

Further, there is no evidence of threshold and ozone associated with risk of preterm birth in Sydney and Brisbane.

SO₂ - may be no threshold for the health effects in sensitive subgroups of the population; results of studies post-1998 show adverse health outcomes below the current standards and Australia has a very large susceptible group. (Discussion Paper p. 73)

Lead - Ambient lead levels in our major cities have declined markedly with the near universal spread of unleaded petrol. Nevertheless, given the evidence of the lack of threshold, the non-linear nature of adverse effects, the links with fine particle pollution and the downward movement of acceptable blood lead levels, the standard should be revised.

Particles - significant additional evidence of both long and short term effects of PM₁₀ and PM_{2.5} since establishment of AAQ NEPM; effects observed at current ambient levels in Australian cities; no evidence of threshold; linear dose response.

Benzene - standard should be set as part of revised AAQ NEPM; known carcinogen; no evidence of threshold.

PAHs - linked to a range of cancers and to mortality from ischaemic heart disease. Should move to establish a standard and include this in a AAQ NEPM. Need to review whether current MIL for BaP would provide adequate level of protection.

Q2. 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?

Of the various alternatives discussed on page 142 of the Discussion Paper, my preference is for having "a 'not to be exceeded' standard based on health protection and requiring reporting of cause of exceedences, progress toward meeting the standards and actions taken". Considerable care needs to be taken if exceedences due "natural" events are to be excluded from consideration when assessing compliance with a standard. A suitably tight definition of "natural" would need to be applied.

Q3. 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 risk to population health, and management approaches being undertaken to address these exceedences?

YES

Q4. Any other issues you wish to raise?

Not at this stage.

