

17 HAZARDOUS SUBSTANCES AND WASTE MANAGEMENT

17.1 Background

17.1.1 Hazardous Substances

Under the Resource Management Act, Council has responsibility for managing the use, development or protection of land to prevent and mitigate any adverse effects resulting from the storage, use, disposal or transportation of hazardous substances. The Wellington Regional Council takes an overall co-ordination, education and enforcement role in dealing with hazardous substances.

17.1.2 Waste Management

The Wellington Regional Council has policies on the siting of new landfills, rationalising existing refuse landfill sites, and reducing waste. The District Plan is concerned with the environmental effects of landfill siting within the City.

The involvement of the Council in waste management is primarily an operational and service function. Bulk refuse is currently disposed of at the Silverstream Landfill. The Council's service delivery function is managed under the Strategic and Annual Plan processes.

The disposal of sewage from the urban area is currently undertaken through the combined Hutt Valley Drainage system with the outfall at Pencarrow. Effluent disposal in the rural area is largely by on-site septic tanks and effluent fields. These discharges are under the jurisdiction of the Regional Council.

17.2 Resource Management Issues

- 17.2.1** *The inappropriate storage, use, disposal and transportation of hazardous substances can have potentially significant and long lasting effects, which can degrade or destroy water quality and ecosystems or contaminate soil resources and other natural and physical resources within the City.*

Environmental contamination is the process of physical, chemical or biological change in the condition of land, water and air as a result of discharges. This may compromise the life supporting capacities of these resources, and accordingly the health of ecosystems and communities. The potential or actual adverse environmental effects associated with hazardous substances are likely to be more significant because of the toxic, explosive or flammable nature of this material.

Upper Hutt is located in an area subject to earthquakes and land displacement. It also contains alluvial plains with porous and free draining soils which have helped create numerous underground aquifers in the valleys. These aquifers are vulnerable to penetration from discharged hazardous substances and contaminants. There is, therefore, a risk that an earthquake or flooding could result in the release of hazardous substances and other contaminants into the environment.

Many substances which are used frequently but in minor quantities (for example, household use of ammonia) could be considered hazardous in larger quantities. The use of such substances in minor quantities does not create a significant adverse effect on the environment.

17.2.2 *The need for co-ordination between the agencies involved with the management of hazardous activities.*

Management of hazardous activities and substances is shared amongst a number of agencies which means that close co-ordination is necessary.

17.2.3 *The need to avoid, remedy or mitigate the potential damage caused by contaminated sites to human health and safety and the life-supporting capacity of the environment.*

The use, storage or production of hazardous substances can lead to the contamination of soil and other resources. Such contamination may be at a level that makes the site in question unsafe for human occupancy or use. Unacceptable effects on natural resources may also result.

The problems associated with contaminated sites differ in nature, hazard intensity and importance from site to site. The level and type of contamination present on a site are important in identifying the risk to the environment and the health and safety of the community, especially in relation to the re-use of these sites. The Regional Council gives priority to the accurate identification of contaminated sites and the risks posed. A full clean-up of a contaminated site may not always be technically achievable or practicable. In some cases, retaining contaminants on a site and using planning controls to limit site use may be the preferred option.

The lack of national standards has posed difficult legal problems in relation to database liability, the accuracy of information and the privacy of information gathered. Many legal uncertainties relate to the interface between the Privacy Act 1993 and the Resource Management Act 1991. This has raised concerns about the collection and dissemination of information on contaminated sites. The Australian and New Zealand Guidelines for the assessment and management of contaminated sites provide assistance to regional and local authorities.

17.2.4 *The need to provide facilities for the efficient and safe disposal of waste and to avoid, remedy or mitigate potentially significant adverse effects on the environment.*

The disposal and storage of residue waste can have serious environmental effects as most residue waste is disposed of in landfills. The Silverstream landfill accepts refuse from Upper Hutt City and Lower Hutt City. The Silverstream landfill's remaining life span has been estimated at between 25 and 50 years. The Hutt Valley is a sensitive receiving environment which is vulnerable to contamination from discharges from refuse landfills. Site geology and geomorphology are, therefore, important factors in the location of landfills to avoid potential adverse effects related to natural hazard events. The discharge of contaminants from landfills includes leachate to land and water and methane to air. These discharges are poisonous to both human life and the environment.

Environmental concerns over refuse landfills relate to visual appearance, leachates, wind blown debris, disease carrying animals, odours and landfill gases. This applies not only to publicly run sites but also to small private operations.

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| 17.3 | Objectives |
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17.3.1 *The management of adverse effects from hazardous emissions and the storage, use, disposal or transportation of hazardous substances to minimise the risks to community health, safety and well-being and the life-supporting capacity of the environment.*

Any activity which involves hazardous substances has the potential to cause significant adverse effects on the environment. The policies of the District Plan seek to minimise the risks from the manufacture, storage, use, disposal and transportation of hazardous substances.

17.3.2 *The management of waste in an effective and efficient manner that poses minimal risk to community health and safety and the environment.*

Resource use produces wastes which have the potential to cause long-lasting and significant adverse effects. Policies should address not only measures to reduce those effects, but also methods of reducing the amount and type of waste produced in the first instance.

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| 17.4 | Policies |
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17.4.1 *To ensure that facilities using, manufacturing, storing or disposing of hazardous substances are located, constructed and operated in a manner that will not adversely affect the environment.*

The three main methods of managing hazardous substances at present are the promotion of voluntary methods of good practice, the co-ordination with agencies with responsibilities in hazardous substances management, and the management of the Council's own process of hazardous substances management. In addition, education and advice to users of hazardous substances can be provided to supplement these methods.

The proximity of natural hazards is an important consideration in siting hazardous activities or activities which use hazardous substances so that the risk of unintentionally releasing hazardous contaminants into the environment is minimised. **Such activities will be discouraged from locating within flood hazard areas. Proposals must be assessed based on the scale of and type of substances and the adequacy of the facilities' design to avoid or mitigate the flood hazard effect.**

17.4.2 *To promote appropriate use of contaminated sites having regard to the type and level of contaminants present.*

The re-use of sites contaminated with hazardous substances is an important issue that may adversely affect human health and safety or the life-supporting capacity of ecosystems. Providing advice and assistance to affected landowners as needed is one method.

17.4.3 *To co-operate with national and regional government agencies in the management of hazardous substances.*

Local, regional and central government all have certain responsibilities for the management of hazardous substances under the Resource

Management Act and the Hazardous Substances and New Organisms Act. To avoid duplication of effort, it is necessary to co-ordinate actions in the management of hazardous substances.

- 17.4.4** *To ensure that the location, design and use of landfill and associated waste treatment or disposal facilities avoids, remedies or mitigates any adverse effects on community health and safety and the environment.*

This policy acknowledges that waste must be disposed of in an environmentally safe manner. The location of facilities must be such that they will not give rise to any adverse effects on the environment. In addition, regard should be given to the proximity of natural hazards when considering potential sites to minimise the risk of unintentionally releasing hazardous substances or contaminants into the environment.

- 17.4.5** *To encourage the adoption of waste management practices which implement the concepts of cleaner production and which encourage reduction, re-use, recycling, recovery and residue management.*

The Upper Hutt City Council will encourage resource users to take responsibility for reducing waste.

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| 17.5 | Methods |
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- 17.5.1** District Plan provisions consisting of the following:
1. Rules to manage the effects of the storage, use, handling and production of hazardous substances.
 2. Rules to require resource consents for the use, development or subdivision of identified contaminated sites.
 3. A roading hierarchy to encourage heavy vehicles carrying hazardous substances or large quantities of refuse to avoid residential areas.
- 17.5.2** The exercise of Council's responsibilities under the Hazardous Substances and New Organisms Act 1996.
- 17.5.3** Review of the District Plan in regard to hazardous substances in the light of experience gained operating the provisions of the Hazardous Substances and New Organisms Act 1996.
- 17.5.4** Assist the Wellington Regional Council in updating a register of contaminated sites and facilities that store, use, manufacture and

dispose of hazardous substances and use this information in responses to requests for resource consents, project information memoranda and land information memoranda.

- 17.5.5** Co-ordinate with agencies involved with hazardous substances in administering engineering and civil defence response plans.
- 17.5.6** Promote an integrated approach to waste management, hazardous substances and contaminated sites in conjunction with the Wellington Regional Council and other agencies with statutory responsibilities in these areas.
- 17.5.7** Liaison and advocacy with landowners in order to promote the Council's policies.
- 17.5.8** Disseminate information and advice on responsible waste management practices.
- 17.5.9** Promote the use of codes of practice and the appropriate standards in the design, maintenance and use of facilities and sites in which hazardous substances are stored, used, manufactured or handled.

17.6 Anticipated environmental results and monitoring

The following results are expected to be achieved by the objectives, policies and methods of this Chapter. The means of monitoring whether this Plan achieves the anticipated environmental results are also set out below.

| Anticipated environmental results | Monitoring indicators | Data source |
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| Prevention or mitigation of adverse environmental effects from hazardous substances | Development of procedures with the Wellington Regional Council for monitoring hazardous substances | Wellington Regional Council records |
| Safe storage, use, and disposal of hazardous substances in the City | Resource consents Enforcement and complaints | Council records |
| Environmental restoration of contaminated sites | Additions and deletions to the number of contaminated sites | Wellington Regional Council records |
| Minimised adverse effects from landfills and other waste disposal facilities where practicable | Effects of existing landfills: <ul style="list-style-type: none"> • leachate • landfill gas • subsidence • windblown rubbish | Council records Field inspections |
| Reduced waste due to more efficient resource use | Reduced waste quantity | Council records |