

## **SECTION 17 - SOLID WASTE MANAGEMENT**

### **Resources Activities And Values**

The term "waste" includes all materials whether solid, liquid or gas, which have no remaining economic value to the person or company which used or generated them, and therefore require collection and either recycling, storage or disposal.

At the time this Plan was written the majority of solid waste in Mackenzie District was disposed of at Council Landfills. Four landfills currently exist in the District, at Fairlie, Tekapo, Twizel and Haldon. The Haldon landfill is operated privately. Resource Consent for operating these landfills expires during the lifetime of this Plan. At the time of writing, it was not known what action Council would take upon the expiry of consents. There are a number of options available. These might include a zero-waste strategy, the transporting of waste out of the District, or developing a new landfill.

The Canterbury Regional Council has granted resource consents to the Mackenzie District Council to allow the Fairlie, Tekapo and Twizel landfills to continue operating for another five years (as from December 1996). These sites will be staffed and will have restricted opening hours and user charges. Collection facilities for the recycling of aluminium cans will be provided and green waste will be separated out. Containers will be provided at the three landfills for the acceptance of waste oil.

No facilities for the acceptance, treatment or disposal of hazardous waste exist in the District. Waste disposal needs of campervans are provided for by disposal sites at the Fairlie camp ground, Alexandra Terrace (Lake Tekapo), Lakeside Drive (Lake Tekapo), Ruataniwha Road, Twizel (adjacent to Twizel Resort) and at the Haldon Arm camping ground.

The Council is preparing a District "Waste Management Strategy", to co-ordinate waste management within the District. This strategy will be primarily concerned with the provision of waste collection and disposal facilities, recognising the need to identify the types and quantities of wastes produced in the District, and the implementation of practical waste minimisation measures within the District, as discussed below. The Council will ensure public input into this strategy before it is finalised.

The District Waste Management Strategy will review the existing network of waste collection and disposal facilities within the District, and examine the need for a rationalisation of waste collection and disposal facilities - including the establishment of any new sanitary landfills or other waste management facilities. The aim of the strategy will be to ensure that the people of the District have easy access to a waste collection or disposal facility appropriate to their needs, and that the potential for any adverse effects from these facilities is minimised.

Nationally attitudes to waste have moved from concerns relating to disposal methods alone, to a wider focus on waste management as a process whereby waste is treated as a residual resource, rather than an undesirable problem. A guiding principle of good waste management is waste minimisation. This involves:

- Waste Avoidance - avoiding the need for waste disposal or reducing the quantity of waste put out for disposal.
- Waste Reduction - the re-use or recycling of what would otherwise be disposed of.

- Energy Recovery - where wastes are used for generation of potential fuels or heat.

Application of waste minimisation in the District will be beneficial, both in terms of reducing the amount of waste generated but also in making the disposal of waste a simpler and less costly exercise.

## Issues

The Council has responsibility under Section 5 to ensure that waste management in the District is carried out in a manner which safeguards the life-supporting capacity of air, water, soil and ecosystems; and avoids, remedies, or mitigates any adverse effects on the environment. However, it is also required to ensure that people and communities are able to provide for their health and safety, and wellbeing. The production of wastes is an unavoidable by-product of human activities, and therefore provisions need to be made for the collection, storage, treatment or disposal of these wastes, within the District. The amounts of waste produced in the District may be minimised by implementing the methods discussed below. However, wastes will still be produced and require disposal in a manner which minimises the potential for adverse environmental effects.

### Issue 1 - Effects on Soil and Water Quality

Waste management practices can result in soil, groundwater and water contamination. Such adverse effects are of particular concern with respect to land fill sites at Albury and Fairlie where sites are adjacent to the Tengawai and Opihi Rivers respectively. The contamination of water is a particular concern in these areas as a high water table exists and as these areas are potentially susceptible to flooding.

The leaching of heavy metals and contaminants from landfills is also a potential problem with respect to all landfills of the District, particularly if hazardous wastes are disposed of. However, the extent of this problem is difficult to determine as insufficient information currently exists on this issue.

### Issue 2 - Effects on Amenity of Surrounding Areas

Waste management practices, in particular the operation of landfill sites, can adversely affect the amenity enjoyed in nearby areas. Potential effects which affect amenity include odours, pest infestation, problems with flies or birds, uncontrolled litter and visual unsightliness. The following issues are thought to be associated with the landfills in the District:

Bird problems	-	Twizel and Mt Cook
Fly problems	-	Tekapo
Uncontrolled litter	-	Burkes Pass, Tekapo, Mt Cook

It is important that these adverse effects are mitigated, avoided or remedied to ensure that the amenity of surrounding areas is protected.

### Issue 3 - Takata Whenua Concerns

The tangata whenua of the District have particular concerns relating to the effects of waste management practices on water quality and consequent effects on traditional mahinga kai (food gathering places), and effects on their relationship, in terms of their culture and traditions, with their ancestral lands, water, sites, waahi tapu and other taonga. For these reasons and due to Council's responsibility under Part II and III of the Act it is important that

the tangata whenua are consulted regarding management of waste in the District.

## Issue 4 - People's Needs and Efficiency

The Resource Management Act requires Council to enable present and future generations to provide for their needs and wellbeing. One such need is the need to dispose of waste produced. The options available to people to dispose of waste may be reduced if existing landfills are closed due to their potential adverse effects on the environment or if existing landfills reach their capacity.

Waste management also needs to be undertaken in a manner which enables resources to be used efficiently.

## Objectives And Policies

### **Objectives**

- 1 *Minimal risks of soil, groundwater and surface water contamination, and minimal effects on amenity of the District, as a result of the collection, treatment, storage and disposal of wastes in the District.*
- 2 *The safe, efficient and culturally acceptable collection, treatment, storage and disposal of all solid and hazardous wastes within the District to meet the needs of both current and future generations of residents and visitors.*

### **Policies**

- 1 To protect soil and water quality and the amenity values of the District by ensuring appropriate siting, management, construction and aftercare standards apply in relation to landfill sites.
- 2 In conjunction with the Regional Council, to ensure that hazardous wastes are used, collected, stored and disposed of in a manner that does not adversely affect soil and water quality.
- 3 To undertake waste management in a manner which is appropriate and culturally acceptable to Tangata Whenua as Treaty Partners.

### **Implementation Methods**

The following methods have been developed to implement the objectives and policies relating to waste management in the District:

- 1 Require resource consents for land use to be obtained for:
  - new landfills or other waste management facilities;
  - the composting, processing or spreading of any other wastes, other than wastes produced from a single dwelling onto land where the primary purpose is to dispose of waste rather than to fertilise the land;
  - disposal of piggery or poultry effluent as part of factory farming activity near to

property boundaries.

- 2 As and when required, designate through the District Plan suitable sites for the location of new sanitary landfills or other waste management facilities. Regard will be had to the compliance of any proposed facilities with the Regional Policy Statement and any applicable regional plans or guidelines, and the Ministry for the Environment "Landfill Guidelines" (1992).
- 3 Allocate Council resources through the annual planning process in order to implement a district waste management strategy which will consider matters such as:
  - the operational standards of all landfills, within the District, and the need to prepare and implement on-going site management plans for all existing landfill sites.
  - suitable locations for the development of new sanitary landfill sites to meet the solid waste disposal needs of both current and future generations of residents and visitors.
  - the need for periodic surveys of the types and quantities of wastes produced in the District.
  - the adoption, promotion and implementation of a waste minimisation within the District.
  - monitoring of the effects of waste disposal, treatment and collection and subsequent actions to be taken.
  - methods to ensure waste generators meet the costs of wastes they produce.
  - compliance of any proposed facilities with the Regional Policy Statement and any applicable regional plans or guidelines (including the Regional Waste Management Strategy), and other provisions of the MFE "Landfill Guidelines" (1992) not already mentioned above.
  - consider the need for waste management education and information programmes when and where appropriate.
  - review waste minimisation methods, collection methods, and the use of transfer stations.
  - identify practicable alternative waste collection and disposal systems options to those currently provided by Council.
- 4 Assist the Regional Council with;
  - a) investigating the most appropriate option for the storage and subsequent disposal of the District's hazardous wastes;
  - b) providing information regarding the safe storage, transport, use and disposal of hazardous wastes;
- 5 Undertake consultation with the tangata whenua as Treaty partners for Mackenzie on appropriate and culturally acceptable waste management initiatives in the District.

## Reasons

With respect to the provision of landfill sites apart from the need to designate or require resource consent applications to be made for waste collection, treatment, storage or disposal facilities, including new sanitary landfills in the District Plan, objectives can be met by alternative non-regulatory methods. These alternative methods include the allocation of funds under the annual planning process and joint co-operation with the Regional Councils.

The Council needs to prepare and implement a district waste management strategy, which

considers appropriate strategies to co-ordinate waste management within the District, and which allocates funds, to achieve the provision of waste collection and disposal facilities, identification of the types and quantities of wastes produced in the District, and practical minimisation of waste within the District where possible.

The Council needs to prepare and implement on-going site management plans for all existing landfills sites in order to mitigate their potential adverse environmental effects. In addition suitable sites for new waste management facilities need to be investigated and developed to provide for the solid and hazardous waste disposal needs of Mackenzie into the future.

By monitoring the types and quantities of wastes produced in the District, the Council may determine the waste management needs of the District. This information is vital for the implementation of a district waste management strategy and the application of waste minimisation methods to reduce the amounts of waste requiring disposal within the District.

In order to meet objectives, regulation of composting and spreading of liquid waste is also proposed as it is considered that other methods such as education will not be sufficient to avoid adverse effects of these activities.

The Regional Council has considerable expertise and overall responsibility for the integration of waste management within the region, the Council will therefore continue to co-operate with the Regional Council to address hazardous waste management issues and overall waste management responsibilities.

Finally the Council must fully address its Treaty obligations and therefore undertake consultation with the tangata whenua on waste management issues.

### **Environmental Results Anticipated**

- Waste management in the District carried out in a way that most effectively minimises the potential adverse effects to the people and the environment.
- The collection, treatment, storage, or disposal of wastes produced in the District in the most effective and efficient manner, including the operation of landfill disposal facilities within the District which do not adversely affect soil and water quality or the amenity of the environment.
- Improvement in the operational standards of existing landfills.
- Identification and development of suitably sited and operated landfills to meet the current and future needs of the District.
- Incorporation of the values and opinions of the takata whenua into the waste management practices of the District.