



Report 08.339
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Committee Regulatory Committee
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Plan effectiveness monitoring: Regional Air Quality Management Plan

1. Purpose

To inform the Committee of the results of the monitoring of the effectiveness of the Regional Air Quality Management Plan.

2. Background

The Regional Air Quality Monitoring Plan for the Wellington Region was publicly notified in June 1995, and after completing the First Schedule process of submissions, further submissions, hearings and appeals was made operative on 8 May 2000. There has been one plan change, which was notified in February 2002 and made operative on 1 September 2003.

Section 35 of the Resource Management Act 1991 (the RMA) requires every local authority to monitor the efficiency and effectiveness of the policies, rules and other methods in its policy statement and plans, and to prepare a report on the results of this monitoring every five years. Councils must take appropriate action when their monitoring indicates that is necessary.

This report presents the results of monitoring the effectiveness of the policies and methods, including rules, in the Regional Air Quality Monitoring Plan for the Wellington Region (the Plan). Greater Wellington does not monitor the efficiency of its policy statement or regional plans because of the difficulty in quantifying the economic costs for implementing non-regulatory methods and permitted activities and comparing those with the costs of consented activities. Monitoring the efficiency of policy statements and plans is a problem no council has yet dealt with.

3. Information used and limitations of the review

The effectiveness of policies, rules and other methods has been assessed by comparing the results of state of the environment monitoring, complaint statistics data, and feedback from interested groups with the implementation of the methods (including rules). Provisions have been deemed to be **effective** if

implementation of the provisions has contributed to achieving the plan objectives, as measured by the state of the environment monitoring, complaint statistics data, and feedback from interested groups.

This review, like the reviews of the Regional Plan for Discharges to Land (Report 06.108) and the Regional Freshwater Plan (Report 06.86) in 2006, and the review of the Regional Soil Plan this year (Report 08.338) highlights the limitations in our ability to monitor the efficiency and effectiveness of our regional plan provisions.

One of the findings from the previous reviews was that our consents and compliance database (COCO) did not contain sufficient information to allow efficiency or effectiveness of regional plan rules to be assessed. Pollution complaints are recorded on the Incident database which is not easily linked to the consent and compliance database and has not been set-up to assess regional plan provisions. A new integrated database is being developed. As with the other reviews, we also found that information about compliance with permitted activity rules is also difficult to obtain.

4. Results of plan effectiveness assessment

4.1 Ambient air quality and community feedback

Results of the ambient air quality monitoring show that very fine particulate matter (PM₁₀) is the contaminant of most concern in the region. National standard levels have been exceeded or approached on one to three days each winter in Wainuiomata, Masterton and Upper Hutt since records began. However, even in these vulnerable areas, levels have been “good” (less than 33 percent of the threshold level) around 70 per cent of the time.

Almost all of the polluting chemicals discharged to air come from vehicles (carbon monoxide, nitrogen dioxide and unburned hydrocarbons), but all results for carbon monoxide and nitrogen dioxide testing are less than 33 percent of the threshold level.

Community feedback, both as comments to our regional policy statement review and as complaints to our pollution hotline, indicates that while smoke from fires and pollution from vehicles is of concern, it comes second to the effects of odour on their health and wellbeing as a concern for them.

4.2 Implementation and effectiveness of regional rules

The Plan has 25 policies, 23 regional rules and 31 “other methods” to achieve two objectives. The objectives are to maintain high quality air, and avoid, remedy or mitigate adverse effects of air contamination on the environment, including people.

Six rules allow activities that would otherwise require a discharge permit because they are carried out on “industrial or trade premises” (the trigger for requiring a discharge permit under the RMA). Another 14 rules allow activities regardless of the kind of premises, because the effects were deemed to be less

than minor and able to be controlled by general conditions. Some examples of contaminants allowed to be discharged as Permitted Activities (with conditions) are agrichemical sprays and powders, fumigants, fumes from fish and chip shops and panel beaters, and smoke from domestic fires and land clearance.

4.2.1 Rules deemed to be effective

The application of many Permitted Activity rules is widespread with a good level of compliance – or at least, few complaints. Rule 5, for example allows, subject to conditions, discharges from a wide range of food production processes like coffee roasting and deep fat frying at fast food outlets. These rules allow people to provide for their social and economic wellbeing, there are few complaints about their effects on people and communities, and air quality monitoring has not shown any level of pollution that could adversely affect amenity values or people’s health. These rules were deemed to be helping achieve Objective 2 of the Plan and so are at least partially effective.

4.2.2 Rules deemed to be ineffective

There are two kinds of activity where the rules are not helping to achieve the objectives of the plan and so are not effective. The first is activities, both consented and unconsented, that cause offensive and objectionable odour beyond the property boundary and adversely affect amenity values. The second kind is combustion processes that cause concentrations of particulate matter to breach threshold levels in the National Environmental Standards and could be adversely affecting people’s health.

Incidents of objectionable odour cause more complaints to Greater Wellington’s pollution hotline than any other kind of pollution or non-compliance. Many complaints relate to activities with resource consents where the effects of odour may have been better controlled by setting controls on the process rather than setting an “effects-based” condition about the effect at the property boundary.

Complaints about smoke have come second to odour almost every year since the pollution hotline was established. Sources tend to be residential (domestic fires) or industrial (burning metal or timber) rather than generators or boilers and most incidents attended were compliant and no action was necessary. Domestic fires are the source of most of the PM₁₀ (airborne particulates that are smaller than 10µm in diameter) in winter throughout the region wherever there are many houses and topography restricts the dispersion of the smoke. This is particularly so in the airsheds where PM₁₀ concentrations approach or exceed the threshold in the National Environmental Standard (Masterton, Upper Hutt and Wainuiomata). Any change to the permissive approach in the Plan, which does not deal with the cumulative effects of domestic fires effectively, is probably only necessary in gazetted airsheds because elsewhere in the region particulate matter is dispersed and does not cause a health hazard.

4.2.3 Some points of interest

Two activities that were highly contentious when the plan was being developed have caused few problems since it was made operative. These are the use of agrichemicals and the escape of diisocyanates from spray painting at panel beating shops. Greater Wellington's biosecurity department provide advice around the region about how to comply with the two agrichemical rules and minimise adverse effects from the use of agrichemicals. This advice, together with promoting compliance with agrichemical training requirements, has helped with the effectiveness of those rules.

For spray painting, Greater Wellington undertook extensive testing and modelling to determine the actual effects of harmful paint constituents on people living near panel beater shops. The conclusions were that provided all major spray painting is carried out in purpose built spray booths and ventilated through appropriately located stacks, emissions of the application rates specified in the rules are unlikely to cause adverse health effects on neighbours.

At least six rules in the Plan control activities that are also controlled by New Zealand Standards or under the Building Code. For example, fume cupboards are required by the Building Act 1991 to be tested for the Building Warrant of Fitness, for which the owner of the building is responsible. The nature and frequency of testing is specified in a compliance schedule which is unique to each building and prescribed by the city or district council. Compliance with the rule may contribute to achieving the objectives, but may not be the most efficient means of doing so.

4.3 Implementation and effectiveness of non-regulatory methods

When the Plan was being prepared, Greater Wellington had little information about the state of air quality in the region. Since then, considerable work has been completed in setting up and maintaining an ambient air quality monitoring framework and there is now good environmental data for air quality and the pressures on it.

Discharges to air from domestic and mobile sources are allowed as of right under the RMA. Instead of introducing regulation, Greater Wellington has provided information and advice about how to reduce the effects of these activities in annual environmental report cards and in *Be the Difference* campaigns. The effectiveness of this approach to managing domestic fires has not been assessed because our information campaigns have been limited and any decrease in PM₁₀ levels is more likely to be associated with weather conditions than possible improved burning practices. In addition, there is now some regulation of domestic fires because central government introduced a design and emission standard for wood burners which has been in effect since 1 September 2005.

5. Implementing the findings

The results of this evaluation have shown that the implementation of the regional rules and the non-regulatory methods has only been partially effective in achieving the objectives of the Plan. High quality air has not been degraded, but activities are having adverse effects on ambient air quality and amenity values. Smoke emissions are responsible for potentially harmful effects on people's health in some airsheds in winter, and a small number of industries are responsible for offensive and objectionable odour that affects the amenity values of significant numbers of people. The effects of discharges to air on resources or values of significance to tangata whenua, the quality of ecosystems, water and soil, and the global atmosphere are not assessed by Greater Wellington's monitoring programme.

Almost all rules would benefit from at least minor changes and some would benefit from a complete re-write. These changes will need to be considered when the Plan is formally reviewed. Some areas where it may be appropriate to take action are:

- Activities that are controlled in more than one plan, for example, domestic composting, or that are controlled by other means, such as by New Zealand standards may not require additional management in a regional plan for air quality.
- Activities known to cause offensive odour may be more effectively managed by controlling the process rather than the effects at the property boundary. The offensiveness of some odours depends on the quantities of material being processed, and on the site housekeeping by the industry. In some cases it may be preferable to restrict the location of the activity rather than trying to deal with the effects on the community once the business has become established.
- Activities known to cause problems with smoke may be more effectively managed by adopting clearer restrictions on fuel types and by targeting information about appropriate burning techniques at specific airsheds.

We are required to begin the full review of the Regional Air Quality Management Plan before May 2010, ten years after it became operative. The reviews for the Regional Plan for Discharges to Land and Regional Freshwater Plan must have started by December 2009, and the review of the Regional Soil Plan must have started by October 2010. These reviews fit well with implementing the direction set in the Regional Policy Statement, which will have made significant progress through the public process by then.

6. Communication

The *Effectiveness report: Regional Air Quality Management Plan* will be available on Greater Wellington's website and hard copies will be available for anyone who requests it.

7. Recommendations

That the Committee:

1. ***Receives the report; and***
2. ***Notes the content.***

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