

9 August 2019

Mr Adam Carlon,  
National Environment Protection Council Executive Officer  
Department of the Environment and Energy  
GPO Box 787  
Canberra ACT 2601

Dear Mr Carlon,

**RE: RACGP Submission to the National Environment Protection Council (NEPC) on the proposed variation to the National Environment Protection (Ambient Air Quality) Measure standards for ozone, nitrogen dioxide and sulphur dioxide.**

The Royal Australian College of General Practitioners (RACGP) welcomes the opportunity to provide a written submission to the National Environment Protection Council (NEPC) on the proposed variation to the National Environment Protection (Ambient Air Quality) Measure standards for ozone, nitrogen dioxide (NO<sub>2</sub>) and sulphur dioxide (SO<sub>2</sub>).

The RACGP is Australia's largest professional general practice organisation representing over 40,000 members working in or towards a career in general practice.

The RACGP supports an active specific interest group of general practitioners (GPs) in the area of environmental impacts in general practice. This group is concerned with the impacts of environmental changes on the health of individuals and communities.

This submission supports strong standards in the upcoming National Environmental Protection Measures (NEPM) review of SO<sub>2</sub>, NO<sub>2</sub> and ozone. These three pollutants are quick acting respiratory irritants – and may worsen asthma symptoms and contribute to lung disease<sup>1,2</sup>. NO<sub>2</sub> and possibly ozone negatively impact child lung development<sup>3</sup>, cognitive development, and can cause lung and heart disease in adults<sup>4</sup>.

As the evidence base grows, there is a need to update standards in line with the science. There is no safe level of air pollution, with health effects occurring at lower concentrations than previously thought<sup>5</sup>. This is an opportunity to strengthen the outdated standards in line with current evidence.

The RACGP recommends:

1. Adopting a world's best NO<sub>2</sub> standard of 9 parts per billion.
2. Expanding the network of monitors to include roadside NO<sub>2</sub> monitors at key roadside areas in each city where a significant population will be exposed.
3. Adopting the World Health Organisation (WHO) 1 day SO<sub>2</sub> standard of 8 parts per billion.

### **1. Adopting a world's best NO2 standard of 9 parts per billion (ppb)**

Research in Australian schools shows significant effects on childhood asthma if NO2 levels are above 9 ppb. We recommend a new annual standard of 9 ppb in line with the science<sup>6</sup>. Australia's current annual NO2 standard is set at the upper limit of 30 ppb. Improving this standard would have substantial benefits for children's health and lung function<sup>7</sup>. This can be achieved by developments such as Sydney's new metro trains and the port Botany rail duplication which will take cars and trucks off the road, while in Melbourne the new East-West metro will likewise improve air quality by reducing traffic. The shift to tighter Euro 6 vehicle emissions standards and to electric vehicles will reduce pollution, so standards that properly protect health are easily attainable.

### **2. Expanding the network of monitors to include roadside NO2 monitors at key roadside areas in each city where a significant population will be exposed.**

Many people are exposed to high levels of pollution along busy roads<sup>8</sup>, however the current NEPM does not monitor along these hotspots. Roadside exposure can be many times higher than urban background, especially for NO2<sup>9</sup>.

Studies have found vehicle emissions can cause significant risk of lung cancer among people living within 100 metres of major roads.<sup>10</sup> An Indoor Air Quality Study of residential dwellings that was carried out in Melbourne (Australia) found that dwellings in close proximity to major roads (less than 50 metres) recorded high levels of indoor air pollutants<sup>11</sup>. The network of NEPM monitors should be expanded to include measurement of road side NO2 at some busy roads in each city – if it isn't measured it can't be improved.

### **3. Adopting the recommendations of Peak medical health experts and medical bodies<sup>12</sup> on Air Quality, and the World Health Organisation (WHO) 1 day SO2 standard of 8 parts per billion.**

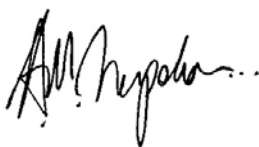
We support Australia adopting the World Health Organisations' (WHO) 1 day SO2 standard of 8 ppb<sup>13</sup> and the recommendations outlined in the [Peak medical health experts and medical bodies position statement](#). Australia's current 1-day SO2 standard of 80 ppb is 10 times higher than the recommended WHO standard.

### **Concluding comments**

Strong air pollution standards will improve public health and reduce the impact of common health conditions such as asthma, a disabling condition experienced by patients and encountered by GPs every day in Australia.

Again, the RACGP thanks you for the opportunity to provide a submission to the NEPC. Please direct any inquiries regarding our submission to Fran Hardcastle, Manager RACGP Specific Interests at frances.hardcate@racgp.org.au or on 03 8699 0361.

Yours sincerely



**Dr Harry Nespolon**  
President

## References

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<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4602116/>
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