16. Waste and Discharges to Land

Introduction

Wastes are unwanted solids and liquids that are to be discarded or discharged. The amount of waste disposed of in Marlborough has steadily increased, mostly due to an increasing population, economic growth and increasing consumer demand. Disposing of waste uses land and resources that would otherwise be available for other purposes. Waste disposal also incurs a cost to communities and the environment.

When an item enters the waste stream, the environmental effects vary depending on the nature of the waste, the method of disposal and the nature of the receiving environment. Effects previously experienced include localised contamination of soil and water resources and nuisance problems, such as litter and odour. Uncontrolled waste disposal also has significant health implications for people and communities.

Avoiding waste altogether would be the best way to avoid the costs to people and the environment. However, not all waste can be avoided and management of waste is necessary to ensure that the costs and effects on the environment are minimised. The Council exercises waste management functions under multiple pieces of legislation.

In Marlborough the majority of stormwater in urban areas is discharged to water via the reticulated stormwater network. Where this network is unavailable potential effects on water could be significant. Where it can be demonstrated that filtration of contaminants may be provided safely by soils, stormwater could be discharged to land. Stormwater from industrial and commercial land uses will likely contain contaminants requiring treatment prior to discharge. Without management, stormwater discharges containing contaminants may cause environmental effects such as localised contamination of water resources or nuisance problems such as exacerbating flooding.

The focus of this chapter of the Marlborough Environment Plan (MEP) is to set a framework for addressing Marlborough's significant waste management and discharge to land issues under the Resource Management Act 1991 (RMA). In addition to waste minimisation, the chapter focusses on the way in which the Council exercises its function of controlling the discharge of contaminants into the environment.

Issue 16A – Large quantities of solid waste are generated in Marlborough.

Solid waste is made up of materials and resources that are no longer wanted or needed and volumes have continued to rise in Marlborough due to increases in population, growth in local industries and the production of more packaging and single use items. Approximately 40,000 tonnes of solid waste is disposed of annually at the regional landfill. The large quantity of solid waste produced in Marlborough represents an inefficient use of natural and physical resources.

Unmanaged, this volume of solid waste also has implications for the environment in terms of contaminating land, water and air resources. For this reason, the Council provides waste collection services (through kerbside waste collection in urban areas and transfer stations) and a regional landfill for safe disposal. Even when solid waste is managed in this co-ordinated and centralised way, it is still necessary to collect and manage the gas and leachate caused by the decomposition and breakdown of waste within the landfill.

The Council has invested heavily in alternatives to landfill over the past decade, for example by establishing a hazardous waste collection facility (2004), recycling facilities at the transfer stations

(2008), the Resource Recovery Centre in Blenheim (2009), a reuse centre in Blenheim (2010), a salvage yard and e-waste collection facility in Blenheim (2012) and the expansion of recycling and reuse options across the transfer stations (2014). Further work is underway to establish a commercial and industrial sorting facility. These waste minimisation initiatives have extended the life of the regional landfill. This is particularly relevant given the difficulties in finding suitable sites for (and the costs of) establishing new landfills.

The regional landfill cannot take all solid wastes and was deliberately designed not to cater for many forms of hazardous waste. Given the threat to human health and the environment posed by such solid wastes, it is important that there other options are available for safe disposal of such solid wastes.

Waste management in the Marlborough Sounds and in isolated parts of South Marlborough presents a considerable challenge. Providing opportunities to minimise solid waste and offering a collection and disposal service for residual solid waste to those who reside or holiday in more remote locations (in many cases, without road access) is difficult, due to the cost and practicality of providing these services. Solid waste is also generated on the considerable number of boats using the Marlborough Sounds. Some people have responded to these challenges of isolation by disposing of their solid waste on-site, especially where the waste is generated on farms (e.g. rubbish and offal pits). There is also the risk of illegal dumping. Illegal dumping has significant environmental implications and can result in the contamination of land and water resources (creating a public health hazard) and the potential for the spread of plant pests from green waste. It is also unsightly in areas that are usually visually appealing.

[RPS, R]

Objective 16.1 – Reduce the amount of solid waste generated in Marlborough.

The obvious response to Issue 16A is to reduce the amount of solid waste generated in Marlborough. Reducing wastage and/or treating waste as a potential resource for reuse, recycling or recovery are ways in which patterns can be changed. Reducing the amount of waste that needs to be disposed of in the environment also reduces the potential for adverse effects on the quality of our land, water and air resources.

[RPS]

Policy 16.1.1 – Encourage waste minimisation practices by establishing a waste management hierarchy that ensures waste is managed in the following order of priority:

(a) promoting lower levels of solid waste generation; then

(b) promoting higher levels of reuse, recycling and recovery of solid waste; then

(c) disposal of residual solid waste.

The Council places priority on reducing waste at source, as this is the most efficient and effective way of minimising waste. This priority is reflected in the hierarchy of actions within the policy. Successful waste minimisation relies on households, businesses and industries all actively participating in community efforts to reduce the amount of solid waste produced in the first place and then, in terms of the solid waste that is produced, reusing, recycling and recovering as much of that as possible. The Council seeks to take advantage of changing community attitudes by making it easier to reduce, reuse, recycle and recover solid waste.

To do so, it is important that there are good systems in place to help people to reduce, reuse, recycle and recover the solid waste currently generated in homes, businesses, industries and on rural properties. Waste minimisation initiatives may vary depending on the waste and the community being served. People need to be informed about how to access and utilise each initiative. Education on waste minimisation is therefore important for all sectors of the community.

There is limited ability for the Council to influence production processes, as most consumer goods are imported into Marlborough, so promotion efforts will focus instead on influencing consumer

Commented [1]: RESOLVED:
Minister of Defence
ENV-2020-CHC-76
New policy: stormwater discharge to land
By consent order dated 22 October 2024

choice. Packaging is an issue in terms of waste generation, but so too is the ease of replacing products. By making people aware of the consequences of their purchasing choices in terms of waste generation, it is hoped that people will subsequently make better choices.

Commented [2]: RESOLVED:
Federated Farmers of New Zealand
ENV-2020-CHC-58
By consent order dated 31 January 2023

[RPS, R]

Policy 16.1.2 – Encourage the diversion of inert waste and putrescible waste from the waste stream disposed of at the regional landfill.

Historically, a large proportion of the solid waste disposed of at the regional landfill has been either inert (e.g. construction and demolition waste) or putrescible (e.g. green and kitchen waste). These wastes can be converted into useful products such as compost, or disposed of in a manner that avoids the need to use the regional landfill, such as cleanfilling or on-site disposal. Such diversion of inert and putrescible waste will be encouraged to extend the operational life of the regional landfill.

Inert wastes are now disposed of at suitable cleanfill operations, where there is some reuse activity being undertaken. As a consequence, disposal of inert material at the regional landfill is now minimal. The reduction of putrescible material at a household level and the increased reuse of green waste through composting are key drivers for the Waste Management and Minimisation Plan that will run from 2015 to 2021.

Methods of implementation

The methods listed below are to be implemented by the Council unless otherwise specified.

[RPS, R]

16.M.1 Regional rules

Permitted activity rules will enable the discharge of inert and appropriate putrescible wastes to land. This will assist in the diversion of waste from disposal in the regional landfill.

[RPS, R]

16.M.2 Waste Management and Minimisation Plan

Maintain, implement and review the Waste Management and Minimisation Plan for Marlborough as required under the Waste Minimisation Act 2008. The Plan sets out goals, objectives and targets for minimising waste in Marlborough and has taken account of the New Zealand Waste Strategy.

[RPS, R]

16.M.3 Information

Provide information on the types of solid waste that can be reduced, reused, recycled and recovered, including household, business, industrial and rural solid waste, and how this can be achieved.

Record the types and quantities of solid waste being disposed of at the regional landfill (in accordance with the Solid Waste Analysis Protocol) and undertake surveys of domestic, commercial and industrial solid waste generation. The information collected will help to determine the effectiveness of waste minimisation programmes and whether the objective of waste minimisation is being achieved.

Continue to support at a local level the implementation of national programmes aimed at encouraging more environmentally sound living practices through, amongst other things, waste minimisation. These include programmes aimed at changing attitudes and behaviour in school children and providing information and materials to encourage more sustainable practices in households.

[RPS, R]

16.M.4 Sorting and recycling services/facilities

Continue to operate a Resource Recovery Centre to provide a 'one-stop shop' for recycling operations.

Maintain a kerbside recycling service for Blenheim and Picton.

Develop recycling options for other parts of the region that do not have direct access to recycling facilities.

Establish and operate a sorting facility to provide for the receipt, sorting and processing of commercial and industrial waste. This will provide businesses with an opportunity to have their mixed containers of waste (excluding putrescible) diverted from landfill.

[RPS, R]

16.M.5 Composting operations

Support, where appropriate, the composting of organic wastes, especially where those wastes would have otherwise been disposed of in the regional landfill.

[RPS, R]

16.M.6 Incentives

Continue to charge waste disposers for the collection and disposal of solid waste to encourage waste minimisation. The charge will provide an incentive to recycle or reuse solid waste instead of disposing of it. Variable charges will also be used, e.g. lower charges for green waste disposal will encourage diversion of organic material from the waste stream. Discounts will apply to the purchase from the Council of household composting systems such as worm farms.

The potential introduction of a commercial and industrial sorting facility will provide the region with a more cost effective option for dealing with selected skip and transfer station waste other than landfill disposal.

[RPS, R]

16.M.7 Advocacy

Advocate to central government that it establish and support accessible reuse and recycling programmes for recoverable solid waste types such as glass, agrichemicals and agrichemical containers, agricultural plastic wraps, plastics, papers, tyres, treated timber and metals.

Advocate to central government for extended producer responsibility for particular solid waste types, including computers and compact fluorescent light bulbs.

Continue to work with businesses and industry groups to assist efforts to reduce the amount of commercial and industrial waste generated and where appropriate, to increase the level of reuse, recycling and recovery. Advocacy will aim to identify opportunities for businesses to reduce the amount of solid waste (including hazardous waste) produced as part of business operations.

[RPS, R]

16.M.8 Central government initiatives

Apply to the Waste Minimisation Fund and Community Environment Fund managed by the Ministry for the Environment for financial support as and when suitable waste diversion projects are developed.

[RPS, R]

Objective 16.2 – Avoid, remedy or mitigate actual or potential adverse effects arising from solid waste management activities.

Despite an objective of waste minimisation, there is still a need to dispose of the solid waste that remains once reuse, recycling and recovery efforts have been exhausted ("residual waste"). Given the nature of solid waste, its disposal in the local environment has the potential to create significant adverse effects. Contaminants present in the waste, or produced by the breakdown of the waste material, could adversely affect the soils at the site of the disposal and leach through these soils to underlying groundwater or to nearby surface water bodies. The breakdown of waste could also produce gases and create odour. It is therefore necessary that solid waste management activities be undertaken in a way that minimises the potential for such adverse effects.

[RPS, R]

Policy 16.2.1 – Continue to centralise solid waste disposal activities through the operation of a regional landfill and associated transfer stations.

Inappropriate disposal methods or locations can give rise to significant adverse effects on the surrounding environment through odour, the discharge of contaminants to air, water and land, noise and traffic. Centralising solid waste management at a regional landfill avoids the need for disposal elsewhere in the Marlborough environment and helps to minimise the potential for these adverse effects.

[RPS, R]

Policy 16.2.2 – All residual waste shall be stored and disposed of in a manner that avoids or mitigates actual or potential adverse environmental effects.

It is important that all storage and disposal of residual waste is managed in a manner that reflects best practice and minimises the impacts of the operations on the surrounding environment. This will see the Council, as a provider of waste collection and disposal facilities, and private operators complying with national guidelines for the storage and disposal of solid waste. As solid waste breaks down it produces gas and leachate, potential contaminants that can disperse into the surrounding environment. The Council will use regional rules to ensure that the actual or potential effects of these discharges are avoided or appropriately mitigated.

16.2.3 Deleted

[R]

Policy 16.2.3 – Enable the application of solid waste to land from the processing of primary products, the disposal of animal waste in offal pits, the disposal of biodegradable material in farm rubbish pits or the processing/storage of compost or silage, where:

(a) this does not occur within a Groundwater Protection Area or into or onto soils identified as a Soil Sensitive Area as being at risk; or

(b) standards for permitted activities are met.

Marlborough's economy is based on primary production activities, as reflected in Chapters 4 and 14 of the MEP. Much of the product generated from these activities is processed within Marlborough and there is a resultant production of organic waste material. In many cases, this waste is disposed of through a variety of means as set out in the policy. Primary production waste disposal has the potential to create adverse environmental effects if undertaken in a certain location or in an uncontrolled manner. Potential adverse effects include degradation of surface and groundwater quality through infiltration and run-off, soil contamination, disruption to land ecosystems and reduction of amenity values. Therefore, the policy states that standards have been set to provide thresholds at which the adverse effects from a discharge to land must be avoided or mitigated. Additionally, there are some identified locations where groundwater and soil resources are potentially at risk. In these areas a resource consent will be required to assess the risk.

[R]

Policy 16.2.4 – Where resource consent is required for the discharge of solid waste to land from primary production activities, decision makers shall consider the following matters in deciding whether or not to grant consent and whether conditions can be imposed to avoid or mitigate any adverse effects on the environment:

- **(a) the soil characteristics at the discharge location and whether the nature and volume of waste to be discharged will adversely affect soil structure;**
- **(b) where the discharge is within a Groundwater Protection Area or into or onto soil identified as a Soil Sensitive Area, the risks to groundwater, surface waterbodies or soil quality;**
- **(c) contamination of freshwater resulting from nutrient (nitrogen and phosphorus) and organic nutrients (BOD) through leaching, run-off and/or direct discharge;**
- **(d) the proximity of the discharge location to waterbodies with a high natural character or to waterbodies identified as having degraded water quality that needs to be enhanced through Policies 15.1.4 to 15.1.7 in Chapter 15 - Resource Quality (Water, Air, Soil); and**
- **(e) the potential for reduced amenity values due to odour, vermin or visual effects from the discharge, particularly where this occurs in close proximity to residentially zoned land.**

While the organic material generated from primary production activities can be used for a variety of beneficial purposes such as stock feed, soil conditioners and composting, it is still important that this is undertaken at appropriate locations and within appropriate limits.

When different types of waste are discharged to land, the soil effectively becomes part of the treatment system, with contaminants in the waste being broken down or absorbed as the leachate passes through the soil. Marlborough's soil is diverse, resulting in a variation in the treatment capacity across the District. Understanding this variation is critical in avoiding the adverse effects of discharging contaminants to land. This is why discharges to land for areas identified as a Soil Sensitive Area require resource consent to enable a detailed assessment of the appropriateness of the discharge in these locations.

There is also potential for the discharge of contaminants to have significant adverse environmental effects over the unconfined Wairau Aquifer, where contaminants within leachate can more easily enter the aquifer. Given the significance of the Wairau Aquifer for the supply of community drinking water, it is important that activities located over the unconfined Wairau Aquifer are subject to more detailed assessment, which is why there are specific resource consent requirements for areas identified as Groundwater Protection Areas. Discharges close to waterways can also create the potential for leachate to enter waterways, affecting water quality and instream habitats. Activities located adjacent to high value surface water resources or surface water resources that require enhancement will also attract greater consideration to enable water quality to be maintained or enhanced.

[R]

Policy 16.2.5 – In deciding whether to grant resource consent for any discharge of solid waste to land and the need to impose conditions to avoid, remedy or mitigate adverse effects, decision makers need to determine whether there will be:

- **(a) soil or groundwater contamination from the accumulation or leaching of heavy metals, hazardous substances or other contaminants;**
- **(b) contamination of waterbodies through run-off of sediment or leachate;**
- **(c) erosion, land instability and/or run-off of sediment into waterbodies due to land disturbance activities associated with the activity;**
- **(d) adverse effects on public health or amenity; or**

(e) adverse effects to the mauri of ecosystems, wāhi tapu sites and other sites of cultural significance by discharges of sediment or leachate onto or into land.

Policy 16.2.6 includes the criteria by which a decision can be made about whether to grant consent in respect of the discharge of solid waste to land, including for cleanfills and other activities where permitted activity standards are not met. Discharges of solid waste to land can provide a useful means to dispose of uncontaminated waste material and reduce the amount of material potentially disposed of in the regional landfill. However, if not appropriately managed significant adverse environmental effects can arise, including soil contamination, contamination of waterbodies, erosion or land instability, reduced amenity values or effects on the values of Marlborough's tangata whenua iwi. The policy therefore provides guidance about the matters to be considered in any resource consent application, as well as whether there is a need to impose conditions to avoid, remedy or mitigate adverse effects if consent is to be granted.

[RPS]

Policy 16.2.6 – Avoid the disposal of hazardous waste in Marlborough, except where the hazardous waste can be safely accepted at the regional landfill.

Hazardous substances are used every day in manufacturing, industrial, agricultural, horticultural and viticultural activities. Hazardous substances are those that readily explode, burn, oxidise (accelerate the combustion of other material), corrode (metals or biological tissue) and/or are toxic to people and ecosystems. When these substances are no longer wanted or are no longer economically usable, they become hazardous waste. Hazardous wastes may form only a small part of the general waste stream in Marlborough, but by their very nature they have the potential to do the most damage to people and the environment. Given this significant risk, any disposal of hazardous waste in the Marlborough environment should be avoided. This will make it necessary to have alternative arrangements for the management of hazardous waste. The only exception to the policy is when hazardous waste can be accepted for disposal within Marlborough at the regional landfill, providing the integrity of the landfill liner is protected.

[RPS, R]

Policy 16.2.7 – Encourage the responsible disposal of solid waste from remote locations.

It is difficult to apply the waste minimisation hierarchy set out in Policy 16.1.1 to those parts of Marlborough that are a great distance from transfer stations and/or do not have road access. This is particularly the case for large parts of the Marlborough Sounds and remote rural locations in South Marlborough. These factors make it difficult to take advantage of reuse, recycling and recovery opportunities already provided to the remainder of the community through transfer stations or kerbside collection.

Disposal is often the only management option available to isolated communities or those visiting remote areas. However, isolation creates economic and logistical barriers to the provision of facilities for the collection or disposal of solid waste. This situation could potentially worsen if visitor numbers to the Marlborough Sounds continue to increase. The policy therefore seeks to ensure that disposal is undertaken in a manner that avoids adverse environmental effects. It will be important to work with communities within the Marlborough Sounds and remote rural locations in south Marlborough to determine how their waste disposal needs are best served.

Methods of implementation

The methods listed below are to be implemented by the Council unless otherwise specified.

[RPS, R, D]

16.M.9 Regional and district rules

Standards for the discharge of contaminants to land, water and air from waste management facilities and for the monitoring of any such discharges will be established through regional rules. These standards will apply to community infrastructure, such as the regional landfill and transfer

stations. Rules enabling discharges to land resulting from primary production activities are provided for, subject to meeting standards.

Resource consents will be required for cleanfills and for the discharge to land of organic waste material from primary production activities where the discharge occurs in a Groundwater Protection Area or in a Soil Sensitive Area. Resource consent will also be required where permitted activity standards cannot be met.

Prohibited activity rules will prevent the disposal of hazardous waste into the environment, except at the regional landfill.

[RPS, R]

16.M.10 Provision of waste collection and disposal facilities

Continue to provide the community with a centralised waste disposal facility for residual waste and waste collection facilities, including for the collection of hazardous waste, at transfer stations in accordance with the provisions of the Local Government Act 2002.

Continue to provide waste collection facilities (e.g. coin operated skips) at strategic locations in the Marlborough Sounds for the collection of residual wastes from local residents and visitors.

Consider the need for waste collection programmes for particular hazardous wastes to ensure quantities of hazardous waste that exceed household levels are also removed from the environment.

All hazardous waste collected at transfer stations will be stored and arrangements made for periodic removal to licensed recycling or disposal facilities outside of Marlborough.

The regional landfill will be operated in accordance with the Ministry for the Environment landfill guidelines.

[RPS, R]

16.M.11 Bylaws

Maintain (and review) bylaws to prohibit the disposal of solid wastes that cannot safely be accepted at the regional landfill. The bylaws will be used to assist the ongoing, day-to-day operation and management of the regional landfill.

[RPS, R]

16.M.12 Information

Information that clearly identifies the types of waste that can and cannot be safely disposed of on land and at the regional landfill.

Information on the impacts of illegal dumping on the environment will be provided to the community. The information can be provided by a variety of means, including signage in public areas.

[RPS, R]

16.M.13 Advocacy

Advocate for national funds to support initiatives to better manage solid waste in remote locations.

[RPS, R]

16.M.14 Community support

Support community initiatives to remove solid waste that has accumulated in remote locations, especially the Marlborough Sounds and remote rural locations in South Marlborough.

Issue 16B – The discharge of liquid wastes and stormwater containing contaminants onto or into land has the potential to adversely affect the surrounding environment.

Note that the discharge of contaminants to water is dealt with in Chapter 15 - Resource Quality (Water, Air, Soil).

A strong rural economy and a prevalence of residential living in rural and coastal environments mean that a wide variety of liquid wastes are created in Marlborough. These include:

- domestic wastewater;
- dairy shed effluent;
- winery wastewater; and
- vegetable and shellfish processing wastewater.
- Industrial and trade process wastewater

These liquid wastes contain a variety of potential contaminants including solids, nutrients, bacteria, viruses and substances that change soil properties.

Fortunately, the combination of favourable soil properties and the dry climate in Marlborough make the discharge of liquid wastes to land a viable option. For this reason, the provisions of the water quality chapter strongly encourage the discharge of these and other contaminants to land in preference to water, in order to maintain and enhance water quality in our rivers, lakes, wetlands, aquifers and coastal waters. When this happens, the soil resource effectively becomes part of the treatment system, with contaminants in the liquid waste being broken down or absorbed as the wastewater passes through the soil.

The capacity of the soil resource to treat or absorb contaminants is determined by the physical, chemical and biological properties of the soil. As Marlborough's soil resource is diverse, there is variation in treatment capacity across the District.

Understanding this variation is critical to avoid the adverse effects of discharging contaminants to land. If the rate of discharge exceeds the hydraulic capacity of the soil, then wastewater will pond on the ground surface and, if on a slope, potentially run-off. This creates an obvious health hazard and a risk of contamination of nearby surface water bodies. Discharges to steeper slopes, especially slopes already prone to instability, can increase instability and threaten people and property. The substances and solids present in wastewater can accumulate in soil and increase to levels that adversely affect soil quality. In turn, this can affect the ability of the soil to continue to be used as a land application area or for productive purposes in the future. Shallow soils and soils with high gravel/sand content have limited capacity to treat bacteria, viruses and some nutrients present in wastewater, creating the risk of contamination of groundwater beneath or surface water in close proximity to the land application area. Liquid waste also has the tendency to become anaerobic (lacking in oxygen), which can cause odours around the treatment system or land application area.

There are currently a large number of discharges to land in Marlborough and this will only increase in the future given the ongoing regional growth and preference for discharges to land as opposed to water. It seems sensible to utilise the land resource to treat liquid wastes in Marlborough, but it is essential that discharges to land are well managed as they could, in isolation or in combination, give rise to adverse effects of similar magnitude or greater than those caused by discharges to water.

[RPS]

Objective 16.3 – The discharge of liquid wastes and stormwater onto or into land is managed in a way that avoids more than minor adverse effects on

water and soil quality, land and water ecosystems, slope stability and cultural and amenity values.

The water quality provisions of the MEP encourage the discharge of contaminants to land in preference to water. This policy position recognises that we live in an environment well suited to using soil as a treatment medium. However, it is possible for discharges to land to adversely affect soil quality and the surrounding environment. Consistent with other provisions in the MEP, the objective seeks to avoid such adverse effects. This can be achieved by carefully designing, constructing, managing and maintaining systems for the discharge of liquid waste to land so that they reflect environmental constraints.

[RPS, R]

Policy 16.3.1 – Ensure that wastewater management systems are designed, located and installed to effectively treat and/or contain the contaminants present in wastewater.

It is important that the discharge of contaminants onto or into land is undertaken in a manner compatible with the ability of the land resource to treat and/or contain contaminants present in the wastewater. If this is not achieved, the discharge will adversely affect the immediate and surrounding environment. This policy targets the critical role that wastewater management system designers and installers have in avoiding the potential for adverse effects. It is essential that the design of any wastewater management system recognises and provides for the characteristics and constraints of the site (especially the area to be used as a land application area) and that the system is installed according to the design.

[RPS, R]

Policy 16.3.2 – Require discharge permits for the discharge of contaminants onto or into land where there are significant environmental constraints to effective wastewater management.

Chapter 15 - Resource Quality (Water, Air, Soil) encourages the discharge of contaminants to land in preference to water. This is achieved through permitted activity rules. However, not all Marlborough soils are well suited to receiving and treating contaminants present in wastewater. Of particular note are:

- Soils in the Marlborough Sounds. These soils tend to have a high proportion of clay and corresponding low permeability rates. Furthermore, in many areas the soil is also of inadequate depth to provide sufficient treatment of bacteria and the underlying geology can be prone to instability.
- The gravel/sand soils on the coastal margin of Cloudy Bay, which have extremely high permeability, limited ability to provide treatment/containment of bacteria and nutrients and a high groundwater table.
- The poorly drained soils of the Lower Wairau Plain, which because of low permeability rates are prone to ponding wastewater.
- The loess hills soils to the south of the Wairau Plain have a high potential for tunnel gully erosion.
- Any land in close proximity to surface water bodies has the potential for run-off and surface water contamination.
- Land over aquifers used for municipal water supply.

In these environments, the risk that the contaminants present in wastewater will not be effectively treated and/or retained is greater. This risk also exists where there is a significant volume of wastewater to be discharged. In these circumstances, discharge permits will be required for the discharge of wastewater to land. This will enable the Council to exercise its discretion to determine whether the proposed wastewater management system is suitable given the volume of wastewater, site conditions and constraints.

[RPS, R]

Policy 16.3.3 – Approve discharge permit applications to discharge contaminants onto or into land where as relevant to the discharge:

(a) the discharge is within the ability of the land to treat and/or contain contaminants present in the liquid waste, taking into account:

(i) the rate of discharge (including variability in the rate of discharge);

(ii) the nature and concentration of contaminants within the liquid waste;

(iii) the hydraulic properties of the soil within the land application area and any relevant physical, chemical or biological soil properties;

(iv) any other discharge of contaminants to the same land or to land in close proximity to the discharge;

(b) the discharge does not adversely affect the drinking water quality of groundwater adjacent to or down gradient of the discharge, either alone or in combination with any other discharge;

(c) the land application area is located and managed such that the discharge of contaminants directly, or via overland flow to any surface waterbody or coastal water is avoided;

(d) it is inappropriate (due to the potential impact on the performance of treatment plants and associated infrastructure) or impracticable to discharge the liquid waste into a reticulated sewerage system;

(e) the discharge will not initiate instability or make existing instability worse;

(f) the treatment unit and land application area are accessible for servicing; and

(g) the application demonstrates that the best practicable option is utilised.

The policy provides the criteria for determining whether discharge permit applications should be granted or not. Any applicant will have to demonstrate that the design of the proposed wastewater management system can satisfy all of the identified requirements on an ongoing basis. For the discharge of human effluent, the AS/NZS 1547:2012 standard should be used to assess the on-site wastewater management system.

[RPS, R]

Policy 16.3.4 – When considering discharge permit applications to discharge contaminants onto or into land, have regard to, as relevant to the discharge:

(a) the extent of treatment prior to discharge;

(b) the location of the land application area and the sensitivity of the receiving environment;

(c) the method of distribution to and within the land application area following treatment;

(d) alternative options for managing the contaminants, including discharge to an alternative location or to a reticulated community sewerage system;

(e) the need for reserve land application areas;

(f) site constraints, including geology, topography, slope, climate and presence of waterbodies or structures;

(g) relevant guidelines and standards; and

(h) potential cumulative effects.

The matters listed in this policy are relevant to the consideration of any discharge permit application under Policy 16.3.3 above. Each matter can influence the design of a wastewater

management system and the suitability of the system to the site conditions and constraints. In this way, (a) to (h) help to ensure that land application areas are sized to accommodate the volume of liquid waste to be discharged and that the liquid waste is discharged evenly over the land application area. A variety of standards and guidelines exist for the discharge of contaminants to land, providing a useful reference to help assess the appropriateness of proposed wastewater management systems. For the discharge of human effluent, the AS/NZS 1547:2012 standard should be used to assess the on-site wastewater management system.

[RPS, R]

Policy 16.3.5 – When considering discharge permit applications to discharge contaminants onto or into land, recognise and provide for the cultural values of Marlborough's tangata whenua iwi.

This policy will ensure that any adverse effects of discharging contaminants to land of spiritual and/or cultural significance to Marlborough's tangata whenua iwi are identified and considered in determining any discharge permit application. Places of significance to Marlborough's tangata whenua iwi are identified in the MEP.

[RPS, R]

Policy 16.3.6 – Avoid the use of soak pits for the disposal of contaminants in liquid waste.

The Council is aware that soak pits are not an effective method of managing the discharge of wastewater to land. They result in a concentrated discharge of contaminants into the environment as the wastewater receives little or no treatment as it passes through the soak pit. The solids present in wastewater also tend to clog the soak pit in time, creating the potential for ponding. For these reasons, the use of soak pits as part of any wastewater management system is to be avoided. Any existing soak pit should be replaced with a land application area that is consistent with Policy 16.3.1.

[RPS, R]

Policy 16.3.7 – Promote good practice in the use of wastewater management systems.

The policy targets the important role that operators of wastewater management systems have in avoiding the adverse effects of discharges to land on an ongoing basis. Once installed, it is essential that any wastewater management system is operated correctly and is well maintained. This is because inappropriate use and/or a lack of maintenance can affect the performance of the system, despite it being properly designed and installed in the first place. It is important that the landowner and/or system operator is aware of the actions required for effective performance and that those actions are undertaken. This can be achieved through the preparation and provision of operation and maintenance guidelines when new wastewater management systems are designed. However, alternative methods may have to be used for existing wastewater management systems.

[RPS, R]

Policy 16.3.8 – Monitor the operational performance of existing wastewater management systems and require poorly performing systems to be upgraded to or replaced with systems that effectively treat and contain all wastewater to the discharge site.

Existing wastewater management systems will be proactively monitored on an ongoing basis to ensure they are performing as designed and are being correctly operated and well maintained. Where inspections show that any system is performing poorly, enforcement action will be taken requiring the system to be upgraded (so that it performs according to the original design) or replaced. Upgrade could include maintenance that has previously been neglected. Not all wastewater is discharged on the site where it is produced; for example, agricultural waste may be discharged off-site. In such situations it remains important that systems are appropriately monitored and maintained to ensure they perform appropriately to effectively treat the wastewater discharged.

[RPS, R]

Policy 16.3.9 – Encourage artificial wetlands as a means of managing the discharge of contaminants.

The use of wetlands can provide an effective method of reducing the level of contamination in water, stormwater or wastewater prior to discharge into the environment. Wetland processes filter out and retain contaminants on a passive and ongoing basis. This may help the discharger to meet the objectives and policies that apply to the subsequent discharge of contaminants to land or water. For this reason, the Council will encourage the use of artificial wetlands. Wetlands may also create biodiversity benefits by creating new habitat.

[R]

Policy 16.3.10 – Seek to avoid spraydrift beyond the boundary of the property on which the agrichemical is used by applying management, as follows:

(a) any agrichemical should not move, either directly or indirectly, beyond the property boundary of the site(s) where it is or has been applied; and

(b) agrichemical users will be required to utilise best practice and exercise reasonable care to achieve (a) by minimising any such spraydrift.

The use of agrichemicals is an important management tool, especially in rural environments where they contribute to the control of animal and plant pests and help to minimise crop diseases. Use of agrichemicals in the environment is controlled under the Hazardous Substances and New Organisms Act 1996. Each agrichemical must be approved for use by the Environmental Protection Authority. The Authority can also impose specific controls on the application of agrichemicals to ensure safe use. The policy signals that the Council's role in controlling the application of agrichemicals is to ensure that there are no off-site adverse effects. The application of agrichemicals onto crops or unwanted vegetation typically involves spraying the agrichemical into air and subsequent settlement of the droplets onto the vegetation. The Plan regulates the application (involving discharge) of agrichemicals as a discharge to land as that is the intended receiving environment. However, the potential for spraydrift occurs as a result of inappropriate application methods and practices (e.g. applying agrichemicals in windy conditions). The property boundary is therefore established as the point to which management is applied, as agrichemicals have the potential to cause health effects and other unintended consequences once they move beyond the boundary of the property on which they are being used. The Council will rely on agrichemical users applying best practice and exercising reasonable care to avoid spraydrift beyond their property boundary.

Commented [3]: RESOLVED:
Horticulture New Zealand
ENV-2020-CHC-71
By consent order dated 31 January 2023

Methods of implementation

The methods listed below are to be implemented by the Council unless otherwise specified.

[RPS, R]

16.M.15 Identification

Identify in the MEP those areas with soils most susceptible to the adverse effects of the discharge of contaminants to land.

[RPS, R]

16.M.16 Regional rules

Permitted activity rules will enable the discharge of contaminants to land in environments where there is a low risk of adverse effects. Standards for the discharge of contaminants onto or into land and for the monitoring of any such discharges will be established, including standards for:

- *domestic wastewater discharges from on-site wastewater management systems;*
- *dairy shed effluent;*
- *vegetable, fish and shellfish processing wastewater; and*

- *leachate from composting operations.*

All permitted activity rules will require the preparation and provision of operation and maintenance guidelines for the operator of the wastewater management system.

Where the conditions of the permitted activity standards cannot be met, a resource consent will be required and conditions will be imposed to ensure that the operator of the system is well informed about the appropriate operation and maintenance of the system.

Where there is a greater potential for adverse effects on the receiving environment, discharges to land will require a resource consent.

In some instances, discharges to land will be prohibited. A prohibited activity status will apply to the use of soak pits and will have effect within five years of the MEP becoming operative. This will allow time for replacement with appropriate land application areas to occur.

All stormwater containing contaminants which is discharged to land requires a resource consent. Where a stormwater does not contain any contaminants, the discharge of this water to land is not managed under the MEP.

Commented [4]: RESOLVED:
Minister of Defence
ENV-2020-CHC-76
By consent order dated 22 October 2024

[RPS, D]

16.M.17 District rules

Apply district rules to industrial and trade activities requiring them to connect to Council-operated reticulated trade waste infrastructure within industrial zonings and requiring resource consent to establish in areas not zoned industrial.

[RPS, R]

16.M.18 Certification

To ensure that any on-site wastewater management system is installed according to design, the designer will be required to certify the installation of the system and provide that certification to the Council.

[RPS, R]

16.M.19 Information

Provide information, including guidelines, to landowners, resource users, wastewater management system designers and the public:

- *to ensure there is greater awareness of the advantages and disadvantages of different wastewater management systems and their suitability for different environments;*
- *to improve the standard of design and installation of waste management systems by helping designers to appropriately assess site characteristics and constraints;*
- *to promote an awareness of the importance of ongoing management and maintenance to the performance of wastewater management systems and the factors that can affect performance;*
- *to encourage improved management and maintenance of wastewater management systems; and*
- *to report on monitoring of discharges to land.*

On-site wastewater management systems to be targeted by the method include:

- *wastewater management systems;*
- *farm waste management systems; and*

- *winery wastewater management systems.*

Establish a register to record the details of all on-site wastewater management systems in the Marlborough Sounds.

[RPS, R]

16.M.20 Warrant of Fitness

If the operation of existing on-site wastewater management systems results in degraded water quality in the Marlborough Sounds or in Groundwater Protection Areas then, develop a community proposal for either a Warrant of Fitness ('WoF') scheme for existing on-site wastewater management systems or a reticulated community scheme. The WoF scheme will require an initial inspection of the adequacy and effectiveness of existing on-site wastewater management systems and subsequent re-inspections every five years. The inspections will include an assessment of the capacity and integrity of the treatment unit (e.g. septic tank) and an assessment of the condition of the means of distribution and land application area(s). Both the WoF scheme and the reticulated community scheme will also require approval under the Local Government Act 2002.

Commented [5]: RESOLVED:
Okiwi Bay Ratepayers Association
ENV-2020-CHC-38
by Consent Order dated 7 September 2021

[RPS, R]

16.M.21 Provision of waste collection and disposal facilities

Provide a means of effective collection and disposal of sludge from septic tanks in the Marlborough Sounds within five years of the MEP becoming operative.

Anticipated environmental results and monitoring effectiveness

The following table identifies the anticipated environmental results of the waste management provisions of the MEP. Unless otherwise specified, the anticipated environmental results are ten year targets from the date that the MEP becomes operative. For each anticipated environmental result, a series of indicators will be used to monitor the effectiveness of the waste management provisions.

Anticipated environmental result	Monitoring effectiveness
16.AER.1 A decrease in the quantity of solid waste disposed of in Marlborough.	27% growth in diverted material throughput at the Resource Recovery Centre. 17% growth in materials diverted from regional transfer stations. 20% increase in kerbside recyclable collection volume going to Resource Recovery Centre. More than 16,000m^3 of organic material composted.
16.AER.2 Responsible management of residual solid waste.	Monitoring shows that the regional landfill complies with the Ministry for the Environment landfill guidelines. No incidences of disposal of hazardous waste in the Marlborough environment.

Commented [6]: Clause 16

Anticipated environmental result	Monitoring effectiveness
	A reduction in the number of complaints of illegal dumping of solid waste. Increased community programmes for and participation in managing solid waste in remote locations.
16.AER.3 There are no adverse effects that are more than minor on receiving environments as a result of the discharge of liquid wastes to land.	The annual median values of the following soil parameters for soils within land application areas routinely monitored will fall within target ranges, as defined by Landcare Research (Landcare Research, 2003): (a) soil pH; (b) SAR ratio There is no major non-compliance with permitted activity rules or discharge permit conditions for dairy shed effluent and winery wastewater discharges that cause adverse effects that are more than minor in any year. The rate of minor non-compliance for dairy shed effluent and winery wastewater discharges will not exceed 15 percent of operations in any milking season or vintage in any year.
16.AER.4 All non-reticulated households, holiday homes, visitor accommodation and rural industries are effectively serviced by on-site wastewater management systems.	A warrant of fitness scheme is established and operated for all on-site wastewater management systems or a reticulated wastewater system is developed to address cumulative adverse effects of on-site wastewater management systems in a particular location. A reduction in the number of complaints of failing on-site wastewater management systems.

Commented [7]: WITHDRAWN:
Okiwi Bay Ratepayers Association
ENV-2020-CHC-38
By memorandum dated 7 September 2021