

March 5, 2007 API Comments before the Clean Air Scientific Advisory Ozone Review Panel on the National Ambient Air Quality Standards for Ozone: Policy Assessment of Scientific and Technical Information (OAQPS Staff Paper), EPA-452/R-07-003, January 2007

Good afternoon, my name is Will Ollison and I am here on behalf of the American Petroleum Institute. API represents almost 400 member companies involved in all aspects of the petroleum industry. We appreciate the opportunity to comment on the final draft ozone staff paper being considered today by the Clean Air Scientific Advisory Committee.

In the minutes provided, we first wish to commend the Agency on its model sensitivity testing efforts and actions to correct faulty aspects of the ozone APEX exposure and risk assessment models. The exposure and risk models have been continuously evolving during the ozone rulemaking and we encourage the Agency to continue its quality assurance testing during the upcoming months prior to proposal of revised standards and eventual promulgation. Some potential quality assurance issues were identified in our earlier comments on the 2nd draft staff paper. For example, problems included the PAI (personal activity index) characterization of 'active' children, which the Agency has acknowledged, and APEX modeling of population breathing rates. We recommend that EPA staff continue to improve their models and that they include these improvements in their consideration of proposed revisions to the ambient standards.

We also encourage EPA to incorporate the McDonnell FEV (forced expiratory volume in one second) response model into their ozone risk assessment. Our previous CASAC presentations have detailed the validity of the model in predicting pulmonary response and the advantages of using this response algorithm to project ozone risk. In short, the McDonnell model provides more realistic and reliable estimates of FEV response since most of the conservative assumptions used in the final draft staff paper needn't be invoked. For example, assumptions of the current approach include treating the same the FEV responses for all ages, all breathing rates above 13 EVR (equivalent ventilation rate – L/min-m² body surface area), all O₃ concentration patterns, and all breathing rate patterns. The alternative approach of using the McDonnell model also allows the Agency to examine in detail almost any desired measure of FEV risk. Use of such a tool would provide the Administrator with a greatly expanded understanding of the effects that potential revised standards might have on population risk.

Finally, the in-press version of the McDonnell model has also been recently modified to include age-related responsiveness of children below age 18. These modifications are calibrated to the responses reported in the available chamber studies of children. Recall that the 8-11 year old responses (McDonnell et al., 1985) were about half those encountered for 18 year olds and equivalent to those of 27 year old adults as characterized by the McDonnell model at comparable exposures. Although EPA has made continuing improvements to the APEX *exposure* model, the Agency has failed to advance the FEV *response* modeling science much beyond that used in 1996. EPA's failure to adopt the available response modeling technology makes the staff's recommendation to lower the primary ozone standard premature. The risk assessment approach should be updated and considered in formulating proposed revisions to the current standard. EPA's incorporation of such available relevant science is mandated to the degree that the Agency is required to include the best available information in its evaluation of revised ozone standards.

As documented in API comments on earlier drafts of the ozone staff paper, there are additional reasons to believe that the Agency continues to overestimate ozone exposure and risk. For example, there is considerable uncertainty associated with the epidemiologic methodology, there is questionable reanalysis of the Adam's results in regard to the significance of FEV responses at the 0.06 and 0.04 ppm ozone levels, and there is substantial underestimation of policy relevant background in the real world. Together such compounded uncertainty yields an inadequate justification for lowering the primary ozone standard.

I thank you for your consideration.