



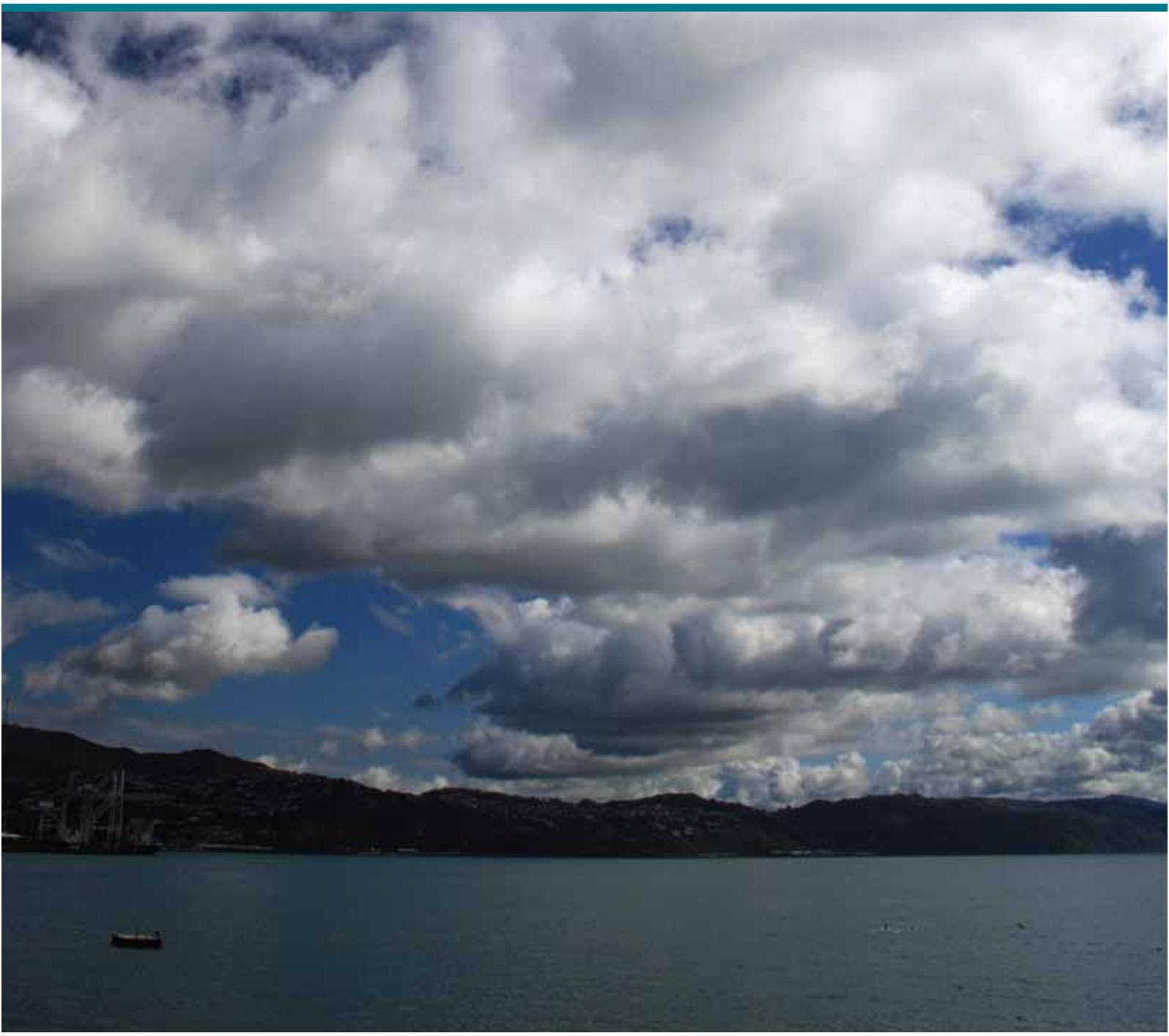
Section 32 report: air quality

Quality for Life



greater WELLINGTON
REGIONAL COUNCIL

Environment





Section 32 Report

Air Quality

For more information, please contact:

Greater Wellington
142 Wakefield Street
PO Box 11646
Manners Street
Wellington 6142
T 04 384 5708
F 04 385 6960
rps@gw.govt.nz
www.gw.govt.nz/rps

March 2009
GW/EP-G-09/05

Contents

1.	Introduction	1
1.1	Structure of this report	2
2.	Regionally significant issues	5
3.	Extent to which the objectives are the most appropriate	6
3.1	Objective 1	6
3.2	Objective 2	7
3.3	Analysis of which are the most appropriate objectives	10
4.	Evaluation of policies and methods to achieve Objective 1	11
4.1	The range of policy and method options considered	11
4.1.1	Regulatory direction to district and/or regional plans	11
4.1.2	Regulatory direction as to matters to be given particular regard in resource management decision making	11
4.1.3	Non-regulatory options	12
4.1.4	Doing nothing	12
4.2	Evaluation as to the effectiveness and efficiency of the policy and method options to achieve objective 1	13
4.3	Results of evaluation as to the most appropriate policy and method options to achieve objective 1	18
4.4	Discussion of options	19
4.5	Risk of acting or not acting if information is uncertain or insufficient	20
5.	Evaluation of policies and methods to achieve Objective 2	21
5.1	The range of policy and methods options considered	21
5.1.1	Regulatory direction to district and/or regional plans	21
5.1.2	Regulatory direction as to matters to be given particular regard in resource management decision making	22
5.1.3	Non-regulatory options	22
5.1.4	Doing nothing	22
5.2	Evaluation as to the effectiveness and efficiency of the policy and method options	23
5.3	Results of evaluation as to the most appropriate policy and method options to achieve objective 2	28
5.4	Discussion of options	28
5.5	Risk of acting or not acting if information is uncertain or insufficient	30
	Appendix 1: Criteria used to determine regionally significant issues	31
	Appendix 2: References	32

1. Introduction

This report presents the Resource Management Act, 1991 Section 32 evaluation “Consideration of alternatives benefits and costs” for the proposed Regional Policy Statement on air quality. Section 32 states:

32 *Consideration of alternatives, benefits, and costs*

(1) In achieving the purpose of this Act, before a proposed plan, proposed policy statement, change, or variation is publicly notified, a national policy statement or New Zealand coastal policy statement is notified under section 48, or a regulation is made, an evaluation must be carried out by—

.....

(c) the local authority, for a policy statement or a plan (except for plan changes that have been requested and the request accepted under clause 25(2)(b) of Part 2 of Schedule 1); or

(3) An evaluation must examine—

(a) the extent to which each objective is the most appropriate way to achieve the purpose of this Act; and

(b) whether, having regard to their efficiency and effectiveness, the policies, rules, or other methods are the most appropriate for achieving the objectives.

....

(4) For the purposes of [[the examinations referred to in subsections (3) and (3A)]], an evaluation must take into account—

(a) the benefits and costs of policies, rules, or other methods; and

(b) the risk of acting or not acting if there is uncertain or insufficient information about the subject matter of the policies, rules, or other methods.

(5) The person required to carry out an evaluation under subsection (1) must prepare a report summarising the evaluation and giving reasons for that evaluation.

(6) The report must be available for public inspection at the same time as the document to which the report relates is publicly notified or the regulation is made.

1.1 Structure of this report

Section 2 of this report outlines the regionally significant issues identified and the process of identification.

Section 3 outlines the objectives proposed in response to each issue and evaluates the appropriateness of each objective in accordance with the Resource Management Act.

Sections 4 and 5 evaluate the appropriateness of the policy and method options proposed to achieve each objective. When evaluating the policy and method options, the range of options available is outlined first, and then each option is evaluated. There are four types of options discussed in each instance. These are:

(a) Regulatory direction to district and/or regional plans

This is where a regional policy directs matters that must be provided for within district and/or regional plans. The method sets out when the provisions are to be included.

(b) Regulatory direction as to matters to be given particular regard in resource management decision making

This is where a regional policy sets out specific matters that are to be given “particular regard” when making resource management decisions. The method sets out when these matters are to be considered. This may include resource consent decisions, decisions on notices of requirements or when making decisions about reviewing, varying, replacing or otherwise changing district and/or regional plans.

(c) Non-regulatory options

This is where a regional policy and a method specifies non-regulatory programmes or action that will be put in place. The non regulatory methods include:

- provision of information or guidance
- integrating management
- identification or investigation
- providing support.

(d) Doing nothing

This is where no intervention, either regulatory or non-regulatory will occur.

Determining the most appropriate policies and methods is based on an assessment of the *effectiveness* and *efficiency* of the policy and method options, and the risks of acting or not acting when there is uncertain or insufficient information.

Effectiveness is a measure of how much influence a resource management intervention has or how successful it is in addressing the issues, in terms of achieving the desired environmental outcome. Effectiveness is a cumulative value, derived from the range of types and scope of influences or impacts of an intervention, towards achieving intended results and environmental outcomes. As with evaluating efficiency, the effectiveness of an option is not able to be assessed as an absolute value. Rather, options are appraised as to whether they exhibit the qualities which contribute to ‘effectiveness’ and to what degree, and a determination is made as to the cumulative effect of the pertinent attributes in terms of high, medium or low ‘effectiveness’.

When evaluating the *efficiency* of the policy and method options both the benefits (social, economic and environmental) and costs (social, economic and environmental) are outlined. Each option is then deemed to be either efficient or inefficient. The following diagram outlines how this assessment is undertaken.

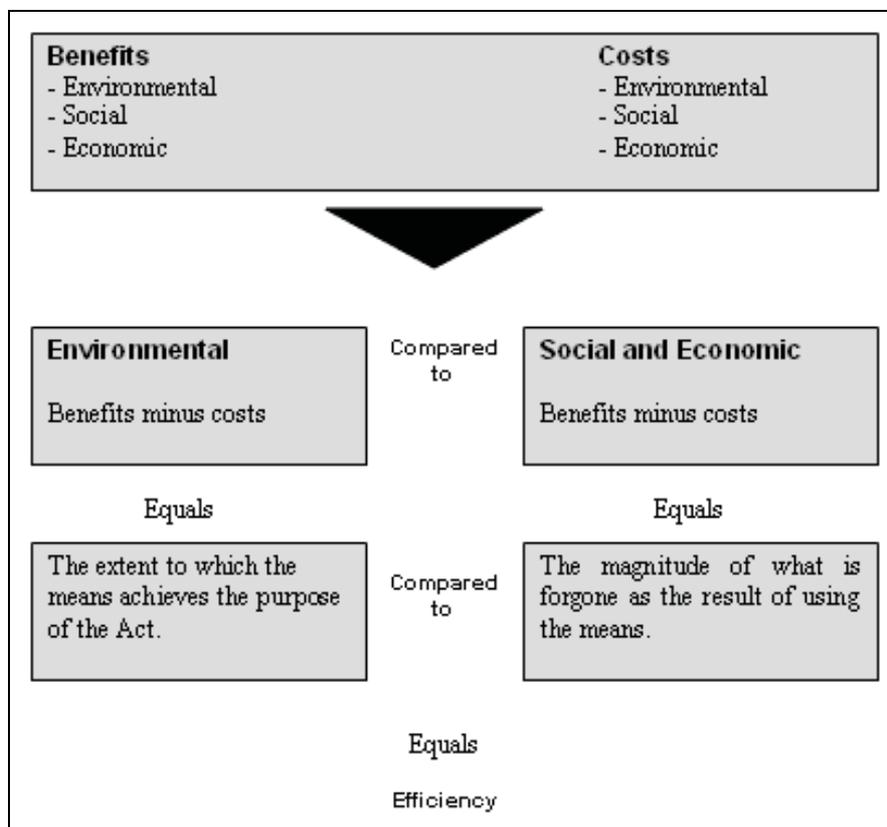


Figure 1: Deriving efficiency from benefits and costs

The evaluation of ‘efficiency’ will result in either a positive or negative result in terms of efficiency. Alternatively, if efficiency is expressed as a cost/benefit ratio, it will be either greater than or less than 1. In the event the ratio is considered to be less than 1, the option can be considered efficient, in that the sum of the benefits outweigh the sum of the costs. In the event the ratio is deemed to be greater than 1, the option can be considered to be inefficient, in that the sum of the costs outweigh the sum of the benefits. It is important to note that in this evaluation of ‘efficiency’, absolute values for each of the variables considered pertinent (i.e. identified as either a cost or a benefit within

the evaluation of the options) are not available. Rather, the analysis has endeavoured to present an accurate appraisal of the relative costs and benefits between the options, in order to determine which are efficient and which are not. A simple yes or no is used to differentiate the options as efficient or inefficient.

2. Regionally significant issues

As part of the review of the air quality chapter, in the Regional Policy Statement for the Wellington Region 1995, the issues were evaluated and reviewed using:

- Measuring up: The state of the environment report for the Wellington region (2005) and the Air Quality - background report (2005)
- Regional Policy Statement Evaluation Report for Air Quality (2006)
- Our region – their future: A discussion document on the review of the Regional Policy Statement for the Wellington Region (2006)
- The Effectiveness Report for the Regional Air Quality Management Plan (2008)
- Criteria to ensure the issues were regionally significant, were ‘resource management’ matters and appropriate for inclusion in the Regional Policy Statement (see Appendix 2 for a copy of the criteria).

The resulting issues included in the proposed Regional Policy Statement on air quality are:

Issue 1: Impacts on amenity and wellbeing from odour, smoke and dust

Odour, smoke and dust affect amenity values and people’s wellbeing. These effects are generally localised and result from the following activities or land uses:

- (a) Odour from activities - such as, rendering, spray painting and solvent use, landfills, sewage treatment plants, silage feeding and effluent spreading.
- (b) Smoke from domestic fires and backyard burning.
- (c) Dust from land uses or activities - such as, earthworks, quarries, and land clearance.

Issue 2: Health effects from the discharges of fine particulate matter

Fine particulate matter (PM₁₀) predominately discharged from domestic fires, occasionally reaches concentrations that can harm people’s health. This can happen in valleys and areas where levels of fine particulate matter may build up during periods of cold calm weather.

3. Extent to which the objectives are the most appropriate

The proposed air quality objectives are:

Objective 1: Discharges of odour, smoke and dust to air do not adversely affect amenity values and people's wellbeing.

Objective 2: Human health is protected from unacceptable levels of fine particulate matter.

To follow is an outline of the extent to which each of the air quality objectives are the most appropriate to achieve the purpose of the Resource Management Act.

3.1 Objective 1

Objective 1: Discharges of odour, smoke and dust to air do not adversely affect amenity values and people's wellbeing.

- Measuring up (2005) reports that odour - from manufacturing, rendering, spray painting, landfills, sewage treatment plants and agricultural activities - is a chronic problem in some parts of the region. These operations are sometimes located close to residential areas and sensitive activities.
- The Effectiveness Report for the Regional Air Quality Management Plan (2008) reports that odour provisions are not helping to achieve the objective of the plan. Incidents of 'objectionable' odour cause more complaints to the Greater Wellington pollution hotline than any other kind of pollution or non-compliance. Many of the complaints relate to activities with resource consents, where the effects of the odour could be better managed by setting controls on the process rather than applying an effects-based condition about the effect at the property boundary. Objectionable odour remains a significant issue in the region not only because of the type of discharge it is, but also due to the ineffectiveness of the methods used to manage odour over the past ten years through the Regional Air Plan.
- Measuring up (2005), reports that smoke – such as from domestic fires and backyard burning - in valleys over the winter months, can reach levels that harms people's health. Greater Wellington Pollution hotline records smoke is the second most common complaint almost every year since the hotline was established. Sources tend to be residential or industrial rather than from generators or boilers. The Regional Air Plan has rules that control combustion, but these rules allow the uncontrolled combustion of many kinds of material and rely on the person to take all reasonable steps to minimise the adverse effects or ensure there is no objectionable smoke beyond the boundary. The products of combustion can be harmful to people's health, considering that most burning is at low temperatures. Smoke remains a significant issue in the region and rules in the Regional Air Plan have proved to be ineffective in avoiding, remedying or mitigating adverse effects on human health or amenity values.

- Measuring up (2005), reports that large scale earthworks, forestry harvesting, industrial sites, (including quarries), have the potential to liberate large quantities of dust that can affect amenity values and people’s wellbeing. Whilst dust will not cause any long term health effects, it can cause soiling of surfaces and reduced visibility.
- Objective 1 addresses issue 1 and Part II of the Resource Management Act by safeguarding the life-supporting capacity of air and avoiding, remedying and mitigating any adverse effects on the environment. The objective, by seeking improved amenity values and well being from the effects of odour, smoke and dust, promotes sustainable management, which enables people and communities to provide for their social, economic and cultural wellbeing and for their health and safety.
- Particular principles (within Part II of the Resource Management Act) of relevance include:
 - 7(c) – the maintenance and enhancement of amenity values*
 - 7(f) – maintenance and enhancement of the quality of the environment*
- Relevant subsections of Section 30 “Functions of regional councils” for Objective 1 include:
 - 30(1)(a) the establishment, implementation, and review of objectives, policies, and methods to achieve integrated management of the natural and physical resources of the region.*
 - 30(1)(b) the preparation of objectives and policies in relation to any actual or potential effects of the use, development, or protection of land which are of regional significance.*
- Without objective 1 Greater Wellington would not be able to encourage (through policies and methods) improvements in localised air quality from the effects of odour, smoke and dust that in some areas of the region have become a chronic issue. The alternative is a continuing deterioration in air quality, which is against the purpose of the Resource Management Act.

On the basis of the above, objective 1 is the most appropriate for achieving the purpose of the Resource Management Act.

3.2 Objective 2

Objective 2: Human health is protected from unacceptable levels of fine particulate matter

- Air Quality Monitoring Technical Report (2004), Measuring up 2005, Emissions Survey for Masterton (2008), Air Emissions Survey - Wainuiomata and Upper Hutt (2006), Management of PM10 in Masterton, Upper Hutt and Wainuiomata (2008) report that the Masterton and Wainuiomata airsheds are likely to breach the National Environmental

Standard for Air Quality¹ on still winter nights. Upper Hutt airshed sometimes records high levels of PM₁₀, but not to levels that exceed or breach the Standard. Other airsheds (Karori, Porirua, and Kapiti) are now being monitored to assess the levels of fine particulate matter. Air quality monitoring and the emission inventories completed for Masterton, Wainuiomata and Upper Hutt show that domestic fires contribute up to 94 per cent of fine particulate matter in Masterton, 87 per cent in Wainuiomata, and 91 per cent in Upper Hutt. The National Environmental Standard for Air Quality is required to be met by 2013 or the Wellington Regional Council will be unable to grant further consents for discharges to air within non-complying airsheds. The National Environmental Standard for Air Quality has been set at 50 micrograms of fine particulate matter per cubic metre of air over 24 hour average. The Ministry for the Environment has provided a cost-benefit analysis for the National Standard that shows the benefits of preventing respiratory illnesses in the population outweigh the costs associated with complying with the standard on businesses and the community.

- Greater Wellington also monitors air quality on busy arterial roads to gauge the impact of vehicle emissions on local air quality. Apart from elevated levels of carbon monoxide in Victoria Street (Wellington City), the levels of PM₁₀ and other pollutants measured have stayed within the National Standards.
- This situation can adversely affect human health and requires further involvement by Greater Wellington, the city and district councils and health agencies to meet objective 2 and Part II of the Act.
- Particular principles (within Part II of the Resource Management Act) of relevance include:

7(c) – the maintenance and enhancement of amenity values

7(f) – maintenance and enhancement of the quality of the environment

- Relevant sub sections to Section 30 “Function of regional councils” pertinent to objective 2 include:

30(1)(a) the establishment, implementation, and review of objectives, policies, and methods to achieve integrated management of the natural and physical resources of the region.

30(1)(b) the preparation of objectives and policies in relation to any actual or potential effects of the use, development, or protection of land which are of regional significance.

- The Resource Management (National Environmental Standards Relating to Certain Air Pollutants, Dioxins, and Other Toxics) Regulations 2004 prohibits air discharges from certain activities, requires Councils to

¹ National Environmental Standards Relating to Certain Air Pollutants, Dioxins, and Other Toxics Regulations 2004

monitor air quality according to the standards, and decline resource consent applications if concentrations in the airshed are likely to breach the standard.

- Objective 2 addresses issue 2 and Part II of the Act by safeguarding the life-supporting capacity of air and avoiding, remedying and mitigating any adverse effects on the environment. The objective, by seeking to improve human health from the effects of fine particulate matter, promotes sustainable management, which enables people and communities to provide for their social, economic and cultural wellbeing and for their health and safety.
- Without objective 2 Greater Wellington would not be able to reduce the health effects (through policies and methods) of fine particulate matter from domestic fires. The alternative is a region of continuing deterioration in air quality, which will not fulfil the purposes of the Act or the National Environmental Standard for Air Quality.

On the basis of the above, objective 2 is the most appropriate for achieving the purpose of the Resource Management Act.

3.3 Analysis of which are the most appropriate objectives

Final chosen objective	Other alternatives?	Why not the most appropriate to achieve the Resource Management Act
<p>Objective 1: Discharges of odour, smoke and dust to air do not adversely affect amenity values and people's wellbeing.</p>	<p>Alternative 1. No objective in regional Policy Statement on discharges of odour, smoke and dust to protect people's health and amenity values. Odour, smoke and dust is left to individual city and district councils</p> <p>Alternative 2. Retain objective 3 in the existing 1995 Regional Policy Statement which seeks that:</p> <p><i>The adverse effects of the discharge of contaminants into air on human health, local or global environment systems and public amenity are avoided, remedied or mitigated</i></p> <p>Alternative 3. An objective that seeks to control all discharges to air</p>	<p>Alternative 1 is not the most appropriate as the regional Policy Statement would not play a role in providing regional direction on reducing discharges of odour, smoke and dust that adversely affects people's amenity values and well being.</p> <p>Alternative 2 is not the most appropriate option as this objective was assessed as part of the review of the Regional Policy Statement as being too unspecific to effectively reduce discharges of odour, smoke and dust.</p> <p>Alternative 3 is not the most appropriate option as it is unlikely that all discharges to air could be effectively or efficiently controlled to safeguard people's well being and amenity values.</p>
<p>Objective 2: Human health is protected from unacceptable levels of fine particulate matter</p>	<p>Alternative 1. No objective in regional Policy Statement to protect people's health from the discharges of fine particulate matter. Discharges of fine particulate matter are left to the householder and industry to decide on the most appropriate course of action.</p> <p>Alternative 2. Retain objective 3 in the existing 1995 Regional Policy Statement which seeks that:</p> <p><i>Air quality is enhanced in those areas with degraded air quality</i></p> <p>Alternative 3. An objective that seeks to control all discharges of fine particulate to air</p>	<p>Alternative 1 is not the most appropriate as the regional Policy Statement would not play a role in providing regional direction on reducing discharges of fine particulate matter.</p> <p>Alternative 2 is not the most appropriate option as this objective was assessed as part of the review of the Regional Policy Statement to be unspecific to effectively reduce discharges of fine particulate matter.</p> <p>Alternative 3 is not the most appropriate option as it is unlikely that all discharges of fine particulate matter to air could be effectively or efficiently controlled, to safeguard people's well being and amenity values.</p>

Table 1: Analysis of which are the most appropriate objectives

4. Evaluation of policies and methods to achieve Objective 1

The appropriateness of the policies and methods to achieve Objective 1 are evaluated by looking at the effectiveness and the efficiency of the policy and method options and the risks of acting or not acting if there is uncertain or insufficient information.

4.1 The range of policy and method options considered

Objective 1 seeks that discharges of odour, smoke and dust do not adversely affect amenity values and people's well being.

In addressing this objective, the primary focus is to determine the most appropriate way(s) to achieve the objective. That is, whether it can be best achieved through regulatory direction to plans, or through regulatory direction as to matters to be considered when making resource management decisions, or through non-regulatory programs, or by doing nothing.

4.1.1 Regulatory direction to district and/or regional plans

Option 1 – Direction to district plans to manage reverse sensitivity effects for odour, smoke and dust

This option requires district plans to discourage new sensitive activities from locating near land use activities that emit odour, smoke and dust, and also discourage new land use activities that emit odour, smoke and dust from locating near sensitive activities.

Option 2 – Direction to regional plans to manage the adverse effects of the discharges of odour, smoke and dust and fine particulate matter

This option requires regional plans to reduce the adverse effects of the discharges of odour, smoke and dust and fine particulate matter.

Option 3 – Direction to require buffer zones

This option requires district plans to include buffer zones between activities that discharge odour, smoke and dust and sensitive activities.

4.1.2 Regulatory direction as to matters to be given particular regard in resource management decision making

Option 4 – Consider the location of sensitive activities and land uses that produce odour, smoke and dust

This option requires local authorities to have particular regard to the relative location of sensitive activities and land use activities that produce odour, smoke and dust in resource management decision making.

4.1.3 Non-regulatory options

Option 5 – Information on best practice to reduce the effects of air pollution

This option is to develop and distribute information on good practice techniques, and to inform people about the issues and possible ways to reduce the discharge of odour, smoke and dust, and the effects of air pollution

Option 6 – Integrating management, through airshed action plans

This option is to use non-regulatory actions - such as the development and implementation of regional airshed action plans - to manage the discharge of fine particulate matter in certain problem airsheds in the region.

Option 7 – Integrating management through a protocol for management of odour, smoke and dust

This option is to use non-regulatory actions - such as the development of protocols between councils, stakeholders, industry groups and the community - to manage the discharge of odour, smoke and dust and the effects of these.

4.1.4 Doing nothing

Option 8 – No intervention

This option offers no intervention for the management of discharges of odour, smoke or dust.

4.2

Evaluation as to the effectiveness and efficiency of the policy and method options to achieve objective 1

Policy and method options	Analysis of Effectiveness	Effectiveness Rating	BENEFITS (social, economic and environmental)	COSTS (social, economic and environmental)	Efficient?
Regulatory direction to district and/or regional plans					
<p>Option 1 Direction to district plans to manage reverse sensitivity effects</p>	<p>Provides a consistent framework for development of policies, rules and methods across the region. Sets out the policy to be applied, but specific decisions would still be determined at the local level. Provides certainty and clarity as to how the region wants to manage the effects of discharge odour, smoke or dust. Improved ability to interpret and thence to implement policy in a consistent and straight forward way. Increased ability for people to critique planning provisions. More streamlined consent processes for applications to discharge to air and for locating potentially sensitive activities. Predictability would be enhanced, as the pertinent matters associated with identification of emitting activities and of sensitive activities are clarified. This in turn, increases certainty and transparency within the resource management process.</p>	High	<p>Improved amenity values, well being and public health Less complaints and call outs for territorial authorities and Greater Wellington for odour, smoke and dust Reduced conflict with local industries that discharge odour, smoke and dust Reduced costs for territorial authorities through less contestability from odour emitters in sensitive areas. Provides consistency in the way activities that discharge odour, smoke or dust, and sensitive activities are managed through district plans Reduced social cost from having better located emitting activities and sensitive activities. Benefit to sensitive activities that locate close to emitting land uses.</p>	<p>Costs for councils and communities associated with research, analysis, interpretation, consultation, governance and decision making processes to identify the location of sensitive activities, and of the activities that emit odour, smoke or dust that can affect sensitive activities. Social and/or economic costs may be associated with specifying precise locations as having 'sensitive activities', or as having activities which emit discharges that may affect sensitive activities. Such costs might fall upon individuals. However, such costs are transparent. Policy may be implemented at various stages due to appeals The policy will have a staggered roll out across the region, as different planning timeframes apply around the region, so responses to the requirements will be at different times. Costs once policy is fully implemented in district plans. Cost to emitters having to relocate to other areas.</p>	Yes

Policy and method options	Analysis of Effectiveness	Effectiveness Rating	BENEFITS (social, economic and environmental)	COSTS (social, economic and environmental)	Efficient?
<p>Option 2 Direction to regional plans to manage the adverse effects of air pollution</p>	<p>Provides a consistent framework for the development of policies, rules and methods across the region. Sets out the policy direction to be applied. Provides certainty and clarity as to how the region wants to manage the effects of discharges of odour, smoke and dust.</p>	<p>High</p>	<p>Improved amenity values, well being and public health Fewer complaints associated with air quality issues, to which the local authorities must respond. Reduced conflict with local industries that discharge odours, smoke or dust. Reduced compliance monitoring and enforcement costs for territorial authorities. Provides consistency in the way discharges of odour, smoke and dust and fine particulate matter are managed through regional plans. Reduced costs to the community, councils and emitters. Improved public health of communities affected by fine particulate matter.</p>	<p>Increased costs for all district plans in the region to implement policy Policy may be implemented at various stages due to appeals Increase in costs once policy is fully implemented in regional plans. Reduced social cost from having better located sensitive activities. Reduced costs to the regional community from improvements in public health.</p>	<p>Yes</p>
<p>Option 3 Direction to require buffer zones</p>	<p>Provides a consistent framework for development of policies, rules and methods across the region. Sets out the policy to be applied, but specific decisions would still be determined at the local level. Provides certainty and clarity as to how the region wants to manage the effects of discharges of odour, smoke and dust. Not requiring a specific distance to be applied, is a possible variant to this option, but is less effective.</p>	<p>Low</p>	<p>Improved amenity values, well being and public health Fewer complaints to territorial authorities and Greater Wellington, necessitating a compliance monitoring and/or enforcement response. Reduced conflict with local industries that discharge odours Reduced costs for territorial authorities Benefits in having a clear physical</p>	<p>Increased costs for all district plans in the region to implement policy Policy may be implemented at various stages due to appeals Costly for emitters or those wishing to locate sensitive activities close to emitters. Potential to severely restrict what activities are able to locate on land within the buffer zone, so it would be unable to be used for the purpose it was intended. This cost is borne by land owner.</p>	<p>No</p>

Policy and method options	Analysis of Effectiveness	Effectiveness Rating	BENEFITS (social, economic and environmental)	COSTS (social, economic and environmental)	Efficient?
			separation between sensitive activities and emitters.	Potentially for little benefit.	
Regulatory direction as to the matters to be given particular regard in resource management decision making					
Option 4 Consider the location of sensitive activities and land uses that produce odour, smoke and dust	<p>Provides interim direction prior to changes being made to a plan, to consider within the resource consent process for an activity in a given location, the effects of discharges to air upon any existing sensitivity activities or in relation to a new sensitive activity, the location of any existing discharges, and thence to encourage alternative locations of the activity about which consents are sought.</p> <p>Provides direction on how the region wants to see the effects of discharges to air managed.</p> <p>Sets out the principles to be applied, but specific decisions would still be determined at the local level.</p> <p>Provides a consistent planning framework for assessing discharges to air across the region.</p> <p>Requires all councils to process consents or notices of requirement in a consistent manner.</p>	Low	<p>Immediate benefit in principles advocated in resource consent process.</p> <p>Possible quick response</p> <p>Potential to promote ad-hoc changes though the consent process</p> <p>Promotes consideration of alternative locations for both new sensitive activities and new emitting activities, as part of resource consent application.</p>	<p>Marked difference in costs depending on scale and nature of consents applications</p> <p>Possible high costs to investigate locations of sensitive activities or emitting activities, to inform every resource consent application for either a sensitive activity or an emitting activity.</p> <p>High costs if resource consent is challenged.</p> <p>Inefficiencies associated with duplication of effort by resource consent applications, for potentially little benefit.</p>	No
Non regulatory options					
Option 5 Information on best practice	<p>Effective if all relevant local authorities commit to implementing best practice</p> <p>Voluntary uptake means it is not certain that the advice and information on actions to take will be implemented or will be appropriately resourced.</p> <p>Provides needed information to the</p>	Med	<p>Less cost to local authorities in comparison with establishing a regulatory response</p> <p>Improved people's well being, health and amenity values if the information and guidance is acted upon.</p>	<p>Could lead to protracted negotiations and poor results.</p> <p>Cheap to produce with a high distribution rate.</p> <p>Information and guidance is not usually monitored therefore it is difficult to</p>	Yes

Policy and method options	Analysis of Effectiveness	Effectiveness Rating	BENEFITS (social, economic and environmental)	COSTS (social, economic and environmental)	Efficient?
	community of interested parties, and those specifically involved in emitting activities or discharge issues.		Easily made available in a format that target audience finds useful and can understand. Is able to inform and educate people on the issue and possible remedies for their location and/or activity	establish cost effectiveness	
<p>Option 6 Integrating management through regional airshed action plans</p>	<p>Effective if the relevant local authorities commit to implementing voluntary airshed action plans them.</p> <p>Not certain that the actions will be appropriately resourced.</p> <p>Joins together councils, stakeholders and other agencies to work on a problem facing parts of the region.</p> <p>Will assist to develop a consensus view for future management of discharges from domestic fires.</p>	Med	<p>Less cost to local authorities than is associated with developing a regulatory response.</p> <p>Improved people's well being, health and amenity values, through implementation of airshed action plans.</p> <p>The actions can be specifically targeted and purpose designed for particular airshed and community.</p> <p>Could deliver results relatively promptly</p> <p>Less cost to contributors for the process of formulating an action plan, relative to cost for establishing a regulatory response, and as the voluntary actions can be purpose designed to suit the capacity of the community.</p> <p>Greater likelihood action will achieve environmental benefits at the local level.</p>	<p>Could lead to protracted negotiations and poor results.</p> <p>This approach necessitates a large time commitment from many people, without any clear or guaranteed outcome.</p> <p>Environmental benefit may not be fully realised.</p> <p>Potential high cost to householders and ratepayers, depending upon the actions promoted within airshed action plans</p>	Yes
<p>Option 7 Integrating management through a protocol for the</p>	<p>Effective if all relevant local authorities commit to a protocol and abide by its terms.</p> <p>It is not certain or guaranteed that the voluntary actions included in any protocol</p>	Med	<p>Less cost to local authorities to develop an agreed document that has common aims about improvements to air quality, than is associated with developing a</p>	<p>Could lead to protracted negotiations and poor results.</p> <p>Large time commitment from many people without any clear outcome.</p> <p>The results may not be consistent across</p>	Yes

Policy and method options	Analysis of Effectiveness	Effectiveness Rating	BENEFITS (social, economic and environmental)	COSTS (social, economic and environmental)	Efficient?
management of odour, smoke and dust and the effects of these.	will be appropriately resourced and implemented. Joins together all councils, industry and stakeholders to work on a common problem facing the region Provides a starting point to resolving region wide problems.		regulatory response. Improved people's well being, health and amenity values through implementation of a protocol. Relatively easy to organise Nothing lost in attempting to formulate a protocol as the information is able to contribute to formal processes to develop a regulatory response to the issue. Provides a vehicle for sharing information, interests, and resources towards formulating mutually agreeable solutions to air quality issues.	all authorities and industries. Non-statutory, voluntary process means the protocol may be accepted, but not taken into account by councils	
Doing nothing					
Option 8 No intervention	This is when no resource management action is taken, either regulatory or non-regulatory to address the regionally significant issue of odour, smoke and dust affecting people's well being and amenity values.	Low	There is a possibility that the issue is quite well informed and is able to be addressed via an alternative response mechanism, e.g., should there be an alternative response from another agency to achieve the odour, smoke and dust objective.	It is anticipated that the issue will continue unabated and that the objective will not be met over the long term. Doing nothing will not achieve the purpose of the Act with regards to discharges to air	No

Table 2: Evaluation as to the effectiveness and efficiency of policy and method options to achieve objective 1

4.3 Results of evaluation as to the most appropriate policy and method options to achieve objective 1

Policy and method options	Effectiveness	Efficient?	Selected option(s)	Proposed policies and methods
Regulatory direction to district and regional plans				
Option 1 Direction to district plans to manage reverse sensitivity effects	High	Yes	✓	Policy 1 and method 1
Option 2 Direction to regional plans to manage the adverse effects of air pollution	High	Yes	✓	Policy 2 and method 2
Option 3 Direction to require buffer zones	Low	No	X	
Regulatory direction as to matters to be given particular regard in resource management decision making				
Option 4 Consider the location of sensitive activities and land uses that produce odour, smoke and dust	Low	No	X	
Non regulatory options				
Option 5 Information on best practice	Med	Yes	✓	Method 6
Option 6 Integrating management, through regional airshed action plans	Med	Yes	✓	Method 26
Option 7 Integrating management through a protocol for management of odour, smoke and dust and the effects of these	Med	Yes	✓	Method 30
Doing nothing				
Option 8 No intervention	Low	No	X	

Table 3: Results of the evaluation as to the most appropriate policy and method options to achieve objective 1

4.4 Discussion of options

A range of options, both regulatory and non-regulatory, are appropriate to achieve objective 1, and address the regionally significant issue regarding odour, smoke and dust.

Option 1 directs district plans to discourage new sensitive activities locating near land uses that emit odour, smoke and dust, thereby lowering the amenity values of the area, and to discourage new land use activities that emit odour, smoke and dust near sensitive activities.

This option (policy 1 and method 1) provides the necessary direction to city and district councils of the need to manage the relative location of sensitive activities and land use activities that emit odour, smoke or dust. There are some cost implications to implementing this option through district plans. In order to minimise such costs, the changes will not be required until the time of the next plan review.

Option 4, to direct specific matters for consideration in resource management decision making (including resource consent applications) as an interim measure before the required district plan provisions become operative, is not considered appropriate, as it is neither an effective or efficient means to achieve the objective and address the issue. This means there will be a long lead in time to regulatory controls on the location of specified activities, within some airsheds, as the relevant district plan may not become operative for some time.

Option 2 directs regional plans to manage the adverse effects of discharges to air. Option 2 (policy 2 and method 2) requires regional plans to protect or enhance the amenity values of neighbouring areas and people's health from the discharge of odour, smoke and dust, and to protect people's health from the effects of fine particulate matter. Fine particulate matter is discussed more fully in Objective 2 below.

Option 2 will compliment Option 1 relating to district plans. There are currently two regional plans that are affected by this option – the Regional Coastal Plan (2000) and the Regional Air Quality Management Plan (2000) which manages discharges of odour, smoke and dust.

Option 2 is assessed as the most effective and efficient option to manage the discharge of odour, smoke and dust from certain activities and the effects of these discharges. There are some cost implications to implementing this option through regional plans, but the benefit of these changes outweighs the cost that will be incurred. Option 4, to require certain considerations, as an interim measure prior to the implementation of option 2, is assessed as not appropriate, for the reasons stated above.

Options 5, 6 and 7 are non-regulatory options that are assessed as being both effective and efficient to achieve objective 1 and address the issue, particularly as these options support and compliment each other and the regulatory options 1 and 2. Furthermore, these three non-regulatory options will assist in

achieving the objective and address issue 1, in the interim, prior to the regulatory options being given effect, through operative plans.

Option 5 to provide information (method 6), will be necessary at critical times in the plan review process, which will assist councils and other affected parties to the proposed changes in developing the most appropriate local regulatory response.

Option 6, (method 26) will see regional airshed action plans developed for those airsheds that breach the National Environmental Standards for Air Quality (see fuller discussion on action plans in objective 2 below), allowing efforts to be specific, targeted and purposeful, in addressing immediate concerns for particular communities, whilst regulatory options are in development.

Option 7 will be effective in assisting councils, through the derivation of a protocol (method 30), to integrate their efforts and the various ways of addressing odour, smoke and dust.

Doing nothing was assessed as an ineffective and inefficient way to address the objective and was therefore dismissed as an option. People and communities would continue to be affected by odour in some locations and sometimes from the effects of smoke and dust. Odour would continue to be a chronic problem in the region, which would reduce amenity and people's well being.

Overall the package of options selected was considered to appropriate to achieve objective 1 and address the regionally significant air quality issue 1.

4.5 Risk of acting or not acting if information is uncertain or insufficient

Section 32(4)(b) of the Resource Management Act requires the evaluation of appropriateness to take into account the risk of acting or not acting if there is uncertain or insufficient information about the subject matter of the policies, rules or other methods.

With regards air quality there is neither uncertain nor insufficient information about the causes of odour, smoke and dust or of the adverse effects associated with these activities, particularly for sensitive activities, upon which to base analysis as to the appropriateness of acting or not acting.

The risk of acting in the way proposed is that some costs will be imposed on local authorities and on applicants for resource consents.

The risk of not acting in the way proposed is that air quality in some airsheds will continue to be degraded, with a consequent decline in the amenity values of some areas, and in people's health and wellbeing. It would also be likely to lead to continuing breaches of the National Environmental Standard for Air Quality, such that Greater Wellington would be required to refuse any further resource consents to discharge PM₁₀ to air in some airsheds

5. Evaluation of policies and methods to achieve Objective 2

The appropriateness of the policies and methods to achieve Objective 2 are evaluated by looking at the effectiveness and the efficiency of the policy and method options and the risks of acting or not acting if there is uncertain or insufficient information.

5.1 The range of policy and methods options considered

Objective 2 seeks to protect human health from the effects of fine particulate matter (air borne particles less than 10 microns - PM₁₀). The World health Organisation (WHO) has reported that prolonged exposure to fine particulate air pollution can lead to respiratory disease such as asthma, lung cancer and emphysema. Even finer particles (<PM_{2.5}) have a higher likelihood of damage to lungs and other organs in the body. The source of fine particles is from domestic fires, backyard burning, motor vehicles and industrial sources. Smoke from domestic fires is the largest contributor to fine particulate air pollution and this occurs in valleys where the smoke is unable to quickly disperse. This is the main reason the concentration of PM₁₀ approaches or exceeds the threshold in the National Environmental Standard for Air Quality in Masterton and Wainuiomata. Upper Hutt does not approach the threshold limit of 50 micrograms per cubic metre, as the highest value recorded in Upper Hutt is 42 micrograms per cubic metre. Other sources of fine particulates are at very low levels compared to domestic fires.

In addressing this objective, the primary focus is to determine the most appropriate way(s) to achieve the objective. That is, whether it can be best achieved through regulatory direction to plans, or through regulatory direction as to matters to be considered when making resource management decisions, or through non-regulatory programs, or by doing nothing.

5.1.1 Regulatory direction to district and/or regional plans

Option 1 – Direction to regional plans to protect people’s health

This option requires regional plans to control adverse effects of the discharges of fine particulate matter that is affecting people’s health.

Option 2 – Direction to regional plan to manage emissions from motor vehicles

This option requires regional plans to control emissions from motor vehicles to protect people’s health. Motor vehicles are a contributor to fine particulate matter and other pollutants especially poorly tuned diesel vehicles.

- 5.1.2 Regulatory direction as to matters to be given particular regard in resource management decision making

Option 3 – Consider the effects of fine particulate on people’s health

This option requires territorial authorities to have particular regard to the effects of fine particulate matter on people’s health and well being in selected airsheds.

- 5.1.3 Non-regulatory options

Option 4 – Provision of information about reducing air pollution and cleaner forms of heating

This option requires the development and dissemination of information about reducing air pollution and adopting cleaner forms of heating.

Option 5 – Integrating management, through regional airshed action plans

This option is to develop regional airshed action plans to reduce the discharge of fine particulate matter in problem airsheds in the region.

Option 6 – Integrating management through a protocol for management of air pollution

This option is to develop and agree upon protocols between councils, stakeholders, industry groups and the community, to manage the discharge of odour, smoke and dust and fine particulate.

- 5.1.4 Doing nothing

Option 7 – No intervention

This option offers no intervention for the reduction of fine particulate matter in some airsheds that is affecting people’s health and well being.

5.2

Evaluation as to the effectiveness and efficiency of the policy and method options

Policy and method options	Analysis of effectiveness	Effectiveness	BENEFITS (social, economic and environmental)	COSTS (social, economic and environmental)	Efficient?
Regulatory direction to district and/or regional plans					
<p>Option 1 Direction to regional plan to protect people's health</p>	<p>Provides a consistent framework for development of policies, rules and methods across the region. Provides certainty and clarity as to how the region wants to manage discharges of fine particulate matter. Improved ability to interpret and thence to implement policy in a consistent and straight forward way. Increased ability for people to critique planning provisions. More streamlined consent processes for applications to emit fine particulate matter. Predictability would be enhanced. This in turn, increases certainty and transparency within the resource management process.</p>	<p>High</p>	<p>Improved public health, less admissions for respiratory diseases Less pre-mature deaths attributable to the effects of fine particulate matter Less complaints and follow for territorial authorities and Greater Wellington Ability to form partnerships between council and businesses Provides consistency in the way fine particulate discharges will be managed within the region or by the regional council The Greater Wellington region is able to meet NES regulation by 2013. Reduced conflict with local industries that emit fine particulate matter</p>	<p>Costs for regional council and communities associated with research, analysis, interpretation, consultation, governance and decision making processes to identify and establish the best approach to managing activities that emit fine particulate matter and to reduce its adverse effects. May be implemented at various stages due to appeals Potential cost imposition for the household, ratepayer and or activities. Equity imbalance in funding incentive projects for a small portion of the community. Social and/or economic costs may be associated with specifying activities that emit fine particulate matter. Such costs might fall upon individuals. However, such costs are transparent. There will be a staggered roll out across the region, as different planning timeframes apply around the region, so responses to the requirements will be at different times.</p>	<p>Yes</p>

Policy and method options	Analysis of effectiveness	Effectiveness	BENEFITS (social, economic and environmental)	COSTS (social, economic and environmental)	Efficient?
<p>Option 2 Direction to regional plan to manage emissions from motor vehicles</p>	<p>Provides a consistent framework for development of policies, rules and methods across the region. Provides certainty and clarity as to how the region wants to manage discharges of fine particulate matter May prove effective in requiring regional plans to include policies and rules to reduce the discharges of fine particulate matter from motor vehicles.</p>	<p>Low</p>	<p>Improved public health, less admissions for respiratory diseases Less pre-mature deaths Less complaints and follow up y territorial authorities and Greater Wellington Ability to form partnerships between council and businesses Some improved consistency in the way vehicle emissions are managed for the region</p>	<p>Increased costs for all regional council to implement this option. Policy may be implemented at various stages due to appeals Large increase in costs for council and ratepayer Potential for protracted legal challenges from motor vehicle industry and government agencies May lead to inconsistencies between this and other regions, for limited environmental benefit</p>	<p>No</p>
<p>Regulatory direction as to matters to be given particular regard in resource management decision making</p>					
<p>Option 3 Consider the effects of fine particulate on people's health</p>	<p>Provides interim direction prior to changes being made to a plan. Sets out the principles to be applied, but specific decisions would still be determined at the local level. Provides a consistent planning framework for assessing discharges to air across the region. Requires all councils to process consents or notices of requirement in a consistent manner.</p>	<p>Low</p>	<p>Immediate benefit in principles advocated in resource consent processes Possible to elicit a quick response from councils, as they process resource consents, in comparison to undertaking plan changes Allows for targeted and innovation responses to be developed in relation to specific consent applications, and depending on the circumstances. However, this may hinder an ability to derive standardised responses, to similar activities and effects.</p>	<p>Marked difference in costs depending on scale and nature of resource consent applications sought. Possible high costs if resource consent is challenged Promotes ad-hoc changes though the consent process Inefficiencies associated with duplication of effort by resource consent applications, for potentially little benefit.</p>	<p>No</p>

Policy and method options	Analysis of effectiveness	Effectiveness	BENEFITS (social, economic and environmental)	COSTS (social, economic and environmental)	Efficient?
Non regulatory options					
Option 4 Information about reducing air pollution and cleaner forms of heating	<p>Sets out the information considered relevant and pertinent, and can provide guidance for interpretation and implementation of the policy framework or the method, or more simply 'good practice', to achieve the objective and/or to address the issue.</p> <p>However, the response to this information is entirely discretionary and voluntary by the recipient, so there is considerable variance as to what it will mean in practice.</p> <p>There is an inference that when information is targeting councils (to assist in developing plans policies, rules and/or methods) that there is demand for such assistance and that it will be used – it wouldn't be good form for the later planning processes to ignore any information or guidance provided to achieve a regional objective.</p> <p>Could be effective if all relevant local authorities commit to doing them.</p> <p>However not certain that the actions will be appropriately resourced and implemented</p> <p>Providing information and guidance does inform and thus assist to clarify matters which might otherwise be contestable or open to variable interpretation. This can assist in explaining resource management activity or responses, however the link between cause and effect is less direct</p>	Med	<p>Less cost to local authorities in comparison with establishing a regulatory response</p> <p>Improved people's well being, health and amenity values if the information and guidance is acted upon.</p> <p>Easily made available in a format that target audience finds useful and can understand.</p> <p>Is able to inform and educate people on the issue and possible remedies for their location and/or activity</p>	<p>Action plans could lead to protracted negotiations and potentially poor results.</p> <p>Relatively cheap to produce with a high distribution network.</p> <p>Information and guidance may not be taken-up by sections or large parts of the targeted communities.</p>	Yes

Policy and method options	Analysis of effectiveness	Effectiveness	BENEFITS (social, economic and environmental)	COSTS (social, economic and environmental)	Efficient?
	and so may be less clear, than is possible under a regulatory response				
<p>Option 5 Integrating management, through regional action plans</p>	<p>Effective if the relevant local authorities commit to implementing voluntary airshed action plans them.</p> <p>Not certain that the actions will be appropriately resourced.</p> <p>Joins together councils, stakeholders and other agencies to work on a problem facing parts of the region.</p> <p>Will assist to develop a consensus view for future management of discharges from domestic fires.</p>	Med	<p>Less cost to local authorities than is associated with developing a regulatory response.</p> <p>Improved people's well being, health and amenity values, through implementation of airshed action plans.</p> <p>The actions can be specifically targeted and purpose designed for particular airshed and community.</p> <p>Could deliver results relatively promptly</p> <p>Less cost to contributors for the process of formulating an action plan, relative to cost for establishing a regulatory response, and as the voluntary actions can be purpose designed to suit the capacity of the community.</p> <p>Greater likelihood action will achieve environmental benefits at the local level.</p>	<p>Could lead to protracted negotiations and poor results.</p> <p>This approach necessitates a large time commitment from many people, without any clear or guaranteed outcome.</p> <p>Environmental benefit may not be fully realised.</p> <p>Potential high cost to householders and ratepayers, depending upon the actions promoted within airshed action plans</p>	Yes
<p>Option 6 Integrating management through a protocol for the management of air pollution</p>	<p>Effective if all relevant local authorities commit to a protocol and abide by its terms.</p> <p>It is not certain or guaranteed that the voluntary actions included in any protocol will be appropriately resourced and implemented.</p> <p>Joins together all councils, industry and stakeholders to work on a common</p>	Med	<p>Less cost to local authorities to develop an agreed document that has common aims about improvements to air quality, than is associated with developing a regulatory response.</p> <p>Improved people's well being, health and amenity values through implementation of a protocol.</p>	<p>Could lead to protracted negotiations and poor results.</p> <p>Large time commitment from many people without any clear outcome.</p> <p>The results may not be consistent across all authorities and industries.</p> <p>Non-statutory, voluntary process means the protocol may be accepted, but not</p>	Yes

Policy and method options	Analysis of effectiveness	Effectiveness	BENEFITS (social, economic and environmental)	COSTS (social, economic and environmental)	Efficient?
	<p>problem facing the region</p> <p>Provides a starting point to resolving region wide problems.</p>		<p>Relatively easy to organise</p> <p>Nothing lost in attempting to formulate a protocol as the information is able to contribute to formal processes to develop a regulatory response to the issue.</p> <p>Provides a vehicle for sharing information, interests, and resources towards formulating mutually agreeable solutions to air quality issues.</p>	<p>taken into account by councils</p>	
Doing Nothing					
Option 7 No intervention	<p>This is when no resource management action is taken, either regulatory or non-regulatory to address the regionally significant issue of protecting human health from fine particulate matter.</p>	<p>Low</p>	<p>There is a possibility that the issue is quite well informed and is able to be addressed via an alternative response mechanism, e.g., should there be an alternative response from another agency to reduce fine particulate matter and achieve the objective.</p>	<p>It is anticipated that the issue will continue unabated and that the objective will not be met over the long term. Doing nothing will not achieve the purpose of the Act with regards to discharges to air</p>	<p>No</p>

Table 4: Evaluation as to the effectiveness and efficiency of policy and method options to achieve objective 2

5.3 Results of evaluation as to the most appropriate policy and method options to achieve objective 2

Policy and method options	Effectiveness	Efficient?	Selected option(s)	Proposed policies and methods
Regulatory direction to district and/or regional plans				
Option 1 Direction to regional plan to protect people's health	High	Yes	✓	Policy 2 and method 2
Option 2 Direction to regional plan to manage emissions from motor vehicles	Low	No	X	
Regulatory direction as to matters to be given particular regard in resource management decision making				
Option 3 Consider the effects of fine particulate on people's health	Low	No	X	
Non regulatory options				
Option 4 Information about reducing air pollution and cleaner forms of heating	Med	Yes	✓	Method 6
Option 5 Integrating management, through regional action plans	Med	Yes	✓	Method 26
Option 6 Integrating management through a protocol for the management of air pollution	Med	Yes	✓	Method 30
Doing Nothing				
Option 7 No intervention	Low	No	X	

Table 2: Results of evaluation as to the most appropriate policy and method options to achieve objective 2

5.4 Discussion of options

Fine particulate matter released from domestic fires, motor vehicles and industry in some valleys breaches the National Environmental Standard for Air Quality. The largest contributor to fine particulate pollution in valley airsheds is domestic fires. Fine particulate matter can cause respiratory diseases, and

reduce people's life expectancy. The level of fine particulate matter needs to be reduced to levels that are acceptable for people's long term health benefit.

Two regulatory options were considered to achieve objective 2, control of fine particulate matter through region plans and the control of motor vehicle emissions through regional plans.

Option 1 is to direct regional plans to control certain activities that are causing the discharge of odour, smoke and dust and fine particulate matter from various sources. This is assessed as an effective and efficient option to achieve objective 2.

Option 2 is to direct regional plans to control motor vehicle emissions which discharge fine particulate matter that affects people's health. Option 2 has been assessed as neither effective nor efficient. Furthermore, this option is best delivered by other regulatory authorities in New Zealand that are responsible for controlling fuel specifications and motor vehicle performance standards, including motor vehicles emissions.

Option 3, is to direct specific matters that must be considered as part of resource management decision making, including in relation to resource consent applications, notices of requirements, a plan change or variation, is assessed as an ineffective and inefficient option to achieve objective 2.

Several non-regulatory options are assessed as being effective and efficient means to ensure people's health is protected from unacceptable levels of fine particulate matter. These options are most effective when selected to work in tandem, as these options support and compliment each other and the regulatory option 1. Furthermore, these three non-regulatory options will assist in achieving the objective and address issue 2, in the interim, prior to the regulatory options being given effect, through operative plans.

Option 4 to provide information (method 6) will be necessary at critical times in the plan review process that will assist councils and other affected parties to the proposed changes in developing the most appropriate local regulatory response.

Option 5, (method 26) will see regional airshed action plans developed for those airsheds that breach the National Environmental Standards for Air Quality, allowing efforts to be specific, targeted and purposeful, in addressing immediate concerns for particular communities, whilst regulatory options are in development.

Option 6 will be effective in assisting councils, through the derivation of a protocol (method 30); to integrate their efforts and the various ways of reduce fine particulate matter that affects people's health.

Doing nothing was assessed as an ineffective and inefficient way to address the objective and was therefore dismissed as an option. The problem would progressively worsen over time to a point where the regional council is not able to operate under the national environmental standard.

Overall the package of options selected was considered to appropriate to achieve objective 2 and address the regionally significant air quality issue 2.

5.5 Risk of acting or not acting if information is uncertain or insufficient

Section 32(4)(b) of the Resource Management Act requires the evaluation of appropriateness to take into account the risk of acting or not acting if there is uncertain or insufficient information about the subject matter of the policies, rules or other methods.

With regards air quality, there is neither uncertain nor insufficient information about the causes of odour, smoke and dust and fine particulate matter or of the adverse effects associated with these activities affecting people's health upon which to base analysis as to the appropriateness of acting or not acting.

The risk of acting in the way proposed is that some costs will be imposed on local authorities and on applicants for resource consents.

The risk of not acting in the way proposed is that air quality in some airsheds will continue to be degraded, with a consequent decline in the amenity values of some areas, and in people's health and wellbeing. It would also be likely to lead to continuing breaches of the National Environmental Standard for Air Quality, such that Greater Wellington would be required to refuse any further resource consents to discharge fine particulate matter to air.

Appendix 1: Criteria used to determine regionally significant issues

The criteria used for determining whether an issue was a resource management issue of regional significance were:

- The issue was a natural or physical resource management problem.
- The issue was to be of regional significance (see further criteria below).
- The issue was about achieving the purpose of the Resource Management Act.
- The issue did not “repeat” the Resource Management Act, the New Zealand Coastal Policy Statement, any other national policy, or another issue in the Regional Policy Statement.
- The issue was explained in the context of the Wellington region.

Regional significance was determined using the following criteria

- The issue concerns a resource which is regionally significant, and the issue requires integrated management at a regional level ; and
- There is a potential shortage of the resource and resultant allocation issues; or
- There is a significant level of conflict over the resource which is either occurring or is foreseeable over the next 10 years; or
- The resource is potentially subject to significant adverse effects at a regional level; or
- There are significant issues in terms of Part 2 of the Resource Management Act which are, or are likely to, arise at a regional scale (e.g. maintenance and enhancement of access along waterways); or
- The community has signalled that it regards a particular issue as being of regional significance; or
- The issue is one of national significance (e.g., preservation of natural character) and requires regional intervention; or
- The issue is one of district significance but requires regional intervention; or
- The matter is one which a National Policy Statement or National Water Conservation Order requires to be addressed.

Appendix 2: References

Davy, Perry (2005). Air quality monitoring technical report. Wellington. Publication No GW/RINV-T-05/84

Davy, Perry (2005). Air quality – background report. Wellington.

Environet Ltd (2008) Management of PM10 in Masterton, Upper Hutt and Wainuiomata

Environet Ltd (2008) Air Emission Inventory – Masterton 2008

Environet Ltd (2008) Air Emission Inventory – Upper Hutt and Wainuiomata 2006

Greater Wellington Regional Council (2005) Measuring up: the state of the environment report for the Wellington region 2005. Wellington. Publication No. GW/ENV-G-05-278

Greater Wellington Regional Council (2006) Our region – their future: A discussion document on the review of the Regional Policy Statement for the Wellington Region. Wellington. Publication No. GW/RP-G-06/83

Greater Wellington Regional Council (2006). Regional Policy Statement Evaluation Report for Air Quality. Wellington. Publication No GW/EP-G-09/16

Greater Wellington Regional Council (2007) A sustainable region. Detailed information. Amended 2006-16 Ten-Year Plan (incorporating the 2006/7 Annual Plan). Wellington. Publication No. GW/SP-G-07/108

Greater Wellington Regional Council (2008) The Effectiveness Report for the Regional Air Quality Management Plan. Wellington. Publication No Ministry for the Environment (2004) Resource Management (National Environmental Standards relating to certain air pollutants, dioxins, and other toxics) Regulations 2004

Water, air, earth and energy – elements in Greater Wellington’s logo that combine to create and sustain life. Greater Wellington promotes **Quality for Life** by ensuring our environment is protected while meeting the economic, cultural and social needs of the community

For more information, contact Greater Wellington:

Wellington office
PO Box 11646
Manners Street
Wellington 6142
T 04 384 5708
F 04 385 6960

GW/EP-G-09/05
March 2009

www.gw.govt.nz