

9 July 2010

Ms. Rapunzel Mulawin
Ministry for the Environment
PO Box 10362
Wellington 6143

Dear Ms Mulawin

RE: Proposed Amendments to the National Environment Standard for Air Quality

1.0 Introduction

1.1 Christchurch City Council (the Council) thanks the Ministry for the Environment for the opportunity to make a submission on the proposal to amend the requirements in the National Environmental Standard for Air Quality pertaining to management of air pollution from particulate matter.

1.2 The Council acknowledges the time and effort required to develop the Ministry's proposal.

1.3 Executive Summary of Submission

Christchurch City Council agrees with the Ministry's assessment that the regulations for particulate matter of less than 10 microns (PM₁₀) need to be more equitable. However the Council does not agree with the Ministry's preferred approach of Option 4A or 4B, as these options would provide fewer benefits to public health and were shown to be less cost effective than at least one of the other options outlined in the discussion document. Of the options presented in the discussion document, Option 3:

- would offer the greatest net value;
- has provisions to avoid increases in net emissions through offsets, a system that has been effectively used by Environment Canterbury; and
- recognises the significant contribution that domestic heating plays in PM₁₀ emissions, through provision of national guidance in domestic emission restrictions.

The Council recommends that the Ministry select Option 3 as the preferred option, with the provision that the number of exceedances is amended to three exceedances per year.

1.4 In line with the description of Option 3 in the Ministry's discussion document, the Council supports the following:

- 'exceptional events' such as volcanic eruptions or wildfires are excluded from being counted as exceedances;
- the 2013 timeline is retained;
- consents for PM₁₀ discharges are allowed in non-complying airsheds and offset provisions are included from 2013 onwards;
- guidance in domestic emission restrictions is provided; and
- other elements described for Option 3, other than the number of allowable exceedances, are adopted.

As a modification to Option 3, the Council supports an increase in the allowable exceedances to three exceedances per year.

1.5 Experience in Christchurch has shown a marked improvement in air quality following the implementation of the regional council's Clean Heat Project and the Regional Air Plan. The recent Heat Smart programme operated by the Energy Efficiency and Conservation Authority is also expected to play a role in improving Christchurch's air quality going into the future. The Council recommends that the Government provide for extension of initiatives such as home insulation grants and healthier home heating subsidies.

- 1.5 The Council further recommends that the Government consider adding a standard on PM_{2.5} to the ambient air quality standards.

2.0 Background

- 2.1 Air quality is important to the Council and to the residents of Christchurch. Poor air quality has an adverse effect on the health of residents, productivity of the work force, community well-being and overall quality of life. Poor air quality also has a deleterious effect on the City's image overseas and negatively impacts on New Zealand's '100 percent pure' brand.

- 2.2 The value of a healthy environment to Christchurch residents is evident in the community outcomes that were developed after extensive public consultation. Two of these are directly linked to ambient air quality: 'a healthy city' and 'a city of people who value and protect the natural environment'.

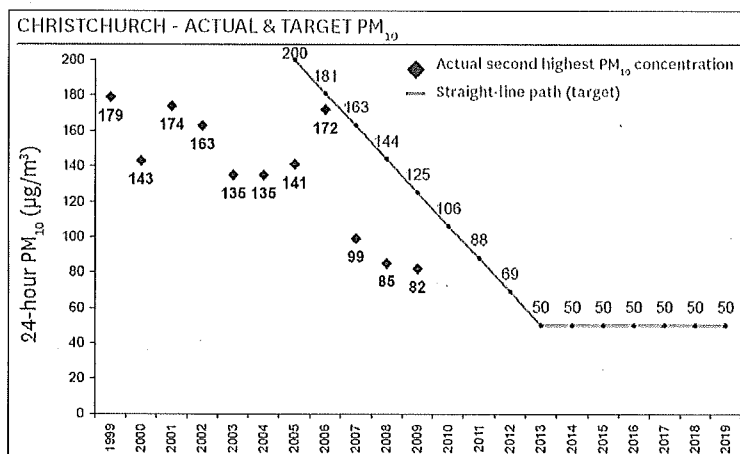
- 2.3 Christchurch City Council has made a commitment to a sustainable Christchurch through its Sustainability Policy. A key goal of the Policy is a society that is efficient, cyclic, solar, safe and social. In the context of this goal 'safe' means 'no negative impacts on people and the earth's life supporting systems'.

- 2.4 Ambient air quality in Christchurch has been steadily improving over the last ten years. The number of 'high pollution' nights has been on a steady decline, and the concentration of PM₁₀ has been declining as well, from a 24-hour high of 220 micrograms per cubic metre ($\mu\text{g}/\text{m}^3$) in 2000 to a 24-hour high of 85 $\mu\text{g}/\text{m}^3$ in 2009. In addition, the Christchurch airshed has achieved conformance with the national annual average guideline value of 20 $\mu\text{g}/\text{m}^3$ for PM₁₀ beginning in 2007 and continuing to the present.

- 2.5 In Christchurch, between 2002 and 2009, there have been over 15,000 conversions from open fires and older log burners to cleaner forms of home heating such as heat pumps, pellet fires and ultra-low emission wood burners that have occurred through the regional council's Clean Heat Project. Data is not available for conversions that may have occurred independent of the Project.

- 2.6 Regional air quality rules have come into effect from this year for the Christchurch airshed (designated as Clean Air Zone 1 in the Regional Air Plan), beginning 1 April 2010. Between 1 April and 30 September each year the use of open fires and log burners 15 years or older is banned. It is anticipated that this will result in a further and significant reduction in PM₁₀ emissions from domestic sources.

- 2.7 The 'straight line path' for PM₁₀ concentration from 2005 to 2013 for the Christchurch airshed, as calculated by the regional council, can be compared against actual concentrations for the years 2005 through 2009. Actuals for PM₁₀ concentration in 2007, 2008 and 2009 were tracking well below the value projected by the 'straight line path' as shown in the graph below.



(Source: Environment Canterbury)

There has been a flattening of the curve in the last two years for which actual data is available, however if the general trend continues it is not unreasonable to assume that compliance with the existing PM₁₀ regulations could be achieved in 2013 or not long thereafter.

3.0 Submission

3.1 Preferred option

The Ministry's discussion document provides a brief cost benefit analysis for each of the five options under consideration, plus the status quo. The Ministry indicated that its preferred option was either Option 4A or Option 4B. The net benefits for these two options are lower than the net benefits for Options 2 and 3. Options 2 and 3 also have greater public health benefits, with mitigation of degraded air quality occurring at a faster pace than that projected for Options 4A and 4B. The sole argument in favour of the Ministry's preferred options seems to be lowering costs to business. The provision of offsetting for Option 3 also allows cost impacts to business that are much less significant in comparison to the status quo.

Option 3 shares with Options 4A and 4B several elements not in the current PM₁₀ regulations:

- excluding 'exceptional events' from being counted as exceedances;
- requiring mandatory reporting of PM₁₀ monitoring data;
- using the Ministry's existing powers under section 27 of the Resource Management Act, to request information from councils such as what actions are being taken or planned to achieve compliance; and
- establishing an air quality compliance strategy.

It is the Council's view that these elements would improve the effectiveness of the existing regulations for PM₁₀.

Option 3 also includes additional elements missing from Options 4A and 4B:

- placing a greater focus on education to educate the public on the health hazards of particulate matter in air;
- introducing national guidance on domestic emission restrictions; and
- mandatory offsets discharge consents for significant PM₁₀ emissions after 2013.

In the Council's opinion, these additional elements would further enhance the effectiveness of the existing regulations.

The Council recommends that the Ministry consider Option 3 as the preferred option, given its advantages over the other options described in the Ministry's discussion document. The Council suggests that the requirement for mandatory reporting of PM₁₀ monitoring data would be the responsibility of regional councils and unitary authorities in non-complying airsheds.

3.2 Allowable exceedance of the PM₁₀ standard

The Ministry proposes to increase the number of allowable exceedances of the PM₁₀ emissions standard (50 µg/m³ over a 24-hour period) from one exceedance to three exceedances per year.

The Council recommends that the Ministry amend the current regulation and increase the number of allowable exceedances to the PM₁₀ emissions standard to three per year.

3.3 Exceptional events

All but Option 2 and the status quo include a provision to exclude 'exceptional events' from being counted as exceedances of the PM₁₀ emissions standard. The Council agrees that occasions when PM₁₀ concentrations exceed the emissions standard due to circumstances that are outside of communities' control, such as volcanic eruptions, wildfires, and high wind episodes, should not be counted as exceedances of the standard. Although there was an indication of the meaning of 'exceptional' in the Ministry's discussion document there needs to be a clear definition of events that would be classified as 'exceptional' should this be incorporated into the standard in the future.

The Council recommends that the Ministry add a provision to the regulations to exclude 'exceptional events' from being counted as exceedances of the PM₁₀ emissions standard, with the provision that 'exceptional events' are clearly defined.

3.4 Timeline

The existing regulations provide for a 2013 timeline by which airsheds need to comply with the PM₁₀ standard. Of the options in the Ministry discussion document three propose retaining the 2013 timeline in some form (status quo, Option 2 and Option 3), and three (Option 1, and the Ministry's preferred Options 4A and 4B) propose extending the timeline by five to seven years. The Council does not agree that a change to the timeline is needed, subject to other provisions being added to the standard to make it more effective (see also comments in section 3.1).

The Council recommends that the 2013 timeline is retained, as part of a package of improvements to the regulations described for Option 3 in the Ministry's discussion document.

3.5 Offsets post-2013

Current regulations remove the ability of councils, after 2013, to issue consents for significant discharges of PM₁₀ emissions. In addition, offsetting to mitigate against additional PM₁₀ emissions is not an option after 2013. A provision to allow for offsetting PM₁₀ emissions post-2013 for discharge consents with significant PM₁₀ emissions in non-complying airsheds is discussed for two of the options (Option 3 and Option 4A). The Council agrees with the Ministry's observation that this approach 'has proven effective in areas it has been used in so far (e.g., Environment Canterbury)' and advocates that offsetting is an effective approach for mitigating PM₁₀ emissions that should continue beyond the existing 2013 deadline.

The Council strongly recommends that the Ministry remove the prohibition against offsets and the issuing of PM₁₀ discharge consents in non-complying airsheds after 2013; and that Regulation 19 is amended so that mandatory offsets are required in non-complying airsheds after 2013.

3.6 Guidance on domestic emissions restrictions

Two of the options in the Ministry's discussion document include a provision for the Ministry to introduce national guidance on domestic emission restrictions. The Council supports this initiative, along with others proposed for Option 3. Guidance will assist communities in non-complying airsheds to identify methods to mitigate sources of PM₁₀ emissions originating from households.

The Council recommends that the Ministry provide national guidance on domestic emission restrictions.

3.7 Domestic heating and insulation

Robust initiatives are needed to aid non-complying airsheds in attaining compliance with the PM₁₀ regulations. Experience in Christchurch has demonstrated that schemes directed at improvements in home heating and insulation, such as the regional council's Clean Heat project and the Energy Efficiency and Conservation Authority's Heat Smart programme, can make a significant difference to ambient air quality.

The Council strongly recommends that the initiatives such as home insulation grants and healthier home heating subsidies continue to be provided, at a minimum in areas in which PM₁₀ regulations have or may be breached.

3.8 PM_{2.5} Standards

Research has shown that smaller particulate matter less than 2.5 microns in diameter (PM_{2.5}) poses a significant risk to human health. The Ministry's discussion document does not provide a framework for addressing PM_{2.5}.

The Council further recommends that the Ministry consider adding a PM_{2.5} standard to the ambient air quality standards.

4.0 Conclusion

4.1 The Council thanks the Ministry for the Environment for the opportunity to comment upon the proposed amendments to the National Environmental Standard for Air Quality.

4.2 The Council is concerned that there may be significant implications to air quality and public health depending on the final form of the changes to the PM₁₀ regulations of the NES.

4.3 **The Council recommends that -**

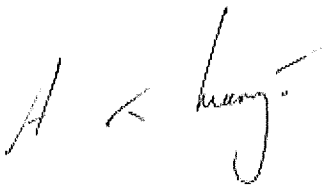
- a. the Ministry consider Option 3 as the preferred option, providing the number of exceedances is raised to three;
- b. the Ministry amend the number of allowable exceedances to the PM₁₀ emissions standard to three per year;
- c. the Ministry add a provision to the regulations to exclude 'exceptional events' from being counted as exceedances of the PM₁₀ emissions standard;
- d. the Ministry retain the 2013 timeline, as part of a package of improvements to the regulations described for Option 3;
- e. that the Ministry remove the prohibition against offsets and PM₁₀ discharge consents in non-complying airsheds after 2013, and instead require mandatory offsets for discharge consents for significant PM₁₀ emissions in non-complying airsheds after 2013;
- f. the Ministry provide national guidance on domestic emission restrictions;
- g. initiatives such as home insulation grants and healthier home heating subsidies continue to be provided; and
- h. the Ministry consider adding a PM_{2.5} standard to the ambient air quality standards.

4.4 Please contact Jenny Ridgen, Strategy and Planning Group, for any queries regarding this submission:

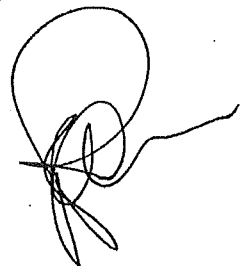
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Yours faithfully



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