

5(a) SOLID WASTE MANAGEMENT

ISSUE

Waste produced by residential, commercial, agricultural and industrial activities presents a range of management issues.

Explanation

The Council provides a solid waste collection and disposal service to mitigate the adverse effects of solid waste produced by communities. However in addition to this service, the Council may consider other measures to avoid, remedy, or mitigate the adverse environmental effects associated with solid waste. Landfills approved for operation by the Canterbury Regional Council must comply with conditions imposed by the Regional Council to mitigate adverse effects. The present treatment of solid waste in landfill sites around the District raises a number of concerns including: the capacity of existing landfill sites; the possible contamination of ground, surface, and coastal waters by leachates; the odour, noise, smoke, dust, and gas emissions, and the unpleasant visual effects of these sites. These issues are also a problem for some closed sites.

OBJECTIVE

- (1) Efficient management of solid waste in the District while ensuring that any adverse effects associated with solid waste disposal are minimised or eliminated where possible.

Principal Reason

To address the community's need for an efficient waste disposal system which avoids or minimises environmental effects.

POLICIES

- (1) To advocate at local and central government levels the waste minimisation hierarchy (i.e. reduce, reuse, recycle, resource recovery, residual disposal) as the baseline for any waste management strategy.

Explanation and Principal Reason

By reducing waste at the earliest possible opportunity the size of the problem is reduced. Legislative changes could be implemented by Central Government to reduce production of waste at its source.

- (2) To avoid, remedy or mitigate the adverse effects of solid waste disposal on natural and physical resources, especially surface and

ground water, and on ecological values, landscapes and the amenities of the locality.

Explanation and Principal Reason

Enables the Council to monitor the disposal of solid waste and better avoid or minimise degradation of natural systems and threats to public health by ensuring that solid waste is disposed of in approved sites or by approved methods.

- (3) To consult with the Takata Whenua in developing strategies to manage solid waste.

Explanation and Principal Reason

Gives recognition to the concern expressed by the Takata Whenua that mahika kai and other natural resources or areas should be protected from any adverse environmental effects produced in association with the disposal of waste.

METHODS

- (1) Implementing the District's "Solid Waste Management Plan" and seeking public comment on the draft of this Plan before Council adoption.

Principal Reason

Addresses issues related to the disposal of solid waste in a systematic and reasoned way. Preparation of the Solid Waste Management Plan is scheduled to begin in 1998. Relevant policies, methods and monitoring provisions from the Management Plan may be integrated into the District Plan where appropriate.

- (2) The Solid Waste Management Plan provides information about solid waste disposal management issues through media promotion, answers to enquiries, and seeking feedback on services.

Principal Reason

Enables the Council to better target community concerns and feedback on most recent changes. Information collected may aid in the development of markets for recycled products. Improved public understanding and acceptance of the waste management plan should have positive consequences, e.g. problems concerning illegal disposal of waste may be reduced.

- (3) Providing properly contained and managed solid waste disposal facilities in accordance with the Ministry for the Environment's Landfill

Guidelines, resource consents for the Redruth Landfill, Transfer Stations, proposed Solid Waste Management Plan, and Disposal Contract and any other statutory requirements.

Principal Reason

The Council will be able to manage waste more efficiently and monitor effectiveness of current management strategies.

- (4) Encouraging the rehabilitation of private and public solid waste disposal sites which present a threat to the quality of surface and ground water and other ecosystem values, and local amenities.

Principal Reason

To address any environmental problems related to disused sites and avoid potential problems where old sites remain in an unstable state.

- (5) Provide information by way of educational programmes, media releases and other service functions to promote waste minimisation whether residential, commercial, industrial or agricultural.

Principal Reason

Addresses the need for more public education about waste management strategies in the District. Aims to reduce the volume of waste and reduce pressure on the Redruth Landfill and extend its life.

- (6) Consider including criteria in the Solid Waste Management Plan for assessing discharges from Council's landfill, e.g. leachates, odours and dust and vermin, and provide controls appropriate to community approved standards (these may be more stringent than Canterbury Regional Council requirements).

Principal Reason

Improved environmental quality and reduced threat to public health and safety.

- (7) The Council to investigate adopting a waste minimisation strategy for all Council operations.

Principal Reason

By investigating waste minimisation options Council sets an example to other commercial and industrial developments.

- (8) Investigating waste reduction strategies such as the Ministry for the Environment's "Going Green Scheme".

Principal Reason

Provides information on a range of easily implemented waste reduction strategies that can be introduced into offices.

- (9) Requiring land use consents for new landfills in addition to Canterbury Regional Council's discharge requirements.

Principal Reason

To ensure a range of conditions which avoid or minimise the adverse environmental effects on neighbouring activities and on natural systems.

- (10) The Council shall provide facilities for the separation of organic garden waste for composting as well as for providing containers for recycling of other products.

Principal Reason

To reduce the amount of waste being landfilled.

ANTICIPATED ENVIRONMENTAL OUTCOMES

- (1) To improve the quality of natural and physical resources especially surface and ground water and air quality where affected by landfills.
- (2) Improved amenity values in the vicinity of the existing landfills.

MONITORING

- (1) Carry out monitoring of solid waste generation and disposal in co-operation with the Canterbury Regional Council and the Ministry for the Environment.
- (2) Evaluate effectiveness of policies within five years e.g. by reviewing waste analysis records and public response strategies, and implementing reporting requirements of the resource consent for Redruth Landfill and other disposal facilities.
- (3) Monitoring of resource consent conditions.

5(b) LIQUID WASTE MANAGEMENT

ISSUE

The adverse effects of liquid waste, including sewage and stormwater, on the environment and the threatened contamination of coastal and freshwater systems in the District.

Explanation

Liquid waste produced by residential, commercial, agricultural and industrial activities present a number of issues including: the effect of the direct discharge of stormwater and industrial waste, e.g. from the Timaru Milliscreening plant and oxidation ponds and freezing works into coastal waters; the actual and potential effects of land based disposal of liquid waste, e.g. pig farm effluent, and dairy factory effluent, on ground and surface water systems.

As stormwater flows over the land it collects contaminants and sediments that have the potential to adversely affect water quality, ecological and amenity values. Stormwater can also produce flooding and inundation. Activities associated with subdivision and development may contribute to and/or exacerbate these effects where not managed effectively. Recent research has found a marked increase in rainfall intensity has occurred in Timaru since 1977 (“High Intensity Rainfalls in Timaru” (Opus International Consultants; April, 1999); this study was expanded to include Temuka and Geraldine).

OBJECTIVE

- (1) Avoid, remedy or mitigate the adverse effects of liquid waste (e.g. sewage, stormwater or agricultural) on aquatic and land ecosystems.

Principal Reason

A reduced level of ecosystem degradation should result. Encourages polluters to improve efficiency where waste is able to be reduced, recovered, or reused. The overall quality of areas where discharges occur should improve.

- (2) Achieve hydrological neutrality in respect of the quantity of stormwater generated as a result of future urban development, and maintain the quality of any receiving waters as a result of stormwater generated from future urban development.

Principal Reason

Aims to avoid, remedy or mitigate the generation of stormwater run off that is discharged from a developed urban site, and avoid contamination from urban sites entering receiving waters. Although

total prevention is not usually possible, stormwater management systems may be designed to maximise prevention by minimising the quantity of stormwater generated, e.g. by reducing imperviousness, and by improving the quality of stormwater, i.e. reducing contaminant loadings. Other benefits include the efficient use of resources, the maintenance and enhancement of amenity values and the maintenance and enhancement of the quality of the environment.

Hydrologic neutrality means neutralising the effect of increased impervious surfaces on the urban hydrograph to pre-development levels, typically by on-site and multi-site stormwater management measures, with respect to one or more of: reduction in the peak flows of selected design storms; enhancement of stream base-flows; or average annual discharge.

POLICIES

- (1) To advocate and promote liquid waste management processes which avoid, remedy or mitigate the adverse effects of liquid waste.

Explanation and Principal Reason

By reducing the amount of liquid waste produced, commercial and industrial activities may become more efficient and reduce operating costs, although this may shift the problem from liquid to solid waste, e.g. sludges from screens and settling ponds. Improved quality of discharges can avoid or mitigate adverse effects on the receiving environment. The pollutants in liquid waste may be recovered and reused, e.g. blood from meat works can be recovered for use in fertilisers.

- (2) To provide for the collection, movement, treatment and disposal of liquid sanitary and trade wastes.

Explanation and Principal Reason

Seeks to minimise threats to public health and other adverse effects on the environment.

- (3) To control the collection, movement and discharge of precipitation and groundwater in a manner which avoids, remedies or mitigates the adverse effects on the environment.

Explanation and Principal Reason

In many areas of the District where there are predominantly free draining soils, stormwater control is generally not an issue, however in some urban areas a stormwater system has been necessary to accommodate runoff.

- (4) To provide for the maintenance or extension of existing stormwater systems and for the development of new systems where required.

Explanation and Principal Reason

Acknowledges the existence of stormwater system in various areas of the District and the need to upgrade and expand these systems as urban areas develop and intensify.

- (5) To have regard for the cultural and spiritual values of the Takata Whenua when seeking to alter or improve present systems of liquid waste management.

Explanation and Principal Reason

Addresses Council's responsibility to take account of the Treaty of Waitangi and recognises Takata Whenua concern for the degradation of mahika kai and natural waters due to both point and non-point source discharges.

- (6) To ensure all extensions of existing settlements and new settlements have effective sewage disposal systems operating.

Explanation and Principal Reason

Gives consideration to the adverse effects of sewage and the requirements of any discharge consents and reduces the threat to public health and nuisance concerns.

- (7) To ensure that any disposal of hazardous substances into stormwater and sewer systems is avoided and that any spillages into the sewers are controlled, contained or remedied.

Explanation and Principal Reason

The Council recognises that the safe disposal of many types of hazardous substances is difficult, or in some cases impossible. Accordingly, the Council will promote safer disposal practises through public education and advice. This will include assistance in determining whether hazardous substances can be recycled. A common example of hazardous substances that can be recycled are agrichemicals. Where recycling is not possible, the Council can advise whether the hazardous substances could be co-disposed of at the Redruth Land-fill. If the hazardous substances cannot be disposed of in this way, the Council will advise as to how such substances can be stored and may be able to assist in the storage of such substances. Any disposal of hazardous substances is likely to be subject of the requirements of the Regional Council.

In addition, the Council will periodically check incoming refuse to all land-fills in the District to guard against inappropriate disposal of hazardous substances. The Council would achieve this policy through appropriate controls at landfills. The Council will also provide a collection point or points for hazardous substances.

- (8) To require financial contributions to cover up to the full cost of providing sewerage and stormwater infrastructure and associated physical works to existing settlements and new settlements.

Explanation and Principal Reason

The Second Schedule of the Resource Management Act requires the Council to specify ... “the circumstances when a financial contribution may be imposed”. In requiring a financial contribution the Council can recover the cost of providing a service or works to those users who directly benefit from it.

- (9) To mitigate the adverse effects of factory farming and effluent disposal. When considering any application for the establishment of a factory farm or for an activity involving the regular spreading of effluent, consideration shall be given to the following matters:

- proximity of adjoining household units
- effects of the activity beyond the site including effects on air quality, water quality and on health
- size of the operation
- design and management systems proposed
- waste treatment methods including disposal
- alternative management and effluent disposal options
- contingency plans in the event of breakdown or spillage

Explanation and Principal Reason

Factory farming produces adverse effects on the surrounding environment which are best considered through the resource consent process.

- (10) To manage the flow of stormwater throughout urban catchments by maximising opportunities to prevent or mitigate the generation of stormwater through the application of low impact design principles such as:

- Integrate stormwater management and design early in the site planning process.
- Manage stormwater as close to the point of origin as possible; minimise collection and conveyance.
- Rely on natural processes within the soil mantle and the plant community.

(Source: “Low Impact Design Manual (TP124)”; Chapter 4 Low Impact Design Approach; Auckland Regional Council; 2000.”)

Explanation and Principal Reason

Traditionally stormwater networks have been designed to remove large volumes of stormwater quickly. This approach has caused problems where streams receiving stormwater have experienced sudden, rapid increases in water volume and flow causing flooding, bank instability, stream bed siltation and habitat destruction as aquatic plants and animals are scoured away. Highly engineered clear, straight stream channels between hard banks and/or the use of pipes (sometimes enclosing small streams) have served to exacerbate damage to aquatic systems including coastal waters. In urban areas flooding and inundation of land and property has resulted from traditional methods.

In the natural environment a considerable amount of vegetation reduces the physical impact of rain and intercepts significant volumes of the resulting run off. As a result less rainfall reaches the ground surface and it takes longer to get there. The undulating ground surface naturally slows the movement of stormwater and allows it to filter through the soil and litter layers. Some of this stormwater is taken up by plants and returned to the atmosphere via transpiration. When stormwater eventually reaches a stream or the coast it may have taken hours, days, weeks or years to complete its course. This process also filters sediments and contaminants from stormwater before it reaches the receiving stream or coastal waters.

Controls limiting the amount of impervious area should be integrated as part of a comprehensive low impact urban design approach when designing all new “greenfields” urban development and when stormwater systems in existing urban areas are being upgraded. This enables compensatory measures such as swales and berms and partially vegetated parking areas to be integrated into the design of public services and facilities. If controls limiting the areas of imperviousness are not achieved additional expenditure will be needed over time to increase the capacity of the stormwater system, and/or more restrictive controls may be needed to ensure the design standards for the stormwater system are achieved.

- (11) To use a minimum design standard of a 50 year / 30 minute rainfall duration event at Gleniti in Timaru for the design of detention dams within open drainage / waterway systems.

Explanation and Principal Reason

Retaining natural drainage channels and watercourses for the management of stormwater is an example of the application of low

impact urban design principles that incorporate water and energy efficient architecture and engineering with low impact technologies. This approach restricts major earthworks and limits the use of heavy machinery to reduce run off and increase soil infiltration. Vegetated channels and swales slow run off, and detention dams detain water, further reducing pressure on stormwater systems while natural ecosystem processes help trap suspended sediment and contaminants.

Controlling the total impervious area of a site or development can mitigate the amount of stormwater generated from a site. A recent report entitled “Timaru District Council Gleniti Development Benefit Modelling” (Opus International Consultants; March 2004) modelled the impervious area of the largely undeveloped area of land at Gleniti at 55% for a critical storm event of 50 year / 30 minute magnitude. If an area greater than 55% of the catchment was covered with impervious surfaces, the integrity of a stormwater management system within gullies and involving a series of low detention dams to regulate the flow of stormwater during high intensity rainfall events, would be compromised.

Historically the amount of impervious area resulting from buildings, driveways and parking areas on a site has not been regulated for the purpose of controlling stormwater run off, although building setback and open space controls, limits on commercial use and storage buildings in Residential Zones, and minimum allotment areas serve to indirectly limit the total impervious area on individual sites. Other hard-stand areas such as paths and driveways add to the total amount of impervious area on a site. As it would otherwise be difficult to control the establishment of paths and driveways on residential allotments, in order to achieve a 55% impervious area limitation for future urban development in the Gleniti catchment, site coverage by buildings or impervious areas is limited to a maximum of 45% of the area of a site. This is based on the assumption that up to 10% of a site may be covered in paths and driveways. If paths, driveways and other buildings or structures that do not require building consent are established it is assumed they will cover up to 10% of a site. If 45% and 10% are added together this gives a total impervious area limitation of 55%.

Should a property owner or developer wish to increase the maximum area of imperviousness from 45% in the Gleniti area the implications of the proposal may be assessed through the resource consent process at the time of subdivision and/or development. This may result in conditions that require the installation and maintenance of run off mitigative devices such as rain gardens, partially impervious surfaces and/or stormwater holding tanks that slowly release the water or allow the water to be stored then used for irrigation at a later date.

- (12) For the purposes of stormwater management and as a financial contribution at the time of subdivision and/or development, to accept land within which stormwater swales and/or detention dams are to be created by the subdivider and/or developer.

Explanation and Principal Reason

This approach enables the Council to manage the development of open drainage and/or waterway channels for stormwater treatment and disposal purposes in a comprehensive coordinated manner. Land to be developed for stormwater management will be vested in the Council. Ownership and management of the stormwater reserves by the Council is necessary for the efficient and effective functioning of this public asset in the same manner that piped stormwater systems are currently operated.

It is recognised that potential multiple use of these reserves for activities such as the incorporation of pedestrian and/or cycle ways also has the potential to create security conflicts with adjacent land owners and this will be assessed as part of any land use/subdivision resource consent process.

- (13) To promote the use of stormwater as a resource.

Explanation and Principal Reason

Currently stormwater is being “wasted” or “lost” when it flows more or less unimpeded into freshwater systems and coastal waters. Although preventing the generation of stormwater is preferable it is not always possible, therefore opportunities for landowners and the Council to better utilise stormwater should be explored e.g. by collecting and storing stormwater for irrigation and by enhancing waterways and wetlands where there is non-contact recreation.

- (14) To promote alternative design layouts for subdivision and building development that integrate development with natural water systems, enhance the quality of urban stormwater before discharge and minimise the amount of stormwater discharged from sites.

Explanation and Principal Reason

The management of stormwater is optimised when low impact urban design features are integrated into site planning at the earliest stage. These include assessing and monitoring the freshwater regime, minimising site disturbance, designing for cluster development, using vegetation to minimise erosion and flooding, reducing impervious surfaces, centralising stormwater collection, treatment and use, retaining and slowing water flow to aid infiltration, retaining natural drainage patterns and protecting downs stream resources.

METHODS

- (1) Providing for improved public information about adverse impacts of contaminants in liquid waste on ecosystems.

Principal Reason

Increases public awareness of the adverse environmental effects of liquid waste on natural systems, reduces the incidence of contamination in the future, and increases the willingness to fund remedial works. Feedback such as enquiries from public provides information to the Council on many “unknowns”, e.g. where used oil can be disposed of. The final format or medium used will be determined nearer to the time of publication.

- (2) Promoting waste minimisation at commercial and industrial activities by encouraging waste reduction at source, encouraging the re-use of products, promoting the recycling of products, using educational and promotional programmes, Trade Waste Bylaws, and charges for all sewage systems.

- (3) Requiring sewerage systems to be installed at time of subdivision for extensions of existing settlements or for any new settlements (see General Rule 6.5).

Principal Reason

Ensures development only occurs where the environment can support any adverse effects from liquid waste. Includes residential, commercial, or industrial expansion. Sewerage systems refers to co-ordinated community systems.

- (4) Investigating and where appropriate implementing alternative methods of stormwater reticulation for extensions to existing settlements and new subdivision to reduce environmental effects (see General Rule 6.5).

Principal Reason

Aims to identify any opportunity for reduced levels of pollutants in stormwater contaminating surface and ground water. Moves to address the level of stormwater contamination presently being discharged into fresh water ecosystems, and to coastal waters. To reduce peak flow rates in anticipation of the Regional Coastal Environment Plan and to help address the New Zealand Coastal Policy Statement.

- (5) Assessing the present status of sewage disposal in small communities throughout the District to identify and evaluate adverse environmental effects.

Principal Reason

To establish baseline information on the status of liquid waste management in small communities. Enables the Council to be more proactive and anticipate effluent discharge or contamination problems, and to prioritise remedial works.

- (6) Upgrading of major sewage treatment facilities at large settlements, and their continued maintenance.

Principal Reason

All liquid waste treatment systems require either discharge or coastal consents from the Canterbury Regional Council. These systems must operate in accordance with their appropriate consents, and in accordance with the Act. Effective and efficient treatment systems need to be designed to minimise their adverse effects of freshwater, coastal and land ecosystems. The Council has begun reviewing its liquid waste management strategies to address Council's responsibilities for its discharges in accordance with Regional Council requirements.

- (7) Promoting separation of kitchen, laundry and bathroom waste water from toilet effluent where septic tanks and alternative systems are used.

Principal Reason

Promoting the separation of kitchen, laundry and bathroom waste water from toilet waste water improves the treatment efficiency of septic tanks, and provides extra water for other purposes. Reduces the amount of liquid waste entering natural waters and improves the quality of ecosystems receiving this waste.

- (8) Requiring industrial discharges in all parts of the District to adhere to Trade Waste Bylaws.

Principal Reason

Promotes treatment of liquid waste at the source for major sewage producing industries, minimises damage to the public asset, and minimises the discharge of toxic substances, with negative effects on biological treatment, to the system.

- (9) Establish a Trade Waste charging regime which limits individual pollutants in accordance with the Local Government Act.

Principal Reason

Encourage reduction in overall volumes and concentration of pollutants released by companies that fail to observe bylaws.

- (10) Investigating the requirement that settling ponds at outlets, sumps and filters be included in stormwater collection and reticulation systems.

Principal Reason

There may be an opportunity to reduce the level of contaminants in stormwater prior to discharge to freshwater waters and coastal waters.

- (11) Liaising with Canterbury Regional Council over requiring resource consent for the disposal of liquid wastes from rural activities, e.g. factory farming.

Principal Reason

Important to consider whether the conditions applied to resource consents are achieving the desired goals and that regional and district rules provide an integrated approach to liquid waste management in rural areas.

- (12) Including rules which require the taking of financial contributions to provide infrastructure and associated physical work for the management of sewage effluent and trade waste (see General Rule 6.5).

Principal Reason

To recover the costs of providing a sewerage system and to ensure those users benefiting from this service pay a fair and reasonable share of the cost.

- (13) Including rules which require the taking of financial contributions to provide infrastructure and associated physical work for stormwater control (see General Rule 6.5).

Principal Reason

To recover the costs of providing a stormwater system and to ensure those users benefiting from this service pay a fair and reasonable share of the cost.

ANTICIPATED ENVIRONMENTAL OUTCOMES

- (1) Improve quality of surface and groundwater systems that receive sewage and stormwater waste.
- (2) Improve the quality of natural systems that have been degraded (or have the potential to be degraded) by methods of liquid waste disposal.
- (3) Protects and enhances wetlands, streams, rivers and coastal waters.
- (4) Promotes the critical functions of floodplains.
- (5) Re-establishes or rebuilds existing riparian buffer systems.

MONITORING

- (1) Maintain existing assessment procedures under the Trade Waste Bylaws, in conjunction with Canterbury Regional Council, of sewer discharges including assessment of quantities and constituents of sewage, the effects of sewage on the receiving environment, and close circuit TV inspection of the inside of reticulated sewerage systems.
- (2) Under Trade Waste Bylaws require industries to monitor own discharges and provide regular reports on levels of contaminants present. Council to implement enforcement action where standards are not met.
- (3) Randomly survey commercial Septic Tank and other liquid waste disposal system cleaners to ascertain whether compliance is being achieved.

Part B

Community Enablement and Physical Resources

5(c) MANAGEMENT OF HAZARDOUS SUBSTANCES

ISSUE

The storage, use, disposal and transport of hazardous substances can and does result in adverse effects on the environment, including the safety of people and property.

Explanation

Many activities in the District involve the use of hazardous substances which are critical to manufacturing, construction, primary production, or day to day domestic activities. Examples include cleaning solvents, agrichemicals, fuel and explosives. However, the composition of these substances is such that they can be “hazardous” to the environment in that they have the potential to impair human, plant, or animal health, or to adversely affect the wider environment. These types of substances are commonly called “hazardous substances”.

The Council has some new responsibilities for the management of hazardous substances which are complicated by current legislative reforms which will affect the management of hazardous substances and new organisms. Most hazardous substances are currently subject to safety controls through the Dangerous Goods Act, the Toxic Substances Act and other legislation.

There are two issues arising from the use of hazardous substances in the District. The first issue is concerning the safe day to day use of hazardous substances and the second issue is the possible effects hazardous substances have on the environment, which is where the Resource Management Act applies.

Specific concerns identified in relation to these issues include: disposal facilities for hazardous substances and their containers used in domestic, industrial, commercial and agricultural activities; the effects of the use of agricultural substances on the environment and people; risks associated with the storage of hazardous substances and large volumes of goods such as grain; the need for management strategies to deal effectively with the actual or potential effects of hazardous substances.

The District Plan is more specifically concerned with the adverse effects of hazardous substances on the environment, rather than the safety issues associated with their correct packaging, handling, use, storage, and disposal. However, the two issues do overlap and the Council believes its policies should promote a greater awareness of the dangers of hazardous substances being used, stored, disposed of or transported incorrectly.

OBJECTIVES

- (1) Avoid, remedy or mitigate the use or disposal of hazardous substances in order to reduce the adverse effects of these substances on the environment.
- (2) Avoid, remedy or mitigate the risk to the environment from any adverse effects resulting from large volumes of non-hazardous goods.

Principal Reason

To eliminate where possible, or otherwise reduce, the exposure of people and the natural environment to the adverse environmental effects of hazardous substances including hazardous wastes. These objectives acknowledge that there is the potential for adverse environmental effects to be an outcome of the use, disposal, storage, or transportation of hazardous substances but proposes that the impact of these effects be reduced.

POLICIES

- (1) To promote the advantages of reducing the use of hazardous substances.

Explanation and Principal Reason

Aims to reduce the use and storage of hazardous substances at source and the generation of hazardous substances as waste.

- (2) To provide for the use of the new Redruth Sanitary Landfill as a co-disposal site for hazardous substances which are considered appropriate for this location.

Explanation and Principal Reason

Addresses the need for a hazardous substance disposal site in the District. Provides an opportunity to treat hazardous substances, e.g. by stabilising with other chemicals, and to use this information in promoting hazardous substance reduction strategies. Details of the operational requirements for the Redruth Landfill are contained in the Disposal Contract for the site. A copy may be viewed at the Timaru District Council.

- (3) To promote the safe use, storage, or transportation of hazardous substances.

Explanation and Principal Reason

Improved public awareness of the issue.

- (4) To promote reduced production, and on site containment and treatment of hazardous wastes.

Explanation and Principal Reason

Reduce public cost of treatment or disposal. There may be occasions where the Redruth Landfill is unable to accommodate the type or volume of hazardous substances for disposal or it may be dangerous to move the hazardous substances from its site.

- (5) To advocate the exclusion of nuclear weaponry and facilities for nuclear weapons from this District.

Explanation and Principal Reason

Consistent with the New Zealand Nuclear Free Zone, Disarmament and Arms Control Act 1987 and addresses public concern that the District be nuclear free.

- (6) To provide areas separate from residential and commercial areas where activities involved with major use or storage of hazardous substances can be encouraged to locate.

Explanation and Principal Reason

Recognises the need to provide for activities using hazardous substances but to limit their use in highly populated areas of the District.

- (7) To control the storage, use and manufacture of hazardous substances to avoid, remedy or mitigate adverse environmental effects due to accidental spillages or poor management practices.

When considering an application for a resource consent, the Council shall consider the extent to which the proposed activity and the proposed site poses a risk to the environment, and in particular:

- (a) The sensitivity of the surrounding natural and physical environment. Depending on the scale of the proposal this may include separation distances from people-sensitive activities (particularly activities such as schools, rest homes, hospitals, shopping centres etc) or to sensitive natural resources (e.g. aquifers, streams, wetlands, habitats).

- (b) The number of people potentially at risk from the proposed activity.
- (c) The risk to adjacent properties and provision on the subject site for separation and isolation distances.
- (d) Cumulative effects of facilities using hazardous substances in the area.
- (e) Site drainage and on and off site infrastructure (e.g. stormwater, sewer type and capacity, water capacity for fire fighting).
- (f) Transportation safety, including method of transportation, quantities and types of hazardous substances transported and proposed transport routes.
- (g) Nature of the topography and the ability to disperse gas.
- (h) The extent to which the proposed activity can avoid or mitigate any undue risk.
- (i) The ability of the proposed activity to be established at an alternative location or for the activity to undertake alternative methods, when it is likely that an activity will result in any significant adverse effects on the environment.
- (j) The extent to which the proposed site is accessible from the major roading network to avoid heavy traffic volumes on local roads (particularly residential local roads); and the extent to which the proposed site's entry and exit points may pose a problem with existing intersections.
- (k) The extent to which the activity can comply with the rules for the relevant zone in question.
- (l) The extent to which the site is vulnerable to natural hazards eg flooding.
- (m) Any other matters that may need conditions to ensure that particular measures are undertaken so any risk in the proposal is avoided or satisfactorily mitigated.
- (n) The extent to which the proposed activity complies with any relevant code of practice or guideline.

The Council shall not exercise its discretion on any consent application over any effects on water quality in water bodies or coastal water.

Explanation and Principal Reason

The Council recognises that the community transports, uses, stores, and disposes on many occasions of very small quantities of hazardous substances, such as glue for woodwork or pesticides for spraying home gardens. Accordingly, the Council has permitted the storage and use of hazardous substances as of right, subject to performance standards to ensure the necessary environmental protection. The quantity permitted as of right is dependent on the nature of the particular substance and the “risk” it poses to the environment; in addition, to how sensitive a particular environment is. For example, a built up residential area is considered to be more sensitive than an industrial area. Where quantities of specific hazardous substances exceed the limit set by the Council for various zones, a resource consent will be required.

The Council also considers that any new industrial processes that are involved in the production of hazardous substances, or any operations that mix different types of hazardous substances, should only be established in appropriate locations and have adequate operational safeguards to ensure protection to the public and the environment.

- (8) To control classes of hazardous substances which have the potential to cause adverse effects to the environment, recognising that the quantities of hazardous substances requiring control will vary depending on the proximity of residential use, on community expectation, and the sensitivity of the surrounding environment (this is not intended to apply to use of hazardous substances in temporary military training activities carried out by the New Zealand Defence Force).

Explanation and Principal Reason

Takes advantage of existing knowledge of hazardous substances and provides for the use and storage of hazardous substances in a range of locations subject to the sensitivity of the adjoining land use.

- (9) To recognise the use or storage of hazardous substances associated with specific activities that are anticipated in the residential areas or rural areas, may be allowed in quantities greater than specified in this Plan, provided the potential adverse effects on the residential environment, or areas identified as being of natural value, are avoided, remedied or mitigated.

Explanation and Principal Reason

Enables hazardous substances to be used by some commercial activities locating in Residential Zones and the use of hazardous substances in some rural areas with adjoining natural areas.

- (10) To require separation distances between activities storing hazardous substances and/or bulk storage of non-hazardous substances which can have adverse effects should spillage or explosion occur on adjacent sites.

Explanation and Principal Reason

Gives some protection to activities on adjoining sites should containment structures fail.

- (11) To promote the return to the manufacturer or supplier of unwanted hazardous substances or the appropriate use by others, in preference to disposal.

Principal Reason

Transfers cost of hazardous substances use and/or disposal back to the manufacturer, developer, or user instead of being borne by the public.

METHODS

- (1) Integrating the waste minimisation hierarchy through the Solid Waste Management Plan (i.e. reuse, reduce, recycle, resource recovery, and residual disposal) when promoting public awareness of the adverse effects of use, storage, transportation and disposal of hazardous substances and hazardous waste. For example substituting less hazardous or non-hazardous substances; promote product redesign and process redesign; reusing waste in processing; returning chemicals to generator or supplier of product.

Principal Reason

The Council will be able to more comprehensively address the issue of hazardous substance management.

- (2) Investigating in liaison with the Canterbury Regional Council the use of incentives, educational and promotional programmes such as an “Amnesty” for hazardous substances, to increase public awareness of the adverse effects associated with the use of hazardous substances.

Principal Reason

Liaison with Canterbury Regional Council seeks to avoid any duplication of functions in the area of hazardous waste/substance management.

- (3) Consulting with the public, adjacent territorial authorities and the Canterbury Regional Council to determine the area to be serviced by the co-disposal site at the Redruth Sanitary Landfill.

Principal Reason

The Council recognises the need to identify and limit the area from which hazardous substances will be received from; otherwise the Redruth Sanitary Landfill could be inundated with requests for disposal of hazardous substances.

- (4) Working in conjunction with the Regional Council towards establishing and regularly updating a hazardous substances inventory for the Timaru District, which will be a record of large amounts of hazardous substances and patterns of hazardous substance use, storage, transport and disposal within the District.

Principal Reason

An inventory will provide some much needed baseline information on amounts and types of hazardous substances used and stored and will be useful for future monitoring programmes. Activities storing amounts of hazardous substances above the threshold levels listed under Column A in the General Rule for Hazardous Substances will be identified in an inventory.

- (5) Investigating the extent of hazardous substance use, manufacture, storage, and disposal in the District in co-operation with other agencies and ensuring a close liaison is maintained with the Canterbury Regional Council.

Principal Reason

Liaison with Canterbury Regional Council seeks to avoid any duplication of functions in the area of hazardous waste/substance management.

- (6) Advocating to government departments and the Canterbury Regional Council the development of alternative methods and facilities for the disposal of hazardous substances in the District which avoid, remedy or mitigate adverse effects.

Principal Reason

In seeking Central Government action recognises the limitations which currently exist for disposal of all types of hazardous substances.

- (7) Co-operating with the New Zealand Police and other emergency services over contingency plans in case of emergency spillage or contamination threatening human life and property.

Principal Reason

To ensure appropriate emergency procedures are in place should an incident involving hazardous substances occur.

- (8) Charging a fee for regular disposal of hazardous substances, to recover costs and to encourage a transition to alternative processes which use (or dispose of) less harmful waste.

Principal Reason

Providing a charge on some aspects of a Council service makes the service self supporting and seeks to deter unacceptable use or generation of hazardous substances.

- (9) Providing rules and the use of performance standards to control the manufacturing, storage, disposal, and use of hazardous substances in the District. Where the use, manufacture or storage of a hazardous substance requires consent under a Regional Rule to avoid, remedy or mitigate any effect on water quality in water bodies or coastal water, the exercise of the Council's discretion will be limited to any other effects on the environment (see General Rule 6.9).

Principal Reason

Provides for the control of any potential adverse environmental effects associated with hazardous substances. Council does not intend to address effects which are the subject of a Regional Rule or Proposed Regional Rule. Council will continue to monitor changes to legislation and Regional Plans to ensure integrated management.

- (10) Using enforcement provisions under the Act where hazardous substances are manufactured, stored, used, transported or disposed of in such a way that is likely to be either noxious, dangerous, offensive or objectionable to such an extent that it has or is likely to have an adverse effect on the environment.

Principal Reason

This approach will be used where the General Rules or zone provisions do not adequately provide for the control of adverse effects.

- (11) Requiring resource consents for new activities or extensions of existing activities which use, store or produce large quantities of hazardous substances. Methods can include site layout, site management and spill contingency planning, transport methods and routes, monitoring and maintenance schedules.

Principal Reason

Provides the community with the security that adequate safety precautions are being undertaken and acts to deter increased use of hazardous substances.

- (12) Encourage those using hazardous substances to operate in accordance with accepted codes of practice.

Principal Reason

Takes advantage of the accepted management techniques.

- (13) Include known contaminated sites on Timaru District Council's hazards register when such information comes to hand.

Principal Reason

This approach is consistent with Part II of the Resource Management Act which requires the sustainable management of land for the use of future generations. It recognises that there are a number of contaminated sites such as timber processing and industrial sites in urban and rural areas that people should be aware of and that may require rehabilitation.

ANTICIPATED ENVIRONMENTAL OUTCOMES

- (1) Reduced contamination of the natural environment by hazardous substances.
- (2) Reduced threat to public safety and amenity.

MONITORING

- (1) Establish a monitoring programme including a Hazardous Substances Inventory for the Timaru District.
- (2) Liaise with Canterbury Regional Council when developing Monitoring programmes.
- (3) Develop a Register of hazardous substances and hazardous wastes disposed of in the Redruth Sanitary Landfill, as part of the monitoring procedures.
- (4) Monitor spillage of hazardous substances, and accidents involving hazardous substances and the effectiveness of emergency response procedures..