

**Environmental Health Unit
Health Protection Branch
Department of Health, Victoria**

Response to AAQ NEPM review questions

1. Is there sufficient new health evidence to support a revised standard and if so, for which pollutants?

Given that the Ambient Air Quality National Environment Protection Measure (AAQ NEPM) is reviewed approximately every 10 years, a review of all pollutants is considered appropriate.

There is enough new health evidence to warrant review of all pollutants especially since many of the pollutants do not have a clear threshold for adverse health effects.

Although the current ambient air levels of carbon monoxide in Australian cities are well below the current NEPM standard, the health evidence suggests that adverse health effects may be linked to current ambient air levels thus supporting the need for review of the standard.

The World Health Organisation (WHO) guideline value for nitrogen dioxide is lower than the current NEPM standard which would suggest that there is sufficient evidence for review.

The 2005 National Environment Protection Council (NEPC) preliminary work and recent studies support the need for review of the ozone standard especially to introduce an 8 hour averaging standard.

Sulphur dioxide should be particularly reviewed given that the WHO guideline value has been recently revised and is significantly lower than the current AAQ NEPM.

There is emerging evidence that lead is associated with adverse health effects at levels lower than the current NEPM standard supporting the need for a review. While it is not known the extent that air contributes to the blood lead levels of the general population nationally, blood lead levels of populations near lead specific industries tend to be higher. Moving lead from the AAQ NEPM to the Air Toxics NEPM would provide tighter and more targeted controls of point source emissions.

There is enough evidence to warrant a review of the particulates standard, especially to consider the adoption of the current NEPM advisory reporting standard for PM_{2.5} as a standard that requires routine monitoring and enforcement.

A review of the Air Toxics NEPM for benzene and polycyclic aromatic hydrocarbons should take into consideration compliance and feasibility issues which may limit the adoption of these air toxics into the AAQ NEPM.

2. Does the current approach, which allows for a number of exceedences of the standard, meet the requirement for adequate protection or are there alternative methods that could provide more consistency in the level of health protection associated with complying with the NEPM standards?

To ensure the protection of public health a combination of a 'not to be exceeded' standard with the exclusion of 'natural events' might be most appropriate. There will have to be rigorous definitions of what is considered a 'natural event' and the review should include some discussion as to whether prescribed burning should be included or excluded.

3. Should changes be made to the reporting protocols that would lead to a greater transparency and better understanding of the causes of exceedences in jurisdictions, the potential health risk to population health, and management approaches being undertaken to address these exceedences?

An exposure reduction approach where longer term ambient air quality goals are put into place, in addition to the AAQ NEPM standards, would be supported in order to provide better protection of public health.

The assessment, immediate reporting and clear justification regarding the source of exceedences are likely to benefit public health and increase public confidence in air quality monitoring.

A measure should also be established for state reporting protocols to be compiled and reported nationally. In this way the ambient air quality of different states (including regional areas) can be compared with one another to help detect emerging trends or areas of concern.

4. Any other issues you wish to raise?

As part of the review process, it would be ideal if community-specific guidance was developed to support the standards chosen and provide information on what the standards mean in relation to public health.