Comments of the American Lung Association

on EPA's First External Review Draft

Policy Assessment for the
Review of the Particulate Matter
National Ambient Air Quality Standards
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The American Lung Association offers these preliminary comments on EPA's first draft Policy Assessment for the review of the PM NAAQS.

First, we are very pleased that EPA has restored this Policy Assessment document as part of the public review process for the NAAQS. Government decision making on complex matters is enhanced by ample opportunities for public participation and scientific peer review and we believe this draft Policy Assessment promotes transparency in decision making.

The critical issue for today's meeting is how to interpret the epidemiological studies for use in standard setting. This of course is particularly difficult given a linear dose-response relationship and the lack of an observed threshold.

Focusing for a moment on the annual average standard for $PM_{2.5}$: we commend the approach taken in the draft document, that is, looking at the mean concentrations and at the concentrations one standard deviation below the mean, or at the interquartile range. One standard deviation above and below the mean has about 70 percent of all the air quality values in a study, thus it is completely reasonable to consider that the adverse mortality and morbidity effects are occurring throughout this range. For the annual average $PM_{2.5}$ standard, it is appropriate to consider the mean, and one standard deviation below the mean, to appraise the long-term studies, as well as the long-term concentrations in the short-term studies. Both are relevant for standard setting purposes.

Given the 15-city risk assessment results, we question whether a standard at the upper end of the proposed ranges, that is an annual average standard of 13 $\mu g/m^3$ and a 24-hour average standard of 35 $\mu g/m^3$ (13/35) could be protective of public health. It is clear from the scientific evidence and the risk assessment that both the annual average and 24-hour standards need to be lowered in order to protect public health. As the draft policy assessment points out, a tighter annual average standard must be coupled with a more

stringent 24-hour standard to protect against high concentrations associated with seasonal sources of fine particles.

Additionally, it would be extremely useful for EPA to extend the risk analysis to evaluate the full range of concentrations recommended in the draft Policy Assessment.

Finally, we encourage EPA to consider alternate, more protective forms of the 24-hour standard, as it has for the annual standard.