
An SAB Synopsis

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A Summary of a Just-Released SAB Report

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Review of the Agency's Diesel Health Assessment Document EPA-SAB-CASAC-99-001

The Clean Air Scientific Advisory Committee (CASAC) of the Science Advisory Board (SAB) of the US EPA (Agency) has completed a review of the Agency's assessment of the health effects of inhaling diesel exhaust. While acknowledging the difficulty of the task, CASAC encourages the Agency to revise the document, which was judged to be not acceptable as a summary of the current knowledge of the health effects of diesel exhaust inhaled in the environment. Consequently, in CASAC's view, it does not serve as an acceptable basis for regulatory decision making, based on adverse health effects.

The CASAC's concerns are four-fold:

1. Some of the information was judged to be considerably out of date. For example, the changes in diesel engines and their emissions that have occurred in the 1990s is not reflected in the document.
2. Neither of the two approaches employed by the Agency to use animal data to generate estimates of human risks associated with environmental exposure to diesel exhaust was found to be supported by present knowledge.
3. The document fails to distinguish the effects of diesel exhaust, per se, from the effects of PM 2.5 (particulate matter less than 2.5 microns in diameter), of which it is a constituent.
4. The human epidemiological data from occupational exposures present the strongest current evidence for human cancer risk from inhaled diesel exhaust. However, the Agency's document does not effectively address ongoing debates about the existing data. In the end the CASAC could not reach a consensus on whether a quantitative, rather than a qualitative,

assessment can be scientifically justified at this time.

This marks the third time that the CASAC has reviewed the Agency's health risk assessment of diesel exhaust. In its prior review -- in 1990 and 1995 -- the Committee identified a number of shortcomings, some of which persist in the current document.

The CASAC believes that a credible document is within the Agency's grasp if sufficient attention is given to the matters raised in this report. The Agency is encouraged to engage CASAC in a discussion of its proposed strategy for remedying the document's deficiencies, prior to completing the next revision.

A complete copy of this report from the SAB's Clean Air Scientific Advisory Committee is available

1. On the SAB Website
[<http://www.epa.gov/sab>]
2. By request from the SAB office
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3. By Fax [202-260-1889].