners and occupiers of land in zones with different Consent Status Indices, in terms of what constitutes a reasonable level of risk from hazardous substances. The rule does this by in effect establishing a 30 metre wide buffer around the edges of some of the zones with higher trigger levels, and setting a lower Consent Status Index for facilities with this buffer strip. One effect of this may be to persuade the user of hazardous substances to locate the hazardous component of the operation clear of the buffer area.

Rule 20.9.4
Permitted Activities

Permitted Activities

The following are Permitted Activities for the purposes of this chapter:

(a) The operation of a hazardous facility or sub-facility with a quantity ratio calculated in accordance with the Hazardous Facilities Screening Procedure 1999, that is within the limits specified in the Consent Status Matrix in Rule 20.9.3.3 for Permitted Activities, as modified by Rule 20.9.3.4, and which complies with the Performance Standards at Rule 20.10.

(b) Use or storage of radioactive material with an activity not exceeding the A_1 or A_2 values for radio-nuclides specified for Type A packages in the International Atomic Energy Agency "Regulations for the Safe Transport of Radio-active Material". *(Copy held by Council's Hazardous Substances Officer.)*

(c) Auckland Regional Council – HazMobile collection of hazardous waste.

Rule 20.9.5
Controlled Activities

Controlled Activities

The following are Controlled Activities for the purposes of this chapter:

(a) The operation of a hazardous facility or sub-facility with a quantity ratio calculated in accordance with the Hazardous Facilities Screening Procedure 1999, that is within the limits specified in the Consent Status Matrix in Rule 20.9.3.3 for Controlled Activities, as modified by Rule 20.9.3.4, and which complies with the Performance Standards at Rule 20.10.

(b) The remediation of contaminated land on a site listed in the Council's Register of Potentially Contaminated Sites (as at 28 November 2000) provided the site has not subsequently been removed from the list.

(c) The retail sale of petrol (up to 100,000 litres storage in underground tanks) and diesel (up to 50,000 litres storage in underground tanks) provided that the Code of Practice for *"Design, Installation and Operation of Underground Petroleum Storage Systems"* and *"Supplement No. 1 - Management of Existing Underground Petroleum Storage Systems"*, published by the Department of Labour, OSH 1992, is adhered to.

(d) The retail sale of LPG (up to 6 tonnes, single vessel storage) provided that the Australian and New Zealand Standard (AS/NZS1596-1997) *for 'LP Gas Storage and Handling of LP Gas'* is adhered to.

Rule 20.9.6
Restricted Discretionary Activities

Restricted Discretionary Activities

The following are Restricted Discretionary Activities for the purposes of this chapter:

(a) The operation of a hazardous facility or sub-facility with a quantity ratio, calculated in accordance with the Hazardous Facilities Screening Procedure 1999, that is within the limits specified in the Consent Status Matrix in Rule 20.9.3.3 for Restricted Discretionary Activities, as modified by Rule 20.9.3.4.

(b) The operation of a hazardous facility or sub-facility that is listed as a Permitted or Controlled Activity, but does not meet the Performance Standards specified in Rule 20.10.

(c) Activities listed at Rule 20.9.4(b) and 20.9.5(c) that do not comply with the specified standard or code of practice.

(d) Storage of milk at a milk collection or processing facility.

(e) Storage of more than 50,000 litres of liquid organic food or beverage, other than milk.

Rule 20.9.7
Discretionary Activities

Discretionary Activities

The following are Discretionary Activities for the purposes of this chapter:

(a) The operation of a hazardous facility or sub-facility with a quantity ratio calculated in accordance with the Hazardous Facilities Screening Procedure 1999 that is within the limits specified in the Consent Status Matrix in Rule 20.9.3.3 for Discretionary Activities, as modified by Rule 20.9.3.4.

(b) Any use or storage of radioactive material with an activity level in excess of that specified as a Permitted Activity and not greater than 5,000 terabequerel.

(c) Use, development or redevelopment of a site that is listed in the Council's Register of Potentially Contaminated Sites (as at 28 November 2000) provided the site has not subsequently been removed from the list.

(d) Activities that have the potential to intercept contaminatation (e.g. excavation works and trenching), on a site that is listed in the Council's Register of Potentially Contaminated Sites (as at 28 November 2000), provided the site has not subsequently been removed from the list.

Rule 20.9.8
Non-complying Activities

Non-complying Activities

(a) The operation of a hazardous facility or sub-facility (other than a facility involving radioactive material) that is neither exempt from this chapter nor a Permitted, Controlled, Restricted Discretionary, Discretionary or Prohibited Activity.

(b) The importation onto a site of material, soil or water contaminated by hazardous substances.

Rule 20.9.9
Prohibited Activities

Prohibited Activities

The following are Prohibited Activities for the purposes of this chapter:

(a) Use or storage of radioactive material with an activity level greater than 5,000 terabequerel.

Rule 20.10

PERFORMANCE STANDARDS FOR HAZARDOUS FACILITIES AND HAZARDOUS SUB-FACILITIES COVERED BY RULES 20.9.4(a) AND 20.9.5(a)

20.10.1
Application of Rules

Application of Rules

The following performance standards apply to sites or parts of sites that are or include hazardous facilities or sub-facilities, ie. sites or parts of sites where the manufacturing, mixing, packaging, storing, loading, unloading, using or handling of hazardous substances which are contaminants as specified in the Resource Management Act 1991, are undertaken.

Rule 20.10.2
Spill Containment System

Spill Containment System

Any part of a site where a hazardous spill may occur that constitutes a hazardous facility or sub-facility shall be protected by a spill containment system. The spill containment system shall be:

(a) constructed from impervious materials that are resistant to the hazardous substances involved;

(b) able to contain the maximum volume of the largest tank used, plus 10% of the next largest tank. Where drums or other containers are used, the spill containment system shall be able to contain half of the maximum volume of substances stored or 5,000 litres, whichever is the lesser. If the contained area is not roofed, additional capacity shall be provided to contain the rain from a 1 in 10 AEP storm (1 in 10 year storm) over a 24 hour period. Provision for containing at least 160 millimetres of rain shall be deemed to meet this requirement;

(c) designed, constructed and managed so that stormwater runoff is prevented from flowing into the contained area;

(d) designed, constructed and managed so that any spill or release of any hazardous substance, and any stormwater that may have entered and become contaminated in the spill containment system, is prevented from entering the stormwater drainage system; and prevented from discharging into or onto land, ground water, any water body or potable water supply.

(e) designed, constructed and maintained for underground storage tanks to contain filling spillage only so as to meet industry code levels where these codes of practice exist and are referenced in the District Plan (petroleum storage facilities in compliance with Ministry of the Environment Guideline: Environmental guidelines for water discharges from petroleum industry sites in New Zealand , 1998, will be deemed to comply with this requirement), or for 1.5 times the maximum credible spillage where no industry code exists.

Note: Toxic Substances Regulations 1983 (refer to Guidance notes on the assessment of compliance with Regulation 17A of the Toxic

Substances Regulations, 1983 on Fixed Bulk Containers, Granting of Exemptions from Provisions relating to Regulation 17A, Ministry of Health also apply.)
AS/NZ4452:1997 The Storage and Handling of toxic Substances is also relevant.

Rule 20.10.3
Stormwater Grate Marking

Stormwater Grate Marking

All stormwater grates shall be clearly marked, to ensure that hazardous substances are not inadvertently released into the stormwater system eg. by use of the Auckland Regional Council "I only drain rain" label.

Rule 20.10.4
Washdown Areas

Washdown Areas

That part of the site where vehicles, equipment or containers are washed shall be so designed and constructed that any washwater from the wash down area or washing facility cannot be discharged to the stormwater drainage system, to land, to ground water, to any water body, or to a potable water supply, unless a resource consent granted by the Auckland Regional Council or a licence or consent issued by the relevant network utility operation allows otherwise.

Rule 20.10.5
Underground Storage Tanks

Underground Storage Tanks

Underground storage tanks shall be designed and constructed to contain any leakage. A leak detection system shall be integral to the design of the tank backed up with an effective monitoring program. For petroleum products, compliance with the Code of Practice for *"Design, Installation and Operation of Underground Petroleum Systems"* and *"Supplement No. 1 - Management of Existing Underground Petroleum Storage Systems"*, by the Department of Labour, OSH 1992, is deemed to meet this requirement.

Rule 20.10.6
Signage

Signage

All hazardous facilities and sub-facilities shall have adequate signage to identify the nature and location of the hazardous substances present at the facility. Compliance with the Code of Practice for *"Warning Signs for Premises Storing Hazardous Substances"* published by the NZ Chemical Industry Council, October 1988, is deemed to satisfy this requirement.

Explanation and Reasons
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.

Rule 20.11

CONTROLLED ACTIVITIES: MATTERS FOR CONTROL AND ASSESSMENT CRITERIA

Rule 20.11.1

Hazardous Facilities and Hazardous Sub-Facilities with an Quantity Ratio within the Range Specified for Controlled Activities

Rule 20.11.1.1
Matters for Control

Matters for Control

The Council will limit its control to the following matters:

(a) Site layout, and siting and design of structures, including materials, floors and yard surfaces.

(b) Non-structural measures to be taken to minimise the risk of adverse environmental effects occurring.

20.11.1.2
Assessment Criteria

Assessment Criteria

When considering an application, the Council will have regard to the following criteria:

Identification of hazards and mitigation of effects

(a) Whether the potential hazards, failure modes and exposure pathways have been identified, and risks of adverse effects on the surrounding environment and public health can be avoided or mitigated.

Protection of life supporting capacity or amenity values

(b) Whether the life-supporting capacity and amenity values of the surrounding natural and physical environment can be protected from the risk of the accidental release or loss of control of hazardous substances.

Separation distance for safety

(c) Whether there is a sufficient separation distance between the proposed activity and adjacent activities with regard to the safety of people potentially at risk from the facility.

Protection of adjacent properties

(d) Whether the community and adjacent properties can be protected from unacceptable risks of the accidental release or loss of control of hazardous substances.

Minimisation of risk to water quality

(e) Whether satisfactory provision can be made for site drainage and off-site infrastructure, to minimise the risk of adverse effects on the water quality of the receiving environment, including potable water supplies.

Controls to minimise effects of discharges

(f) Whether the site design and management controls will minimise the risk of accidental or deliberate discharge of hazardous substances to land or water.

Management of stormwater

(g) Whether stormwater management controls can be imposed, to minimise the risk of adverse effects on the water quality of the receiving environment.

Provisions for fire control

(h) Whether satisfactory provision can be made for fire control.

Spill contingency, emergency planning, monitoring and maintenance

(i) Whether spill contingency and emergency planning, monitoring and maintenance schedules will protect the environment and personal health and safety.

Explanation and Reasons
Hazardous facilities and sub-facilities falling into the Controlled Activity range have the capacity for adverse effects, even if the facility is designed in accordance with the performance criteria and standards at Rule 20.10. The purpose of the control is to enable the Council to influence design and management proposals, if necessary, to ensure that the risks of adverse effects are either avoided or, if that is not completely possible or reasonable, are minimised or mitigated to an acceptable degree.

Rule 20.11.2
Decontamination of a contaminated site

The remediation of contaminated land on a Site Listed in the Council's Register of Potentially Contaminated Sites (as at 28 November 2000)

Rule 20.11.2.1
Matters for Control

Matters for Control

The Council will limit its control to the following matters:

(a) The management or remediation method and programme.

(b) Methods of recovering and removing contaminated material.

20.11.2.2
Assessment Criteria

Assessment Criteria

When considering an application the Council will have regard to the following criteria:

Comprehensive assessment of contamination

(a) Whether the extent of contamination on all parts of the site affected by the proposal has been comprehensively assessed and adequate information on the nature and degree of contamination has been provided.

Effectiveness of decontamination measures

(b) Whether the measures proposed to decontaminate the site will be appropriate and effective.

Effectiveness of measures to prevent off site contamination

(c) Whether the measures proposed to prevent contamination of land, air and water on and in the vicinity of the site, and danger to people and property in the vicinity, will be appropriate and effective.

Health and safety plan

(d) Whether there is a health and safety plan covering the intended work.

A proposal which complies with the *"Australia and New Zealand Guidelines for the Assessment and Management of Contaminated Sites"* published in January 1992 jointly by the Australian and New Zealand Environmental and Conservational Council and the National Health and Medical Research Council, will be deemed to meet these criteria.

Explanation and Reasons
The Council supports landowners who undertake the decontamination of or immobilisation of contaminants on contaminated sites. The sole purposes of making the process a Controlled Activity are to ensure that the process will be as complete as possible and will not have adverse incidental side effects on other land, air, water, people or property.

Rule 20.11.3

Retail Sale of Petrol and Diesel

The Retail Sale of Petrol (up to 100,000 litres storage in underground tanks) and Diesel (up to 50,000 litres storage in underground tanks) Provided that the Code of Practice for *"Design, Installation and Operation of Underground Petroleum Storage Systems"* and *"Supplement No. 1 - Management of Existing Underground Petroleum Storage Systems"*, published by the Department of Labour, OSH, is adhered to.

Rule 20.11.3.1
Matters for Control

Matters for Control

The Council will limit its control to the following matters:

(a) The design of the installation, including materials.

(b) The management methods to be employed to avoid, remedy or mitigate adverse effects of the delivery, storage of dispensing of fuel or oil.

20.11.3.2
Assessment Criteria

Assessment Criteria

When considering an application the Council will have regard to the following criteria:

Effectiveness of design and management systems

(a) Whether the design and management systems proposed will be effective in avoiding, remedying or mitigating any adverse effects from the delivery, storage or dispensing of fuel and oil.

Conformity with Code of Practice

(b) Whether the proposal conforms with the Code of Practice.

Explanation and Reasons

The Code of Practice, if complied with, provides security in respect of the underground storage systems, but does not apply to above-ground facilities, of which the most important are service station forecourts. The purpose of the control is to ensure that the design of service stations ensures that spillages are contained and dealt with so that adverse effects are minimised, and that the design features are complemented by appropriate management procedures, and to enable the Council to satisfy itself that the Code of Practice has been adhered to.

Rule 20.11.4
Retail Sale of LPG

The Retail Sale of LPG (up to 6 tonnes, single vessel storage) provided that AS/NZS 1596/1997 *"Storage and Handling of LP Gas"* is adhered to.

Rule 20.11.4.1
Matters for Control

Matters for Control

The Council will limit its control to the following matters:

(a) The design of the installation, including materials and location.

(b) The management methods to be employed to avoid leakage of gas and to remedy or mitigate adverse effects of any gas leakage.

20.11.4.2

Assessment Criteria	Assessment Criteria
	When considering an application the Council will have regard to the following criteria:
Effectiveness of design and management systems	(a) Whether the design and management systems will be effective in avoiding, remedying or mitigating any adverse effects from leakage of LP gas.
Adherence to Standard	(b) Whether the proposal adheres to AS/NZS 1596/1997.
	Explanation and Reasons *The Australian and New Zealand Standard AS/NZS 1596/1997 provides security in respect of LP gas installations, and the purpose of the control is to enable the Council to satisfy itself that the Standard has been adhered to.*

Rule 20.12

RESTRICTED DISCRETIONARY ACTIVITIES - MATTERS FOR DISCRETION AND ASSESSMENT CRITERIA

In accordance with sections 76(3B) and 105(3A) the Council will restrict its discretion to the matters listed against each specified activity when considering resource consent applications for Restricted Discretionary Activities.

Rule 20.12.1
Specified Hazardous Facilities

(a) Hazardous Facilities and Sub-facilities with a Quantity Ratio within the range specified for Restricted Discretionary Activities

(b) Hazardous Facilities and Sub-facilities with a Quantity Ratio within the Range Specified for Permitted or Controlled Activities but Not Complying with the Performance Standards at Rule 20.10

(c) Activities Listed at Rule 20.9.4 and 20.9.5 that do Not Comply with the Standard or Code of Practice

(d) Storage of Milk at a Milk Collection or Processing Facility

(e) Storage of 50,000 litres or more of Liquid Organic Food or Beverage, Other than Milk

Rule 20.12.2
Matters for Discretion

Matters for Discretion

The Council will restrict its discretion to the following matters in relation to activities listed at Rule 20.12.1(a)-(e):

(a) Site location including but not limited to an assessment of separation distance between the proposed activity and adjacent activities with regard to the safety of people.

(b) Site suitability in terms of vulnerability to natural hazard.

(c) Site layout, and siting and design of structures, including materials, floors and yard surfaces.

(d) Non-structural measures to be taken to minimise risk of adverse environmental effects occurring (eg. management practices, arrangements with emergency services).

(e) Nature and quantities of hazardous materials on the site.

20.12.3
Assessment Criteria

Assessment Criteria

When considering an application the Council will have regard to the following criteria:

Acceptability of risk

(a) Whether the proposal is acceptable in terms of risk.

For this purpose a qualitative or quantitative risk assessment identifying any risk to the environment may be required depending upon the scale or potential effects of the proposed activity, with emphasis on the following matters:

(i) The matters listed for assessment in 20.11.1.2;
(ii) Nature of subsoil and site geology;
(iii) Nature of local roads to be used for transportation of hazardous substances to and from the site;
(iv) Accessibility of the site to emergency services;
(v) Cumulative and synergistic effects, (ie. the effects of one substance upon another), and bio-accumulation of hazardous substances used, handled or stored;
(vi) Adherence to health and safety, or environmental management systems. The Council considers the use of a system such as the NZCIC Responsible Care Programme, the ISO 9000 system, the ISO 14000 system, the ISRS system, the BS 7750 system, or any other recognised and accepted system will satisfy this requirement if included in the resource consent. The Council will give consideration to any other alternative site management system which will achieve the intent of any of the above systems.

Effect of non-compliance with performance standards

(b) Whether the proposal will comply with the Performance Standards of Rule 20.10 and, if it will not, whether the effects of non-compliance are acceptable.

Rule 20.12.4
Information Requirements

Information Requirements

To enable the Council to make the above assessments an application for a Restricted Discretionary Activity for a hazardous facility shall be accompanied by an assessment of the human health and environmental effects of the proposed hazardous facility. This shall be provided in such detail as corresponds with the scale and significance of the actual or potential effects (particularly risk) of the project, and where it is likely that the adverse effects will be significant, shall include a description of alternative locations or methods.

This requirement is in addition to the requirement to provide information contained in Rule 16.16.

Explanation and Reasons
Hazardous facilities and sub-facilities falling within the Restricted Discretionary Activity range have the capacity to cause adverse effects. It may be possible to overcome these by the design of the proposal and the management systems proposed, but in some cases proposals may not be acceptable. In these cases the Council has the ability to refuse consent.

In the case of hazardous facilities employing radioactive materials that are Restricted Discretionary Activities, the rules will enable the Council to control their scale and location.

20.13 DISCRETIONARY ACTIVITIES - ASSESSMENT CRITERIA

20.13.1
Assessment Criteria - All Applications

Assessment Criteria - All Applications

For all Discretionary Activity consent applications required by this Chapter the Council will have regard to the relevant matters set out in section 104 of the Act, to the Policies listed in Section 20.4, to any relevant Assessment Criteria for Restricted Discretionary Activities listed in section 20.12.3 and any other relevant Discretionary Activity Assessment Criteria in the Plan.

Explanation and Reasons
As given following Rules 20.12.4.

20.13.2
Disturbance of a Potentially Contaminated Site

Disturbance of Contaminated Land Listed in the Council's Register

20.13.3
Assessment Criteria

Assessment Criteria

When considering an application the Council will have regard to the following criteria in addition to those listed at 20.13.1:

Assessment of contamination

(a) Whether the extent of contamination on all parts of the site affected by the proposal has been comprehensively assessed and adequate information on the degree and nature of contamination has been provided.

Measures to prevent further contamination

(b) Whether the measures proposed to prevent contamination of land, air and water on and in the vicinity of the site, and danger to people and property in the vicinity of the site, as a result of any work carried out on the site or of the proposed activity, will be appropriate or effective.

Health and safety plan

(c) Whether there is an adequate health and safety plan covering the intended work.

Future users

(d) Whether any contamination on the site is likely to have an adverse effect on future users of and visitors to the site.

Environmental effects

(e) The environmental effects of the proposed activity.

Explanations and Reasons
The controls are necessary to ensure:

(a) That when contaminated soil is disturbed by excavation, earthworks or use of land, or is removed from a site, the process does not spread the contamination to other land, air or water; and

(b) That the proposed use of the site is suitable in terms of potential effects of contamination on users.

APPENDIX 20A

OUTLINE OF LEGISLATION GOVERNING HAZARDOUS SUBSTANCES (AS AT JULY 1999)

The control of the use, storage, transport and disposal of hazardous substances involves several agencies and pieces of legislation.

Under the Resource Management Act 1991 (RMA), Rodney District Council has the responsibility to control the use of land in relation to managing the effects of the use, storage, transport and disposal of hazardous substances at the district level. The Auckland Regional Council also has a regional function for managing the effects of hazardous substances under the RMA and describes this function in the Auckland Regional Policy Statement. Overall, provisions for hazardous substances under the RMA aim at managing the location of hazardous substances by taking into account site-specific conditions and sensitivities.

At the national level, the Hazardous Substances and New Organisms Act 1996 (HSNOA) sets minimum performance requirements for managing the intrinsic hazardous characteristics and the life cycle of hazardous substances, irrespective of location. HSNOA repeals several historical pieces of legislation, including the Dangerous Goods Act 1974, the Explosives Act 1957, the Toxic Substances Act 1979 and the Pesticides Act 1979. ERMA (the Environmental Risk Management Authority) is responsible for the implementation of HSNOA and delegates enforcement to a number of agencies.

Minimum performance requirements under HSNOA apply across the board, including any activities involving hazardous substances managed under the RMA. Therefore, the definition of hazardous substances under the RMA is based on hazardous characteristics specified by HSNOA. However, the scope of what is considered hazardous from an RMA perspective may be wider than HSNOA and may include substances such as milk.

The Radiation Protection Act 1965 is administered by the Ministry of Health. It deals with the control of radioactive substances, waste and equipment and the health and safety of workers involved with radioactive substances and equipment. The National Radiation Laboratory is the main implementing agency.

The Transport Act 1962 and the Land Transport Act 1993 control the transport of hazardous substances by land. The Land Transport Rule 1999, together with NZS 5433:1999 'Transport of Dangerous Goods on Land' specify requirements for the land transport of hazardous substances. The land transport legislation is administered by the Land Transport Safety Authority.

Other pieces of legislation also broadly relate to the management of hazardous substances, including the Building Act 1991, the Fire Service Act 1965, the Health Act 1956 and the Health and Safety in Employment Act 1992.

APPENDIX 20B

OUTLINE OF THE HAZARDOUS FACILITIES SCREENING PROCEDURE (HFSP)

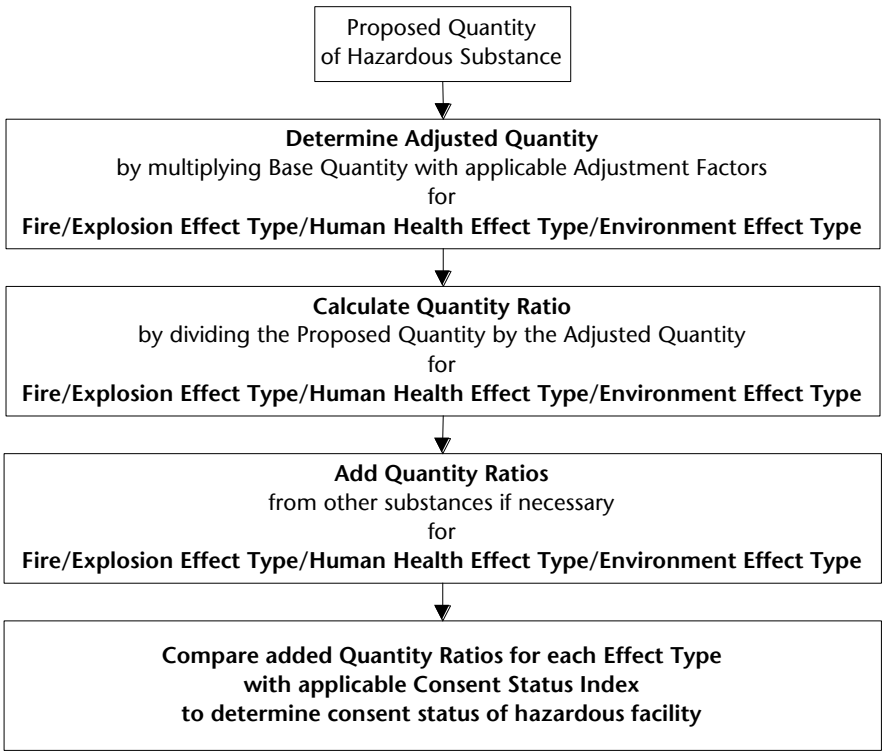
The HFSP is designed to assess the environmental effects of hazardous substances proposed to be stored or used on a site, taking into account their quantities, characteristics, location, type of activity and local environmental conditions. This assessment is carried out for three defined *Effect Types*:

- fire/explosion
- human health
- the natural environment.

Basically, the HFSP compares proposed quantities of hazardous substances with maximum allowable quantities (*Adjusted Quantities*), which depend on the type of substances, how they are used and stored, and the location of the facility. A *Quantity Ratio* is calculated by dividing the proposed quantity of each hazardous substance by the *Adjusted Quantity*. The *Quantity Ratios* of individual hazardous substances are added up for each of the Effect Types. Cumulative *Quantity Ratios* are then compared with defined limits called *Consent Status Indices* which are listed at Rule 20.9.3.3 of the District Plan. If any of the *Quantity Ratios* exceed specified *Consent Status Indices*, the hazardous facility in question requires a resource consent.

Some information needs to be assembled at the outset about the hazards of the substances concerned. This includes site layout and location, and types of activities, as well as the sensitivity of the surrounding environment. In most cases only a limited number of substances need to be assessed to determine the resource consent status of an activity. This applies in particular if one, two or three substances are either very hazardous or stored/used in large quantities.

The following is an overview of the HFSP for a single substance:



NOTE: A full decription of the HFSP and its use is provided in the Ministry for the Environment (2002) publication "Guide to Hazardous Substances Rules in the District plan". In addition , a calculation spreadsheet in MS EXCEL is available and this can be downloaded from the MfE website under publications, hazardous substances.