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Dr. Barry Wallerstein
Executive Officer
South Coast Air Quality Management District
21865 E. Copley Drive
Diamond Bar, CA 91765

Subject: Comments on Health Effects, AQMD Appendix I, 12/19/01 draft

Dear Dr. Wallerstein,

Thank you for providing the Health Effects Appendix for review by the Advisory Council. I found the report to be generally well written and I only have a few comments.

References

This document is primarily a summary of work conducted by many investigators. While a few are specifically referenced, most are referred to by statements such as: "Several studies have attempted to assess...." or "A number of studies have evaluated ..." I'd like to see much more extensive referencing.

PM 2.5

With the exception of PM 2.5, the health effects for all of the pollutants discussed in the Health Effects Appendix have been well known for some time and are discussed in many publications. The health effects of fine particulate, and in particular PM 2.5, are controversial. When the EPA proposed limits on PM 2.5 there was a lot of discussion about whether the epidemiological studies were valid. The problem was that while the epidemiological studies available at the time showed that mortality rates increased as PM 2.5 levels increased, this was not borne out by laboratory studies. This issue received a great deal of attention and was one of the key reasons why the ambient air quality standard for PM 2.5 was placed on hold. In the Health Effects Appendix, this is not brought out clearly. The third paragraph on page I-10, which begins: "The biological mechanisms by which particulate matter can produce health effects are being

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investigated in laboratory studies.” provides some brief comments but does not provide any insight into the controversy. Also, the second paragraph on page I-12 begins: “In summary, the scientific literature indicates that an increased risk of mortality and morbidity is associated with particulate matter at ambient levels. The evidence for particulate matter effects is mostly derived from population studies with supportive evidence from clinical and animal studies.” I don't think that this is adequately supported.

I'd like to see a more detailed analysis of this including:

- A summary of the history of health effects research in this area including the controversy over EPA's PM 2.5 standard and the plan for extensive studies prior to finalization of the standard.
- Are the studies discussed in the Health Effects Appendix the old studies which generated the controversy or are they new data?

Air Toxics

SCAQMD's landmark study of air toxics in the basin focused attention on this broad category of pollutants and in particular diesel particulate. I'd like to see the health effects of air toxics addressed to some degree in the Health Effects Appendix.

Final Comments

Again, thanks for the opportunity to review the Health Effects Appendix.

Very Truly Yours,



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