

REVIEW OF AMBIENT AIR QUALITY STANDARDS FOR THE PROTECTION OF INFANTS AND CHILDREN

Air Resources Board and Office of Environmental Health Hazard Assessment

The Children's Environmental Health Protection Act (Senate Bill 25, Escutia 1999) required that the Air Resources Board (ARB), in consultation with the Office of Environmental Health Hazard Assessment (OEHHA), review the health-based California Ambient Air Quality Standards with emphasis on the adequacy of their protection of infants and children by December 2000. Standards that were considered inadequately protective of public health were prioritized at that time for complete review, and possible revision over the next several years. The standards for particulate matter (PM) including sulfates were accorded first priority for full review.

In November 2001 staff from ARB and OEHHA released a draft review of the PM and sulfates standards. The staff concluded that there was a considerable body of scientific evidence associating exposure to particulate matter with adverse health effects including increased mortality, increased hospitalization among people with pre-existing heart and/or lung disease, increased visits to emergency and urgent care departments for asthma exacerbation, increased respiratory symptoms and reduced lung function. These adverse effects were noted to occur at concentrations below those of the current ambient air quality standards for particulate matter. The people who appear to be most strongly affected by ambient particulate matter and sulfate exposure are the portion of the population who have pre-existing heart and/or lung disease. In general, this is the older fraction of the population, although children with heart and/or lung conditions are also adversely affected. Because of these findings, staff has recommended that the PM standards be made more stringent to better protect public health.

As part of the standard setting process, the draft staff report is being peer reviewed by the Air Quality Advisory Committee (AQAC). AQAC, which was appointed by the President of the University of California, is an outside peer review panel of experts in fields related to the health effects of air pollution. The draft report will be revised to incorporate the comments of the public and the Air Quality Advisory Committee, and will be re-released for further public comment prior to the recommendations being presented to the Board at a public hearing scheduled for June 2002. At the hearing, the Board will deliberate and vote on the recommendations. Once accepted by the Board, the recommendations will become the California ambient air quality standards for PM and sulfates.