



1 February 2019

Vicky Robertson  
Secretary for the Environment

Liz MacPherson  
Government Statistician

### Commentary on *Our Air 2018*

Dear Vicky and Liz

This letter responds to elements of the *Our Air 2018* domain report produced by the Ministry for the Environment and Stats NZ under the Environmental Reporting Act 2015.

Like the *Our Land 2018* report, this report was easy to read and understand, particularly the key findings section. The report also made good use of visuals and infographics to present the data and highlight some key points.

The structure of the report was well-defined and logical, taking readers first through the processes that affect air quality, then the two major types of air pollutants (particulate matter and gaseous pollutants).

The inclusion of chapters about air pollution and climate interactions, and quality-of-life impacts (e.g. light pollution, noise pollution and odours) also provided for extremely interesting reading. Finally, clear identification of some emerging issues and data gaps provided a steer for decision-makers for focusing attention going forward.

I both note and welcome the review of the National Environmental Standard for Air Quality (NESAQ) announced by Hon Nanaia Mahuta on 18 October 2018<sup>1</sup>. Building on the recommendations of the previous Commissioner<sup>2</sup> and the findings of *Our Air 2018*, I recommend that the review of the NESAQ includes:

- **The development of both an annual average AND a 24-hr national standard for PM<sub>2.5</sub>**

Fine particulates (PM<sub>2.5</sub>) are now recognised as posing the highest health risk as they can penetrate deeper into the respiratory track. While wind in New Zealand happily disperses most fine particulate matter, climatic and topographical conditions in some locations can lead to significant concentrations, particularly in the colder months. Further, health implications are associated with both short- and long-term exposure, and according to the World Health Organisation (WHO), there is no threshold for “safe” exposure. It is no longer acceptable for New Zealand to continue to be without standards for this pollutant.

---

<sup>1</sup> Minister welcomes major ‘air’ report. Media release by Hon. Nanaia Mahuta, 18 October 2018.  
[www.beehive.govt.nz/release/minister-welcomes-major-%E2%80%98air%E2%80%99-report](http://www.beehive.govt.nz/release/minister-welcomes-major-%E2%80%98air%E2%80%99-report)

<sup>2</sup> See PCE (2015). The state of air quality in New Zealand: Commentary by the Parliamentary Commissioner for the Environment on the 2014 Air Domain Report. Pg . 51.

- **The development of an annual average national standard for nitrogen dioxide**

Traffic emissions, particularly in heavily populated urban areas, are the biggest source of nitrogen oxides. Both short- and long-term exposure can have health implications.

- **Realignment of the current national standards for sulphur dioxide with the WHO guidelines**

I look forward to seeing a draft of the new NESAQ in due course and will be happy to provide detailed comment. As well as bringing our national standards for these pollutants in line with international guidelines there are three other areas that need careful consideration:

1. The report states that *“black carbon is gaining prominence as an air pollutant that has negative implications for both human health and our climate”*. Monitoring in Auckland has shown that concentrations can be relatively high compared to other countries. While there are no international guidelines for black carbon yet, consideration should be given in the review of the NESAQ as to whether a national standard for black carbon should be developed for New Zealand.
2. The report also states that *“there is limited information on indoor air quality in New Zealand, yet we spend 80 to 90 of our time indoors and outdoor air (which could be polluted) makes it way inside”*. Not only can outdoor air make its way inside, homes with wood burners undoubtedly get fluxes of air pollutants every time the wood burner is opened to reload it with more wood. It is an important knowledge gap which needs to be filled to assess the potential size of this problem.
3. Scarcity of data on key air emission sources remains a challenge. *Our Air 2018* acknowledges the need for better data in this area. Perhaps surprisingly, New Zealand is the only OECD country without a Pollutant Release and Transfer Register – a mechanism which could greatly improve the amount and accuracy of data and information collected to fill this gap. I will shortly be sending a separate letter to Hon Eugenie Sage suggesting that an appraisal of the merits of establishing such a register should be conducted.

I hope these comments are useful and I look forward to tracking your response to the report's key findings.

Yours sincerely



Simon Upton  
**Parliamentary Commissioner for the Environment**

CC:  
Hon David Parker  
**Minister for the Environment**

Hon James Shaw  
**Minister for Statistics**