
MARLBOROUGH ENVIRONMENT PLAN

Section 32 Report

Chapter 15: Resource Quality - Air

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Overview

Background

Section 32 of the Resource Management Act 1991 (RMA) requires that in the process of reviewing its regional policy statement and resource management plans, the Marlborough District Council (the Council) must prepare and publish an evaluation report. The three documents being reviewed are the Marlborough Regional Policy Statement (MRPS), the Marlborough Sounds Resource Management Plan (MSRMP) and the Wairau/Awatere Resource Management Plan (WARMP). Each resource management plan is a combined regional, coastal and district plan.

Section 32¹ of the RMA requires that:

- reviewed regional policy statements and plans must be examined for their appropriateness in achieving the purpose of the RMA;
- the benefits, costs and risks of new policies and rules on the community, economy and environment be clearly identified and assessed; and
- the written evaluation must be made available for public inspection.

The Section 32 process is intended to ensure that the objectives, policies and methods the Council decides to include in the new resource management framework have been well-tested against the sustainable management purpose of the RMA. The Section 32 evaluation report for the proposed Marlborough Environment Plan² (MEP) has been prepared on a topic basis, centred on the policy chapters of Volume 1 of the MEP. Individual reports have been prepared on the following:

Topic	Volume 1 Chapter of the MEP
Introduction to Section 32 evaluation reports	
Marlborough's tangata whenua iwi	3
Use of natural and physical resources	4
Allocation of public resources – freshwater allocation	5
Allocation of public resources – coastal allocation	5
Natural character	6
Landscape	7
Indigenous biodiversity	8
Public access and open space	9
Heritage resources	10
Natural hazards	11
Urban environments	12
Use of the coastal environment – subdivision, use and development activities in the coastal environment, recreational activities, fishing, residential activity, shipping activity and Lake Grassmere Salt Works	13
Use of the coastal environment – ports and marinas	13
Use of the coastal environment – coastal structures, reclamation and seabed disturbance	13

¹ See Appendix A.

² The Marlborough Environment Plan is a combined regional policy statement, regional plan, regional coastal plan and district plan.

Section 32: Chapter 15 – Air Quality

Topic	Volume 1 Chapter of the MEP
Use of the rural environment	14
Resource quality – water	15
Resource quality – air	15
Resource quality – soil	15
Waste	16
Transportation	17
Energy	18
Climate change	19

Chapters 1 and 2 of the MEP are not included within the Section 32 evaluation as they provide an introduction and background to the proposed document. These chapters do not include provisions that must be evaluated in accordance with Section 32.

The Introduction report covers the scope of the review that the Council has undertaken, including consultation and the nature of information gathered, investigations and research undertaken and analysis that has occurred. An overview of the Council's statutory obligations, the relationship of the MEP with other plans and strategies and working with Marlborough's tangata whenua iwi is described. A set of guiding principles the Council has used in the development of the objectives, policies and methods for the MEP is provided. The Council acknowledges that the principles have no statutory basis and do not in themselves have specific objectives, policies or methods. However, they have been included to provide the philosophy and values underlying the content of the MEP and consequently help to inform the Section 32 evaluation.

The policy provisions for air quality are included within Chapter 15 - Resource Quality (Water, Air, Soil). A separate section 32 evaluation report has been prepared for water, air and soil. The rules for air quality are included within each of the zones set out in Volume 2 of the MEP. There are also relevant appendices in Volume 3 that include specific requirements for burning devices and which provides a map of the Blenheim airshed. This Section 32 evaluation report on provisions relating to air quality is set out as follows:

- Description of issues – provides an overview of the resource management issues concerning air quality.
- Statutory obligations – the extent to which there are direct links with Section 6 or 7 matters and whether the provisions are directed or influenced by national policy statements or national environmental standards.
- Information and analysis – whether specific projects, investigations or other information have influenced the inclusion of provisions or other responses to dealing with resource management issues.
- Consultation – an overview of the extent and nature of specific consultation undertaken on the proposed provisions.
- Evaluation – an assessment of the provisions under each of the identified issues. Where appropriate, reference is made to supporting material that has helped to inform why a particular option has been chosen. In some cases the evaluation is undertaken on an individual provision, while in others groups of policies or methods have been assessed together.

In some parts of this evaluation report there are references to provisions within other chapters of the MEP. This is due to those provisions assisting in implementing the management framework for the subject matter of this report or vice versa. A reader should consider the evaluation for these other provisions where they are referred to in this report.

Key changes

The key changes in the MEP from the approach in the MRPS, WARMP and MSRMP are:

- implementation of National Environmental Standards for Air Quality resulting in management of open fires and burners in domestic settings;
- expansion of current prohibitions;
- managing odour as an adverse effect of land use activities; and
- explicit policy for odour, dust and spraydrift.

Summary of reasons for the proposed provisions

Section 32(1)(b)(iii) requires a summary of the reasons for deciding on the provisions included in the MEP. The summary of reasons for the provisions included in the MEP in relation to air quality are set out below; however, the more detailed evaluation is set out in the remainder of this report.

- Clean, fresh air is an important and valued part of Marlborough's environment and the community's quality of life. Unfortunately, elevated levels of particulate can build-up over Blenheim during the winter months, especially during calm, cold evenings. The main source of hazardous particulate matter (PM₁₀) is solid fuel burning for domestic home heating. At times the levels of PM₁₀ measured in Blenheim have exceeded national environmental standards for air quality.
- The most common sources of air contamination in a Marlborough context are smoke, dust, odour and spraydrift. All of these have the potential to adversely affect the ability of those living in close proximity to the source to enjoy their own properties and to cause adverse health effects for residents or workers.

Description of issues

Clean, fresh air is an important and valued part of Marlborough's environment and the community's quality of life. In general, Marlborough enjoys good air quality due to its windy climate and low, dispersed population. However, air quality in some locations has been reduced due to human activities resulting in the discharge of contaminants into the air. These localised air quality problems impact on the amenity and health of the community.

The air pollutant of most concern in terms of health hazards in Marlborough is particulate matter invisible to the naked eye. This size of particulate matter, called PM₁₀ is a health concern because particles this size or smaller can be inhaled into the respiratory system. (Larger particles can be readily filtered out in the nasal cavity.) Health impacts from inhaling small particles range from coughing and wheezing, asthma attacks and bronchitis, high blood pressure, heart attack, strokes and premature death.

The policy framework for air quality is included within Chapter 15 - Resource Quality (Water, Air, Soil). There are two resource management issues for air quality as follows:

Issue 15D – The discharge of particulate matter into air has the potential to cause significant health effects in urban areas, particularly in Blenheim.

- Elevated levels of PM₁₀ can build-up over Blenheim during the winter months. The main source of this PM₁₀ is solid fuel burning, mainly from domestic home heating, which contributes up to 92% of the anthropogenic PM₁₀ measured. Other sources include backyard burning of waste and discharges associated with industrial activities.
- Some form of intervention is required to achieve compliance with national standards for air quality and ensure a safe living environment over the winter months.
- Though Picton and Renwick have also been monitored, Blenheim is the only area within Marlborough where national standards apply. Other urban areas within the District may also have elevated PM₁₀ levels, but monitoring has not been undertaken in those areas.

Issue 15E – The discharge of contaminants into air that reduce the amenity of the surrounding area or create an undue risk to human health.

- The most common sources of air contaminants in Marlborough are smoke and spraydrift. These contaminants can cause adverse health effects for residents or workers and have the potential to adversely affect the ability of people living in close proximity to the source to enjoy their own property.
- Smoke is generally the result of the burning of vegetation or waste and the inefficient operation of boilers occurring in both urban and rural environments. The nuisance effects resulting from 'backyard burning' of rubbish are the main source of air quality complaints received by the Council.
- Agrichemicals that spread beyond the property boundary can cause adverse environmental effects. Spraydrift has the potential to cause adverse health effects and contamination of non-target crops, waterbodies and sensitive flora and fauna in non-target areas.
- A variety of small and medium-sized industrial and commercial processes that have the potential to have localised impacts on air quality include spray painting, abrasive blasting, food and beverage manufacture and processing timber mills.
- Disposal of organic waste arising from human and farming activities and industries processing agricultural products can also affect air quality in terms of offensive or objectionable odours.
- In some areas or situations, reverse sensitivity issues may be a problem, where lawfully-established activities that have addressed offsite effects as far as practicable and reasonable are sought to be constrained with new and often incompatible land uses locating nearby, including residential development.

Statutory obligations

The purpose of the RMA is to promote the sustainable management of natural and physical resources, including ***“safeguarding the life supporting capacity of the air”*** – Section 5(2)(b). Of particular relevance for air quality management is Section 7(f), which states that persons exercising powers under the RMA must have particular regard to the *“maintenance and enhancement of the quality of the environment.”* Section 7(c) is relevant to air quality in terms of *“maintaining and enhancing amenity values.”* There are no specific Section 6 matters on air quality.

Issues related to the discharge of greenhouse gases to air are addressed by central government at a national and international level. The RMA effectively excludes regional councils from the role of regulating emissions for climate change purposes (Sections 70A and 104E of the RMA). For this reason, nothing in this chapter specifically addresses the discharge of greenhouse gases into air. However, Chapter 19 - Climate Change does contain provisions seeking more generally to mitigate and adapt to the adverse effects on the environment arising from climate change.

While there is no national policy statement relevant to air quality, a series of national environmental standards for air quality are in place, as described below. In addition the Council has specific functions under Section 30 of the RMA in relation to the control of discharges of contaminants into the air.

Resource Management (National Environmental Standards for Air Quality) Regulations 2004

The Resource Management (National Environmental Standards for Air Quality) Regulations 2004 are regulations made under Sections 43(1)(a)(iii) and 44 the RMA. (Note that for the purposes of this report these regulations will be referred to as NESAQ.) These regulations are designed to protect public health and the environment by setting concentration limits for clear air, regulating or prohibiting certain activities that pollute the air and imposing air quality monitoring and reporting requirements on regional councils.

The NESAQ is made up of 14 separate but interlinked standards and include:

- seven standards banning activities that discharge significant quantities of dioxins and other toxics into the air;
- five standards for ambient (outdoor) air quality, including for carbon monoxide, nitrogen, ozone, sulphur dioxide and particulate matter (PM₁₀);
- a design standard for new wood burners installed in urban areas; and
- a requirement for landfills over 1 million tonnes of refuse to collect greenhouse gas emissions.

As a unitary authority, the Council is required to identify areas referred to as airsheds, where air quality is likely or known to exceed the standards. In Marlborough, Blenheim is the only area that has been identified as an airshed. The air pollutant of most concern in terms of health hazards in Marlborough is PM₁₀. The NESAQ sets a threshold concentration for PM₁₀ of 50 microns. By 2016, the threshold concentration will only be allowed to be exceeded once in any 12 month period within the Blenheim airshed.

In June 2011, the regulations relating to PM₁₀ were revised and amended to address concerns about the perceived stringency of the ambient standard, the lack of equity for industrial air pollution sources and the difficulty in achieving the original target timeline of 2013. In response, the standards were revised and the amended regulations came into effect on 1 June 2011. These have been consolidated into the Resource Management (National Environmental Standards for Air Quality) Regulations 2004.

Information and analysis

A number of investigations and monitoring activities have helped to inform the review of air quality and amenity provisions, including state of the environment monitoring and compliance monitoring. An overview of these is provided below.

State of the environment monitoring

Since 2001, the Council has undertaken monitoring of the air resource, including:

- annual air quality monitoring of PM₁₀;
- estimations of the amount of emissions contributing to PM₁₀ concentrations;
- management options for reducing PM₁₀ concentrations in Blenheim;
- determination of background contributions to PM₁₀ concentrations in Blenheim;
- investigations into potential air quality issues from viticulture spraying; and
- determination of ambient methyl bromide concentrations in Picton.

The Council's understanding and knowledge of Marlborough's air resources have subsequently increased through this monitoring program. Some of the monitoring is ongoing (i.e. annual air quality monitoring) and results are made publically available on the Council's website.

Compliance monitoring

The Council's Environmental Protection Section investigates alleged breaches of the RMA, the WARMP and the MSRMP with respect to discharges to air. Information and data is reported annually for discharges to air occurring in the District and includes odour, dust, spraydrift, burning and boilers.

Between 2008 and 2011, the Environmental Protection Section undertook an annual survey on the management and performance of boilers in Marlborough to ensure compliance with resource consent conditions. The aim of the survey was to promote effective management of boilers in the District and minimise contaminant discharge to air. Since 2011, monitoring of discharges to air from boilers has been monitored through complaints.

Consultation

Early consultation

In 2006, the first round of consultation was initially undertaken solely for the review of the MRPS and saw the distribution of a community flyer to all ratepayers advising of the review. The aim of this exercise was to determine the community's views on the most important resource management issues that Marlborough would face over the next ten years. Approximately 380 responses were received on the community flyer. However, only a small number of people commented on whether air quality was an important issue. This may be because it was perceived that Marlborough generally has good air quality.

Of the limited number of comments received, the following points were noted:

- Concern was raised that smog could become a danger to people's health in a similar way as has happened in Christchurch during winter. Providing discount coupons to help pay for chimneys to be kept cleaned, encouraging gas fires instead of log burners and banning open fires in town were suggested as methods to help reduce smog.
- Conversely, some felt that there should be no changes to the use of wood fires. The reason given for this was that based on experiences of the 2006 Canterbury snow storms, if log burners were required to be removed, homes may be without an alternative supply of heat. It was considered that the effects on elderly or other at risk people could be significant if there were no alternative sources available for heating and cooking.
- The other main air quality issue highlighted related to the amount of chemical sprays in the air from vineyards. Respondents believed this affected breathing, asthma, cancer and long-term health, particularly with grapes being planted in close proximity to town.
- Noise from frost fans was also identified as an issue and a view was expressed that resource management plans needed to be amended to improve the rules controlling noise from these fans.
- Several people commented that ongoing monitoring was required to ensure that air quality did not deteriorate.

Following this initial consultation, a series of discussion papers were prepared by the Council and released for public feedback in late 2007. One of these was particularly relevant to this Section 32 evaluation: *Discussion Paper 1: Quality of Life in Marlborough*. At the time the discussion papers were prepared, the Council had not determined with any degree of certainty that the state of Marlborough's air quality was a regionally-significant issue and consequently no separate discussion paper was prepared for air quality. Rather, a general description of Marlborough's air quality, including an overview of the Council's monitoring activity and central government initiatives for air quality, were included in the overview discussion paper.

In total, 44 responses were received from individuals, iwi, industry groups and environmental groups on *Discussion Paper 1*. Comments received through the feedback noted the following:

- Air quality was considered a regionally significant issue that needed a policy response in the regional policy statement. There was some support for air quality monitoring programmes to develop an appropriate response and action plan for dealing with situations where national air quality standards were not met. Respondents also considered there should be a programme working towards improving air quality in areas currently experiencing poor air quality.
- Spraydrift and the build-up of chemicals in the environment were considered to be significant issues for Marlborough. Research into alternative practices to avoid the need for crops such as grapes to be sprayed was supported, as was requiring neighbours to be notified when crops were to be sprayed.
- Traffic was considered a major contributor to poor air quality and respondents considered a heavy vehicle bypass for Blenheim was needed to reduce exposure to exhaust fumes. It was also suggested that programmes aimed at reducing exposure to fumes should be linked with the Walking and Cycling Strategy to encourage a reduction in traffic.

- Other comments on air quality included:
 - the use of methyl bromide;
 - dust from land clearance activities in areas prone to strong winds;
 - water blasting of vessels to remove anti-fouling;
 - potential for an increase in problems related to domestic fires over the next ten years because of increasing electricity prices and increasing population and density;
 - the ever-increasing use of frost fighting measures involving the burning of diesel and aviation fuels with resulting increases in carbon emissions; and
 - potential health effects of planting trees and other vegetation in public places contributing to asthma and hay fever problems for people.

Later consultation

Early in the review process, the Council decided on an iterative approach in developing provisions for the MEP. This sought to test as many of the provisions as possible before the new resource management documents were formally notified under the First Schedule of the RMA. The rationale for this was that the greatest flexibility for change to provisions exists prior to notification of a proposed document; once notified, only those provisions submitted on can be changed and then only within the scope of those submissions. The Council therefore established a number of internal and external focus groups with the task of reviewing the provisions to discuss their likely effectiveness or otherwise. The aim was to have as much community participation as possible in developing the provisions to reflect the community's views and to resolve any substantive issues prior to notification.

The policy provisions for air quality were considered by a number of the external focus groups and refined as a consequence. This included feedback from the Practitioners Working Group, Rural Working Group and Sounds Advisory Group (SAG). Other groups that provided feedback included Nelson Forests Limited, TrustPower and WineMarlborough.

In mid-2013 the Council released a set of draft provisions for community feedback. Although the main focus of the provisions related to policy and rules for the coastal environment, other policy, including resource quality, was also released. Limited feedback was received on water, air and soil quality provisions specifically; however, what was received helped to inform development of the chapter.

Evaluation for Issue 15D

Issue 15D – The discharge of particulate matter into air has the potential to cause significant health effects in urban areas, particularly in Blenheim.

Appropriateness of Objective 15.2

Objective 15.2 – Improve the ambient air quality of Blenheim by reducing PM₁₀ concentrations.

Relevance

Monitoring has shown that Blenheim's air quality during the winter months needs to improve to protect the health and wellbeing of the urban community. This can be achieved by reducing the ambient level of PM₁₀, most of which is sourced from home heating. Reducing PM₁₀ discharges at source to improve air quality will ensure that the current health effects of high PM₁₀ levels, which range from minor irritation through to significant respiratory conditions, are minimised. This objective is therefore very relevant in addressing the issue that needs to be responded to. It is focussed on achieving the purpose of the RMA and assists the Council to carry out its functions under Section 30 of the RMA. Importantly, Objective 15.2 implements the NESAQ and is very important for community wellbeing.

Feasibility

There is an acceptable level of uncertainty and risk associated with Objective 15.2. Through the Council's monitoring activity of air quality, there is now a body of information available that has clearly identified that reduced air quality is a problem. The Council has identified the source of most PM₁₀

concentrations as being domestic home heating and the ability to be able to achieve the objective to reduce these concentrations in the Blenheim airshed is within the Council's powers, skills and resources. For these reasons the objective is considered feasible.

Acceptability

Costs will be incurred for individuals to improve ambient air quality in Blenheim. For example, some will have to change their current heating system, some will incur compliance costs for non-compliant burners and others may bear the costs of disposing of green waste in an alternative manner to burning it in their backyard. Despite immediate costs to individuals, the health benefits to the community to improve air quality and reduce PM₁₀ levels justify any associated costs to individuals.

Although there has been limited feedback from the wider community on air quality issues in Marlborough, the Council considers that for human health and wellbeing it is imperative that PM₁₀ concentrations within the Blenheim airshed are reduced.

Assessment of provisions to achieve Objective 15.2

Policy 15.2.1

Policy 15.2.1 – Prohibit the use of open fires and the outdoor burning of organic and inorganic waste within the Blenheim airshed.

Benefits

This policy will result in improved ambient air quality and associated health benefits within the Blenheim airshed. Improved air quality will lead to fewer nuisance issues and a reduction in complaints received by the Council. Amenity standards will also improve from prohibiting outdoor burning in the urban environment. Another benefit of this policy is that because there is a transition period for changes to open fire places, costs incurred by individuals will not be immediate. From a technical perspective, this policy will ensure compliance with the NESAQ.

Support for this policy is documented in the report *Source Apportionment of PM10 in Blenheim*, which found that emissions from domestic home heating, including outdoor rubbish burning, are responsible for the majority (at least 76%) of the PM₁₀ during the winter months and around two thirds of the PM₁₀ during autumn. Other reports supporting this policy have been undertaken for the Council by Wilton (2005, 2007, 2009 and 2010).

Costs

This policy will incur costs for individuals required to change or upgrade their type of heating system. The Council's Building Group has estimated that less than 100 homes within the Blenheim airshed use open fires as the primary source of heating. Based on this low number, it may not be a significant issue.

By prohibiting the outdoor burning of waste material through this policy, costs will be incurred to individuals who must dispose of the waste to landfill as an alternative to burning. There may be a potential environmental cost as some individuals may choose to dispose of waste material illegally rather than using kerbside collection or landfill.

Efficiency

The community benefit of improved air quality and reduced PM₁₀ limits is greater than the individual cost of changing or upgrading heating systems. This policy recognises that air is a resource that everyone in the community relies upon and the effects of burning cannot be confined within property boundaries. By having a prohibition through this policy, cross-boundary effects of discharge activities that otherwise would be impossible to contain will be better controlled. The prohibitions are limited to the extent that they only apply to the area most affected by significant PM₁₀ concentrations, i.e. the Blenheim airshed; other areas of Marlborough are not unnecessarily constrained from the use of open fires or burning of organic and inorganic waste.

Effectiveness

This policy is very effective as an 11% improvement in PM₁₀ emissions is anticipated. This means the policy will help to achieve the objective.

Policy 15.2.2

Policy 15.2.2 – Phase out small scale solid fuel burning appliances older than 15 years of age within the Blenheim airshed.

Benefits

This policy recognises that the efficiency of solid fuel burning appliances decreases with time and ceases to be efficient after 15 years. Modelling has shown that the NESAQ will be achieved by 2016 if, in conjunction with the prohibition on open fires and outdoor burning of rubbish, older-style enclosed burning appliances are replaced at the end of their 15 year life. This policy seeks to ensure that this phase-out occurs by encouraging people to either replace existing solid fuel burning appliances with modern and compliant solid fuel burning appliances or install other clean forms of heating (e.g. electric). The benefits of this policy are that there will be improved ambient air quality and associated health benefits.

Costs

Costs for the upgrade or replacement of appliances as a consequence of the policy will be incurred by individuals. However, this cost may not be significant given that appliances become inefficient over time, requiring greater amounts of fuel for lower heat output or increased maintenance. Compliance costs will also be incurred by ratepayers as the Council progressively works through its records to identify burning appliances that must be replaced in accordance with the policy.

Efficiency

This policy is efficient because the community benefit in terms of improved health benefits and general wellbeing gained through using more efficient appliances that reduce emissions is greater than the costs for individuals replacing old, inefficient appliances. In addition, the Ministry for the Environment provides guidelines about the types of appliances that can be used to replace the older, inefficient appliances and therefore there is greater certainty provided to the individual about the efficiency of newer appliances. In this way the objective to improve ambient air quality is more likely to be achieved.

Effectiveness

Beyond the 15 year life of an appliance, evidence indicates that PM₁₀ emissions increase. This policy is effective because of the anticipated improvement in the PM₁₀ levels within the Blenheim airshed through the upgrade or replacement of old appliances, which will help to achieve the objective and increase the likelihood of the issue being addressed.

Policy 15.2.3

Policy 15.2.3 – Require all new multi-fuel burning appliances to comply with the National Environmental Standards for Air Quality design standard for wood burning appliances.

Benefits

For domestic fires, NESAQ Regulations 22 to 24 only apply to new domestic wood burners; they do not apply to multi-fuel burners (burners that use coal and wood), coal burners, pellet fires or wood/coal stoves designed for the primary purpose being cooking. As a result of this exclusion, an equity issue arises in that individuals who install these types of wood burners do not have to comply with the NESAQ design standards for wood burning appliances. Including this policy means that anyone installing a new multi-fuel burning appliance must comply with the same standards of the NESAQ as those individuals installing domestic wood burners.

By capturing those wood burners that the NESAQ excludes, this policy will result in positive environmental effects. Another benefit of this policy is that it applies at the time of installation and therefore does not apply to retrofitting or making changes to an existing appliance.

Costs

There are no additional costs to the landowner/individual as this policy applies to any new wood burner that the landowner has already decided to purchase. There is a minor potential cost for manufacturers to ensure the NESAQ design standards for wood burning appliances are met.

Efficiency

This policy is efficient as the community benefits of new multi-fuel burning appliances that comply with NESAQ design standards are greater than the cost to individuals of purchasing new burners. In addition, this policy is equitable for all individuals as all new burners must comply with the NESAQ standards.

Effectiveness

By capturing those wood burners that the NESAQ excludes, this policy will result in improved ambient air quality, which clearly assists in achieving the objective and addressing the issue.

Policy 15.2.4

Policy 15.2.4 – Refuse discharge permit applications to discharge PM₁₀ into air within the Blenheim airshed if the discharge is likely to increase the concentration of PM₁₀ by more than 2.5 micrograms per cubic metre (24 hour average) in any part of the airshed, unless:

- (a) the Blenheim airshed average exceedance is less than 1 per year; or
- (b) the applicant offsets the proposed PM₁₀ discharge by reducing PM₁₀ discharges from another source(s) in the airshed by the same or greater amount.

Benefits

This policy effectively follows Regulation 17 of the NESAQ, which was included in response to concerns over the focus on domestic fires and their contribution to reduced air quality with little focus on industrial activities. Although it is not necessary to include this policy as it effectively duplicates Regulation 17, it has been included in recognition of achieving a balance between business/industrial and domestic users in terms of their contribution to reduce air quality levels.

Costs

There are no greater costs in this policy as the restrictions must be complied with through the NESAQ regulations.

Efficiency

This policy is efficient because the community benefit will outweigh the cost to the individual. Because there is direction to refuse discharge permit applications where there is likely to be an increase in PM₁₀ concentration, air quality within the Blenheim airshed will at a minimum, be maintained. By including (b), there may be an improvement in the air quality of the Blenheim airshed if the discharge from another source(s) is reduced by a greater amount than the proposed discharge. In this situation, this policy will achieve the highest benefit to the community within the Blenheim airshed.

Effectiveness

This policy is effective in achieving the objective as it captures a range of activities (residential burning and industrial activities) that can contribute to reducing the air quality of the Blenheim airshed. In addition, under this policy there will be a control on the concentration of PM₁₀ allowed under the discharge permit. This should result in either no reduction in air quality or an improvement in air quality, particularly if the offset under (b) reduces a PM₁₀ discharge from another source by a greater amount.

Methods of implementation

The most significant change in the methods of implementation from the current MRPS and the two resource management plans is the influence of the NESAQ on how councils are required to manage air quality. For this Council the prohibition of outdoor burning and indoor open fires and the phasing out of burners older than 15 years of age within the Blenheim airshed through regional rules is a significant difference from the current framework. This approach, although strong, is considered necessary to improve and protect the health and wellbeing of the urban community. The evaluation for Policies 15.2.1 and 15.2.2 describes why it is appropriate to employ these types of methods.

Other options considered to achieve Objective 15.2

The Council considers that there are no other reasonably practicable options for achieving Objective 15.2. While in most circumstances there is an option of the status quo (being the existing provisions of the MRPS, MSRMP and WARMP), for Objective 15.2 this option is not available as the NESAQ contains standards with which the Council must comply. The current resource management documents do not reference the NESAQ as they were prepared prior to the introduction of the standards in 2004. As Objective 15.2 has been included to respond to the NESAQ, retaining the current provisions of the MRPS, MSRMP and WARMP would mean the NESAQ would not be able to be met.

Risk of acting or not acting

In terms of Section 32(2)(c) of the RMA, an assessment of the “*risk of acting or not acting if there is uncertain or insufficient information about the subject matter of the provisions*” is required. Given the direction in the NESAQ and the level of available information regarding air quality within the Blenheim airshed the Council considers the risks of acting or not acting to include the proposed provisions is low. This assessment is based on data and information gained through historical air quality monitoring undertaken at a number of sites in Blenheim by the Council’s Science and Monitoring Group and other investigations undertaken by Wilton (2005b, 2006, and 2007).

Evaluation for Issue 15E

Issue 15E – The discharge of contaminants into air that reduce the amenity of the surrounding area or create an undue risk to human health.

Appropriateness of Objective 15.3

Objective 15.3 – Reduce the potential for nuisance and health effects from the discharge of contaminants into air.

Relevance

The objective acknowledges that people should be able to enjoy their own property without the nuisance or potential health effects caused by smoke, spraydrift and other discharges to air from nearby properties. These effects can usually be minimised through appropriate management practices mainly directed at preventing air quality problems from occurring rather than dealing with the effects of poor air quality in the future.

This objective is relevant as it focusses on achieving the purpose and principles of the RMA with regards to:

- Section 5(2) – managing the use, development, and protection of natural and physical resources in a way, or at a rate, which enables people and communities to provide for...their health and safety;
- Section 7(c) – the maintenance and enhancement of amenity values; and
- Section 7(f) – maintaining and enhancing the quality of the environment.

It is also within the Council’s statutory functions in terms of Section 30(f), which in part means the Council has the control of discharges of contaminants into air. The objective also helps to implement aspects of the NESAQ, especially those regulations setting out prohibitions on the burning of some materials, which can have both human health risks and nuisance effects.

Feasibility

This objective is feasible because it is within the Council’s resources to provide monitoring and gather information. However, resources are limited, so monitoring and information gathering needs to be targetted at those activities involving the discharge of contaminants into air with the greatest potential to impact human health.

There are known risks to human health and for potential nuisance effects associated with the discharge of contaminants to air. This objective aims to reduce that risk to an acceptable level, which

will be partly achieved through implementation of the NESAQ, standards for some permitted activities, resource consent for some discharges to air and prohibitions for some activities.

Acceptability

This objective is very acceptable because it is consistent with the community's desire expressed through early consultation to address the effects of spraydrift. The Council is also aware of ongoing concerns with the effects of spraydrift through complaints made periodically to the Council.

Assessment of provisions to achieve Objective 15.3

Policy 15.3.1

Policy 15.3.1 – Prohibit the discharge of contaminants into air resulting from the combustion of materials that will give rise to concentration of contaminants likely to be dangerous or toxic.
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Benefits

Policy 15.3.1 recognises that some people choose to burn inappropriate materials and that this practice contributes to excessive concentrations of air contaminants, resulting in objectionable or offensive smoke and odour and associated health and nuisance problems. The benefits of this policy therefore are a reduction in the adverse health and environmental effects from the burning of inappropriate materials as there will be prohibited activity rules that clearly list materials that cannot be burned.

Costs

Under this policy there is potential for increased costs to individuals for alternative disposal of materials that cannot be burned. There is also an increased cost to the Council in determining compliance with the expanded list of materials that cannot be burned. This cost will be dependent on the behaviour of the individual undertaking the burning activity.

Efficiency

The community benefit of this policy in terms of improved health and overall wellbeing is greater than the cost to the individual. This policy is very efficient as it will achieve the highest net benefit for the community by identifying and listing materials that cannot be burned.

There is no more stringent standard than a prohibition. Therefore, this policy is very efficient as it ensures that certain materials should never be burned due to their significant adverse effects on human health and wellbeing. This policy is also efficient because the NESAQ requires that the burning of certain materials be prohibited.

Effectiveness

This policy is effective as it makes a significant contribution to achieving the objective by prohibiting the burning of dangerous or toxic materials that can have significant adverse effects. By identifying and listing materials that cannot be burned, the objective is much more likely to be achieved.

Policy 15.3.2

Policy 15.3.2 – Require all discharges to comply with the ambient air quality standards established by the National Environmental Standard for Air Quality.

Benefits

This policy simply implements the NESAQ by raising community awareness that air quality standards apply throughout Marlborough, not just within the Blenheim airshed. Through this policy, the community will become aware of their obligations under the NESAQ and understand the health and environmental benefits that come from this regulation.

Costs

There will be no more costs incurred to individuals beyond those already created by the NESAQ.

Efficiency

This is an information policy in that it allows individuals and the community to become aware of and understand the standards of the NESAQ. It is therefore considered to be neutral in terms of a cost to the community.

Effectiveness

It is considered logical to include 15.3.2 in a group of policies that deal more generally with air quality. Although the NESAQ achieves the objective, the obligations of the community are not well known or understood. This policy not only helps to identify for the community their obligations under the NESAQ but also supports those obligations.

Policies 15.3.3 and 15.3.4

Policy 15.3.3 – Control emissions from large scale fuel burning devices outside the Blenheim airshed and approve discharge permit applications where the discharge will not be dangerous or noxious, or cause an offensive or objectionable effect beyond the boundary of the site(s) from where the discharge originates.
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Policy 15.3.4 – Manage the use of agrichemicals to avoid spraydrift. The boundary of the property on which the application of agrichemical occurs is the point at which management applies, as follows:

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| <ul style="list-style-type: none"> (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). |
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Benefits

Policies 15.3.3 and 15.3.4 recognise that nuisance effects have occurred historically. The benefit of these two policies is that cross-boundary effects of discharges and activities resulting in odour, dust and spraydrift is reduced. Both of these policies provide greater certainty with respect to the point at which measurement of the effect(s) applies and determination of compliance with standards is breached, i.e. beyond the boundary of the property from which the discharge originates. The policies target the activity producing the adverse effect.

These policies result in environmental and social benefits from attempting to reduce the adverse effects. In addition, economic benefits are created by avoiding cross-boundary effects. For example, spraydrift of the contaminant will be retained on the property to which it is applied. This is economically beneficial for the sprayer, as not only will there be less potential for loss of product but the user will not have to address potential adverse effects beyond the property boundary after the discharge event.

Costs

Costs associated with these policies relate to the practicalities of complying with the standards and the costs this imposes in terms of adopting new technologies and/or methods. However, resource users should already be using best practice options and exercising care in relation to discharging contaminants to air; therefore, additional costs should not be incurred provided the discharge is contained within the property boundary.

Efficiency

Collectively, the policies are efficient as they will increase the likelihood of an improvement in quality. As a result, the community benefit of improved health and wellbeing will outweigh the cost that may be incurred through the policies to an individual.

Policy 15.3.3 is efficient as there is greater benefit to the community from controlling these emissions relative to the cost to the individual of being regulated. Policy 15.3.4 is also efficient because the responsibility of the agrichemical management and ensuring the product does not cross the property boundary falls on the discharger; subsequently, the costs incurred for not meeting these obligations also falls on the discharger.

Effectiveness

Even with the control point for determining adverse effects at the property boundary, it will be difficult to contain all discharges within the property from which the discharge is occurring. To that extent, it is somewhat uncertain as to whether these two policies will be effective as they rely on resource users

managing the discharge well. Despite this uncertainty the property boundary is still the best location to manage potential effects and no other suitable location has been identified.

Policy 15.3.3 is also effective as it helps reinforce the approach taken in Section 17 of the RMA – the duty to avoid, remedy or mitigate adverse effects.

Policy 15.3.5

Policy 15.3.5 – Manage discharges of contaminants to air not specifically provided for in Policies 15.2.1 to 15.2.3 or 15.3.1 to 15.3.4 by:

- (a) allowing, as permitted activities, discharges of contaminants into air from industrial or trade premises or industrial or trade processes that have no more than minor adverse effects on the environment;
- (b) avoiding or mitigating adverse effects of localised ground level concentrations of contaminants, including cumulative effects on:
 - (i) human health; and
 - (ii) amenity values; and
- (c) avoiding or mitigating adverse effects on any other values.

Benefits

The benefit of this policy is that it covers any other discharge not covered by other policies. This policy takes an enabling approach for activities through permitted activities with a that need to discharge contaminants into air from an industrial or trade premises or that are an industrial or trade processes. This means these activities will occur in the appropriate locations with no more than minor adverse effects on the environment, resulting in positive environmental benefits and social wellbeing.

This policy restricts human and health effects, especially at ground level where consent is required. Greater clarity is provided on the discharge effects within a discrete area where human health and amenity are potentially most affected. This policy helps gives effect to Sections 7(c) – the maintenance and enhancement of amenity values and (f) – maintenance and enhancement of the quality of the environment.

This policy manages not only cumulative effects of the discharge on air, but also includes wider-reaching protection for other values such as water quality and biodiversity, which was a concern raised by focus groups.

Costs

A range of costs will be incurred from this policy. For example, there are a greater number of permitted activities enabled under (a) that may still incur some costs through having to meet standards but are not subject to the additional costs associated with obtaining a resource consent. This reflects the existing management framework.

Efficiency

This policy is efficient as it ensures that in terms of amenity and health effects, management is applied in all environments where discharges occur, including unforeseen discharges. Therefore, the policy is one of high net benefit to all of the community, greater than any cost to an individual discharger.

Effectiveness

This policy helps to achieve the objective to protect human health and amenity values. However, it is difficult to determine the extent to which it will be effective as it is not possible to anticipate exactly what discharges will occur. Despite this uncertainty, the policy provides a management framework that will appropriately reduce the adverse effects of discharges not otherwise anticipated.

Policies 15.3.6 and 15.3.7

Policy 15.3.6 – Promote measures to avoid or mitigate the effects of the discharge of contaminants to air at their source.

Policy 15.3.7 – Having adequate information about the state of Marlborough’s air quality to enable the Council to assess the cumulative effects of discharges to air on amenity values and human health.

Benefits

Both these policies will result in environmental, social and cultural wellbeing benefits for the community.

Policy 15.3.6 acknowledges that the resource user can employ complimentary non-regulatory tools at the source of the discharge to avoid or mitigate adverse effects through reducing the level of contaminants in the discharge. Through this policy, the Council, individuals and industry are encouraged to work together for a common goal to improve the quality of discharges to air.

The Council's knowledge about the state of air quality in Marlborough is neither perfect nor complete and therefore air quality policies may not be effective in achieving Objective 15.3. For this reason, the Council will seek to identify information gaps, either in terms of contaminants monitored or the location of monitoring, and adjust or expand the state of the environment monitoring programme as resourcing and priorities allow. The intent is that greater environmental, social and economic wellbeing will result from additional information about the state of Marlborough's air quality. This will help to inform how effective and efficient the other policies are for air quality in Chapter 15.

Costs

Under Policy 15.3.6 there is a potential cost in terms of implementing approaches to reduce the level of contaminants in the discharge, although depending on the nature of the discharge there may also be opportunities to reduce costs. For Policy 15.3.7 there will be a cost associated with collecting information to determine cumulative effects. However, this policy seeks to reduce costs by working with individual resource users and industry groups to collect and share information, which will help to reduce costs.

There is the potential for a plan change if significant effects are identified through monitoring. However, if there is a positive environmental or community benefit for human health, then these policies provide the highest net community benefit.

Efficiency

Ratepayer money will be used on these policies, but the community benefit is equivalent to any cost to the community. The policies provide and allow for the greatest net benefit for the community. They are also efficient as they reflect the combination of regulatory and non-regulatory approaches for the management of the discharges to air.

Policy 15.3.6 attempts to pre-empt the effects of the discharge of contaminants to air by managing the effects at the source rather than waiting until the effects occur in the wider environment. This approach means that there is likely to be fewer complaints made to the Council and therefore less costs associated with compliance.

Effectiveness

These policies are effective as they provide a wide range of approaches, both regulatory and non-regulatory, to address the effects of discharges to the environment. The advantage of this is that there is a greater likelihood of achieving the objective and addressing the issue.

Methods of implementation

Similar to the evaluation for the methods of implementation for Objective 15.2, the influence of the NESAQ for the management of air quality is the most significant difference between the MEP and the framework of the current MRPS and the two resource management plans. This is why many of the methods have been included.

In particular, there is emphasis on non-regulatory methods and working with industry to gain greater understanding of the effects of spraydrift. The focus on agrichemical spraydrift reflects the significant change of land use to viticulture, with increased areas in south Marlborough having been planted in grapes since the WARMP was first notified.

Other options considered to achieve Objective 15.3

Two other options were considered by the Council to achieve Objective 15.3. They were:

1. *Status quo in terms of the existing provisions of the MRPS, the MSRMP and the WARMP*

The MRPS identifies that enabling the community to provide for its own health and wellbeing is a significant issue in relation to reduced air quality from activities that result in discharges of contaminants to air. An objective is in place to avoid, remedy or mitigate the adverse effects of activities on local ambient air quality, community wellbeing, amenity values, resources or values of significance to tangata whenua, ecosystems, water and soil. The policies and methods of implementation are fairly generic in terms of air quality in that they do not specifically address nuisance and health effects for discharges beyond the property boundary.

The MEP specifically identifies that the discharge of contaminants to air can result in adverse effects on the area surrounding the discharge. Objectives, policies and methods of implementation encourage minimisation of these effects through appropriate management practices, which should ensure that the potential for these contaminants to move beyond the property boundary and adversely affect others is reduced. The proposed policies for the MEP are therefore preferred, especially when taken in conjunction with the range of methods identified to implement the policies.

2. *No regulation for nuisance and health effects on the surrounding area*

The current MRPS contains no specific provisions for reducing the potential for nuisance and health effects from the discharge of contaminants into air. Option 2 would have seen the continuation of this approach. However, this would ignore information gathered from SOE monitoring and other investigations that have identified activities involving discharges that are likely to result in adverse effects. Therefore, providing no regulations for nuisance and health effects on the surrounding area was not a viable option.

Risk of acting or not acting

In terms of Section 32(2)(c) of the RMA, an assessment of the “*risk of acting or not acting if there is uncertain or insufficient information about the subject matter of the provisions*” is required.

Through the life of the current resource management plans, information has been gathered about the quality of Marlborough’s air resource and the potential for discharges of contaminants to adversely affect the health and wellbeing of the community. The Council is therefore in a position to include provisions to address the issues of which it is aware. There would be a greater risk to environmental, economic and social wellbeing if provisions were not included to control the discharge of contaminants into air from cross-boundary effects.

There is limited information available on spraydrift, its associated effects and the subsequent potential risk to human health. There is a potential risk that policies may not be able to adequately deal with unanticipated discharges. There is also a risk that by not including Policy 15.3.4, spraydrift would not be managed at the boundary of the property, reducing the chances to avoid associated effects of spraydrift and potential risks to human health.

Through policy and methods of implementation the Council has included a commitment to gather further information on the state of Marlborough’s air quality. Though this information is not complete, the Council considers it has enough information from the monitoring undertaken so far for the purposes of this Section 32 report and is able to include the proposed framework set out Chapter 15 for air quality.

Appendix A – Section 32 of the RMA

32 Requirements for preparing and publishing evaluation reports

- (1) An evaluation report required under this Act must—
 - (a) examine the extent to which the objectives of the proposal being evaluated are the most appropriate way to achieve the purpose of this Act; and
 - (b) examine whether the provisions in the proposal are the most appropriate way to achieve the objectives by—
 - (i) identifying other reasonably practicable options for achieving the objectives; and
 - (ii) assessing the efficiency and effectiveness of the provisions in achieving the objectives; and
 - (iii) summarising the reasons for deciding on the provisions; and
 - (c) contain a level of detail that corresponds to the scale and significance of the environmental, economic, social, and cultural effects that are anticipated from the implementation of the proposal.

- (2) An assessment under subsection (1)(b)(ii) must—
 - (a) identify and assess the benefits and costs of the environmental, economic, social, and cultural effects that are anticipated from the implementation of the provisions, including the opportunities for—
 - (i) economic growth that are anticipated to be provided or reduced; and
 - (ii) employment that are anticipated to be provided or reduced; and
 - (b) if practicable, quantify the benefits and costs referred to in paragraph (a); and
 - (c) assess the risk of acting or not acting if there is uncertain or insufficient information about the subject matter of the provisions.

- (3) If the proposal (an **amending proposal**) will amend a standard, statement, regulation, plan, or change that is already proposed or that already exists (an **existing proposal**), the examination under subsection (1)(b) must relate to—
 - (a) the provisions and objectives of the amending proposal; and
 - (b) the objectives of the existing proposal to the extent that those objectives—
 - (i) are relevant to the objectives of the amending proposal; and
 - (ii) would remain if the amending proposal were to take effect.

- (4) If the proposal will impose a greater prohibition or restriction on an activity to which a national environmental standard applies than the existing prohibitions or restrictions in that standard, the evaluation report must examine whether the prohibition or restriction is justified in the circumstances of each region or district in which the prohibition or restriction would have effect.

- (5) The person who must have particular regard to the evaluation report must make the report available for public inspection—
 - (a) as soon as practicable after the proposal is made (in the case of a standard or regulation); or
 - (b) at the same time as the proposal is publicly notified.

(6) In this section,—

objectives means,—

- (a) for a proposal that contains or states objectives, those objectives:
- (b) for all other proposals, the purpose of the proposal

proposal means a proposed standard, statement, regulation, plan, or change for which an evaluation report must be prepared under this Act

provisions means,—

- (a) for a proposed plan or change, the policies, rules, or other methods that implement, or give effect to, the objectives of the proposed plan or change:
- (b) for all other proposals, the policies or provisions of the proposal that implement, or give effect to, the objectives of the proposal.

Appendix B – Bibliography

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