



Central Hawke's Bay
District Council



23 July 2020

Ministry for the Environment
PO Box 10-362
WELLINGTON

Dear Sir or Madam

PROPOSED AMENDMENTS TO THE NATIONAL ENVIRONMENTAL STANDARDS FOR AIR QUALITY

1.0 OVERVIEW

The Hawke's Bay Regional Council (HBRC) would like to thank the Minister for the Environment for the opportunity to submit on the proposed amendments to the National Environmental Standards for Air Quality (NESAQ).

This submission has been prepared by Napier City Council (NCC), Hastings District Council (HDC), Central Hawke's Bay District Council (CHBDC) and Hawke's Bay Regional Council staff.

Specific comments on the proposed amendments are detailed from Section 2 below:

1.1 Hawke's Bay – local context

Monitoring in Hawke's Bay indicates that outdoor air quality is generally good most of the time. However, during winter high PM₁₀ levels occur over the Napier and Hastings urban centres, which is predominantly from domestic heating sources. This led to the identification and gazettement of two airsheds over the Napier and Hastings urban areas in 2005.

In 2006, two additional airsheds were gazetted in Hawke's Bay over the Whirinaki and Awatoto areas. These airsheds were separately gazetted because industry is the principal source of PM₁₀ in these areas.

In 2008, the HBRC prepared Plan Change 2 which amended regional plan provisions to include a range of measures to reduce small particle concentrations in Napier and Hastings to comply with the then PM₁₀ ambient standard set out in the NESAQ.

In particular, Plan Change 2 introduced new rules for managing domestic woodburners, requiring many homeowners to replace old burners and open fireplaces with new, efficient heating. Existing provisions which control discharges to air from industrial and trade premises were also changed.

Notably, over the past 10 years around 21,000 older solid fuel burners have been phased out in Napier and Hastings, and approximately \$26 million has been spent on a financial assistance scheme to help homeowners. As a result, ambient PM₁₀ concentrations in Napier and Hastings have significantly reduced and in recent years have complied with NESAQ.

2.0 SPECIFIC COMMENTS

Specific issues that that HBRC, NCC, HDC and CHBDC wish to comment on are detailed as follows:

2.1. PM_{2.5} standard

The introduction of a PM_{2.5} standard which reflects the WHO guidelines is supported. This is consistent with the HBRC strategic plan which aims to have air quality across the region meeting World Health Organisation guidelines by 2025.

Notwithstanding, moving to a PM_{2.5} standard will require additional monitoring and modelling work to be undertaken before the impacts on our region are fully known. As such, it is requested that the NESAQ is amended to include a lead in time of at least 2 years before the PM_{2.5} standards take effect.

To date, based on the limited PM_{2.5} monitoring data HBRC has, it is anticipated that the amended NESAQ will result in the following:

- Additional regulatory and non-regulatory methods for Napier and Hastings to meet the proposed PM_{2.5} standard,
- Two new airsheds - Wairoa and Waipukurau, and associated regulatory and non-regulatory methods to meet the proposed PM_{2.5} standard,
- An expansion of HBRC's financial assistance scheme to assist with the upgrade of existing woodburners. This scheme is currently funded via a targeted rate. Residents in lower income areas such as Wairoa and Waipukurau may not have sufficient financial means to pay for this increased cost.

2.2 PM₁₀ monitoring

The continued monitoring of PM₁₀ is supported. The new generation of monitors typically measure PM_{2.5}, PM_{10-2.5} and PM₁₀ fractions as such, once monitors are in place the additional costs of monitoring PM₁₀ over and above PM_{2.5} are expected to be minimal.

Notwithstanding, the costs for monitoring PM₁₀ across the region is currently \$25,000 per year. These costs and are expected to increase by at least \$10,000 if new NESAQ compliant monitors are required in Wairoa and Waipukurau. This is in addition to the one off start-up costs of around \$80,000 per monitor.

2.3 Polluted airsheds and resource consents

The inclusion of offsets for PM_{2.5} for all industries in 'polluted' airsheds is not supported. Under existing regional rules, it is typically industrial and commercial activities that require a resource consent for a discharge of contaminants to air. Rules for domestic solid fuel burners are permitted (subject to conditions), meaning no resource consent is applicable.

Therefore, in Hawke's Bay, it would not be fair or equitable to require mandatory offsets from all new industry, when the primary source of PM_{2.5} concentrations comes from domestic heating in a number of our centres such as Napier, Hastings, Wairoa and Waipukurau.

As such, it is requested that the Minister refine the offset provisions in the NESAQ, so these provisions only apply to polluted airsheds, where the primary source of PM_{2.5}

concentrations comes from industry. In Hawke's Bay, this would mean only the Whirinaki and Awatoto Airsheds would be subject to offset provisions.

If the Minister proceeds with the offset provisions as proposed, it is requested that the NESAQ is amended to ensure offsets only apply to completely new discharges of PM_{2.5}, not replacement consents for existing discharges of PM_{2.5}, which are classified as 'new discharges' as per the RMA.

2.4 Emissions standard

The Hawke's Bay Regional Resource Management Plan contains an emission standard for solid fuel burners of 1.0g/kg in the Hastings Airshed and 1.5g/kg in the Napier Airshed.

It is requested that the costs and benefits of a reduction of the emissions standard in the NESAQ to 1.0 g/kg is carefully considered. It may be more appropriate to apply the lower emissions standard to polluted airsheds only, rather than a blanket reduction across the whole of New Zealand.

Retaining the emissions standard at 1.5 g/kg would provide flexibility for each individual council to determine whether 1.5 g/kg emission standard, or a lower standard, is needed in areas outside of their 'polluted airsheds' and ensure the lower 1.0 g/kg emission standard isn't applied across the whole region, unnecessarily.

2.5 All domestic, solid-fuel burners covered

The Hawke's Bay Regional Resource Management Plan contains consistent rules and emission standards that apply to all types of domestic solid fuel burning appliances in gazetted airsheds.

Amending the NESAQ to have a consistent emission standard for all types of domestic solid fuel burning appliances, is supported provided this applies to polluted airsheds only.

It is questioned whether it is reasonable to apply this standard to areas within the region that currently comply with the NESAQ. Particularly given, there are a limited wood fire cookers, space heaters and water boilers on the market.

2.6 Mercury emissions

New Zealand is a signatory to Minamata Convention on Mercury. As such, the new standards set out in the NESAQ for mercury emissions is supported.

2.7 Additional comments

We are happy to see the removal of the mandatory 15 year phase out dates/life span for burners. Not all burners age at the same rate, particularly when there are other heating appliances in the home, such as heat pumps, and the wood burner is not the main source of heating.

A requirement to upgrade burners for all households every 15 years, may potentially result in a significant amount of unnecessary waste and expense, particularly if a woodburner is not at the end of its life due to reduced use over that time period. A 15 year mandatory phase out period would put unnecessary cost on homeowners throughout the region, and unnecessary waste in landfills.

2.8 Additional: Hawke's Bay Regional Council only requests

The proposed amendments to the NESAQ do not address the sale and use of wet wood or outdoor burning.

Outdoor burning (horticultural production land)

Current research indicates that outdoor burning has more adverse health effects than previously thought, particularly when burning green material which results in a low temperature burn with smoky emissions. This type of burning can contribute to acute symptoms in those with compromised health, through increased particulate matter, carbon monoxide and hazardous air pollutants such as dioxins and furans.

The Hawke's Bay Regional Resource Management Plan currently has rules in place which restricts outdoor burning in the Napier and Hastings Airsheds during the winter months.

Despite this, the scale of outdoor burning on the Heretaunga Plains, both inside and outside of the airsheds, can be considerable, with the estimated PM₁₀ emitted on an average day approximately three times the emissions from transport, or up to twenty times that of urban industry.

This is largely due to the region's productive horticultural industry, around 11,000 hectares, and the need to periodically redevelop orchards as well as destroy diseased plant material. While the exact contribution of PM₁₀ to the Napier and Hastings Airsheds is difficult to assess, we know that these types of outdoor burns have significant localised impacts and are related to approximately 30% of air quality related complaints received by HBRC.

HBRC is currently investigating a range of options to address outdoor burning both on a region wide basis and on the Heretaunga Plains. To assist with any future plan changes, it is requested that the NESAQ includes new restrictions for outdoor burning, from both urban and rural areas, to limit unnecessary and unauthorised outdoor burning, and minimise PM₁₀, PM_{2.5} and localised smoke emissions from this practice.

Additionally, it is requested that an outdoor burning guidance document is developed by the MfE which provides further information to councils around best practice. In particular, HBRC is interested in understanding:

- Which types of diseases require immediate disposal, via burning, to stop the spreading of disease on and between horticultural properties, and which diseases can be managed in an alternative manner.
- The relationship between the Resource Management Act and the Biosecurity Act when undertaking outdoor burning for disease control purposes. For example, the National Beekeepers Association currently destroys plastic beehives infected by American Foulbrood disease (AFB) via burning, pursuant to the Biosecurity Act. This contravenes Rule 20 of the Hawke's Bay Regional Resource Management Plan which prohibits the burning of plastic material.

Wet wood

Even when used in NESAQ compliant burners, wet wood does not provide as much heat as dry wood and can be extremely smokey resulting in high PM₁₀ and PM_{2.5} emissions.

HBRC supports the use of non-regulatory tools which discourages the burning of wet wood.

Monitoring

It is unclear whether Schedule 2 of the NESAQ will be updated to include ASNZS3580.9.17:2018 and/or allow continuous particulate monitoring using in-situ optical methods that conform with EN15267 or USEPA equivalent method status.

Updating Schedule 2 in this regard, will enable the use of monitors that simultaneously measure multiple size fractions and reduce the cost of measuring both PM₁₀ and PM_{2.5} at sites.

We would appreciate clarification on this point.

3.0 SUMMARY

Once again, we would like to thank the Minister for the opportunity to comment on the proposed amendments to the NESAQ. We are happy to work with the Minister to investigate and resolve any of the outstanding issues we have identified.

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