

31 July 2020

Air Quality NES consultation
Ministry for the Environment
PO Box 10 362
Wellington 6143
AirQualityNESsubmissions@mfe.govt.nz

CHRISTCHURCH CITY COUNCIL SUBMISSION ON PROPOSED AMENDMENTS TO NATIONAL ENVIRONMENTAL STANDARDS FOR AIR QUALITY

1. Introduction

- 1.1. The Christchurch City Council (the Council) thanks the Ministry for the Environment for the opportunity to provide comment on proposals to amend the National Environmental Standards for Air Quality (NESAQ).
- 1.2. During the current term the Council adopted its Strategic Framework, which includes four primary community outcomes. One of these is 'Resilient Communities'. A key target under Resilient Communities is 'safe and healthy communities'.
- 1.3. We consider that the amendments to the NESAQ will improve environmental and human health outcomes by reducing air pollution and this will contribute to safe and healthy Christchurch communities. We are therefore supporting the proposals outlined in the discussion document, as detailed in the sections below.

2. Particulate matter

- 2.1. The current NESAQ has a set of requirements for particles up to 10 microns in size (PM₁₀). To take into account better understanding of the impact finer particles have on human health the Government is proposing several changes to the NESAQ.
 - Introducing two new standards for finer particles, PM_{2.5}, are proposed for which airsheds must be in compliance: a 24-hour average daily concentration of not more than 25 micrograms per cubic metre (µg/m³) and an annual average concentration of not more than 10 µg/m³. We note that these proposed new PM_{2.5} standards are the same as those recommended by the World Health Organisation.
 - Replacing the PM₁₀ standard with PM_{2.5} standards as the standards against which airsheds will be assessed. Airsheds exceeding either the annual or the daily PM_{2.5} standard, averaged over the previous five years, would be deemed polluted.
 - Monitoring for PM_{2.5} would be required in all airsheds. Existing monitoring requirements for PM₁₀ would continue.
 - Requiring new domestic solid fuel burners to meet a new emission standard of no more than 1.0 grams particulates per kilogram of fuel, reduced from the current 1.5

g/kg. The standard would apply to new domestic solid fuel burners installed on properties less than two hectares in size.

2.2. The Council:

- a. **Supports** the addition of both the new PM_{2.5} standard of a 24-hour average daily concentration less than or equal to 25 µg/m³ and the new PM_{2.5} standard for an annual average concentration less than or equal to 10 µg/m³. This aligns not only with the World Health Organisation recommendations but also with advice from the Parliamentary Commissioner for the Environment.¹
- b. **Agrees** that the proposed PM_{2.5} standards should replace the PM₁₀ standard as the primary standards for managing particulate matter, while retaining the requirement to monitor PM₁₀.
- c. **Notes** that the Christchurch airshed could meet the proposed annual PM_{2.5} standard, but current levels are only just below the proposed standard and a variety of conditions affect compliance. Air quality in Christchurch has improved noticeably since the regional council adopted the regional air plan, but exceedances of current air quality standards can still occur. Regional council rules have placed restrictions on the types of solid fuel combustion devices for domestic heating in homes in a number of locations in the region susceptible to poor air quality, such as Christchurch, Rangiora and Timaru. When new or replacement solid fuel heating devices are installed in “clean air zones” they must meet stringent emissions standards. As older solid fuel devices, with greater rates of emissions, would not have to comply with the amended standard they would remain air pollution sources until they are replaced over time with compliant devices.
- d. **Supports** the proposal to lower the emissions standard for new domestic solid fuel burners to 1.0 g/kg. As noted in the discussion document Environment Canterbury has already set lower limits for emissions for home heating in polluted airsheds.

3. Mercury

3.1. The Government proposes to add two new requirements to the NESAQ to manage mercury emissions. Doing so will enable New Zealand to meet one of the three main steps needed to ratify the Minamata Convention for Mercury, which New Zealand signed in 2013. The new requirements would

- Prohibit mercury use in specified industrial processes, in accordance with Annex B of the Convention.
- Require incorporation of best management practice guidelines for specified sources of mercury emissions, in accordance with Annex D of the Convention.

3.2. The Council

- a. **Supports** the proposal to prohibit the specific industrial processes listed in Annex B of the Minamata Convention, noting that as there are no Annex B industrial processes in use in New Zealand the prohibition of these processes is being proposed in order to formalise conformance with Annex B.

¹ Commentary by the Parliamentary Commissioner for the Environment on 'Our Air 2018'. 1 February 2019. Online: <https://www.pce.parliament.nz/publications/commentary-by-the-parliamentary-commissioner-for-the-environment-on-our-air-2018>

- b. **Supports in principal** the requirement for councils to give “mandatory consideration” to best practice international guidelines for Annex D mercury emissions sources² when making planning or consenting decisions but seeks greater clarity on what “mandatory consideration” means.

4. Implementation and timing

3.1. The discussion document states that amendments to the NESAQ would come into immediate effect once gazetted.

3.2. The Council

- a. **Recommends** that the Government include provisions to allow time for compliance with new requirements. Transitional provisions to allow councils time to meet PM_{2.5} requirements would be advisable where councils do not currently have the technology in place to monitor PM_{2.5}. It may take time for regional councils to both give effect to the new requirements in their regional plans as well as undertaking additional monitoring and compliance activities required under the NESAQ amendments. Any transitional provisions should be timed to take account of councils’ long term planning processes and the associated need for funding to meet new PM_{2.5} monitoring requirements.
- b. **Supports** transitional provisions to allow time for alternatives to become readily available for affected activities, if needed. For example, is the technology readily available in New Zealand to enable industry to adopt “best international practice” to minimise or eliminate mercury emissions from affected activities?

5. Conclusion

5.1. The Council

- a. Supports the addition of the two PM_{2.5} standards of not more than 25 µg/m³ for the average daily concentration and not more than 10 µg/m³ annual average concentration.
- b. Agrees that the proposed new PM_{2.5} standards should replace the current PM₁₀ standard as the primary standards for managing particulate matter.
- c. Notes that compliance with the PM_{2.5} standard within the Christchurch airshed may be achievable based on recent Environment Canterbury monitoring but that in any given year conditions, and therefore compliance, may vary.
- d. Supports the proposal to reduce the emissions standard for new domestic solid fuel burners to 1.0 g/kg.
- e. Supports the proposal to prohibit the specific industrial processes listed in Annex B of the Minamata Convention for Mercury.
- f. Supports in principal the requirement for councils to give “mandatory consideration” to best practice international guidelines for Annex D mercury emissions sources.

² Annex D sources are: coal-fired power plants; new or upgraded coal-fired industrial boilers above 2 megawatts; smelting and roasting processes used in the production of non-ferrous metals; waste incineration facilities; cement clinker production facilities.

- g. Supports transitional provisions to allow councils time to meet PM_{2.5} monitoring requirements.
 - h. Supports transitional provisions, if needed, to allow time for alternatives to become readily available for affected activities.
- 5.2. For clarification on any points within this submission please contact Diane Shelander, Senior Policy Analyst, at diane.shelander@ccc.govt.nz.

Yours sincerely



Andrew Turner
Acting Mayor of Christchurch