



Howard J. Feldman
Director

Regulatory and Scientific Affairs

1220 L Street, NW
Washington, DC 20005-4070
USA
Telephone 202-682-8340
Fax 202-682-8270
Email Feldman@api.org
www.api.org

June 1, 2011

By electronic mail: *stallworth.holly@epa.gov*

Dear Dr. Stallworth:

The American Petroleum Institute (API) represents more than 470 oil and natural gas companies, leaders of a technology-driven industry that supplies most of America's energy, supports more than 9.2 million jobs and 7.5 percent of the U.S. economy, and, since 2000, has invested nearly \$2 trillion in U.S. capital projects to advance all forms of energy, including alternatives. API members include producers, refiners, suppliers, pipeline operators and marine transporters, as well as service and supply companies that support all segments of the industry. API appreciates the opportunity to provide comments as requested in the May 9, 2011 Federal Register notice [78 FR 26720-21].

API commends the U.S. Environmental Protection Agency's ("EPA" or "Agency") process of updating its guidance for conducting benefit-cost analysis. In addition to API's earlier comments¹ on this topic, API appreciates the opportunity to comment on the SAB's review of the EPA white paper entitled "Valuing Mortality Risk Reductions for Environmental Policy".

API highlights its key comments below, with additional detail provided in the main body of the document.

- API recommends that EPA use the value of life year lost (VOLY) approach as the preferred method of estimating the economic benefits associated with changes in air pollution related mortality risk.
- EPA proposes a terminology change from value of statistical life (VSL) to "value of mortality risk" (VMR), while the SAB encourages the use of the term "value of risk reduction", VRR. The SAB points to potential confusion with the use of EPA's proposed terminology. API is concerned that a terminology change could actually lead to more confusion with the public as to what is actually being measured, and create at least the perception of a discontinuity between new and old estimates. API recommends no change to the VSL terminology.
- API agrees with the SAB recommendation that EPA should use caution in applying hazard specific differentials. With respect to the issue of "cancer premiums", API recommends that additional research is needed to establish their existence and to reduce

¹ See API's comments dated January 14, 2011 by Howard J. Feldman.

the uncertainty surrounding the magnitude of estimates before they are incorporated in government benefit-cost analysis.

- API agrees with the SAB conclusion that there is “no substantive empirical evidence that altruistic concerns are significant drivers of values for risk reduction.”
- API suggests that the Agency’s scarce resources would be better served through efforts aimed at reducing the fundamental uncertainties associated with estimates of VOLY, taking into consideration the particular type of risk involved and differentiated by socioeconomic factors .
- API supports the SAB view that EPA establish a protocol to regularly update risk reduction estimates.
- EPA benefit-cost analysis should also account, to the extent possible, for countervailing impacts of regulations on life years saved.

API recommends that EPA use the value of life year lost (VOLY) approach as the preferred method of calculating the economic benefits of changes in mortality risk.

As stated in previous API comments on the white paper under consideration, “Valuing Mortality Risk Reductions for Environmental Policy,” the virtually exclusive use of VSL by EPA in benefit-cost analysis, combined with use of high end concentration response functions, has resulted in the likely over-estimation of the benefits of changes in air quality.

As part of the work to improve economic analysis of air pollution reductions under the EU CAFE program, a high-quality study was completed that provides reliable and credible VOLY estimates (NEEDS, 2006).² In contrast to the studies EPA has relied on to estimate the VSL, which focused in part on occupational risk tradeoffs, the NEEDS study focused directly on VOLY lost by air pollution mortality, thereby avoiding significant benefit transfer-related concerns. API strongly recommends that EPA consider the VOLY estimates from the NEEDS research and consider developing similar estimates using a U.S. based survey.

API strongly recommends that EPA adopt the approach of calculating the economic benefits of air pollution reduction that focuses on mortality using the VOLY approach as the preferred method. At a minimum, EPA should use the VOLY approach in conjunction with VSL as recommended in OMB Circular A-4. This would provide a more robust range of economic benefit values to consider.

² NEEDS. (2006). “Final Report on the Monetary Valuation of Mortality and Morbidity Risks from Air Pollution.” New Energy Externalities Developments for Sustainability. Project No: 502687. EU Sixth Framework Programme. http://www.needs-project.org/RS1b/NEEDS_RS1b_D6.7.pdf

EPA should take a more rigorous approach and use caution when considering the use of hazard specific differentials.

API agrees with the SAB recommendation that EPA should use caution in applying hazard specific differentials. In analysis of WTP variation by hazard characteristic, the SAB highlights the importance of being clear about the comparisons being made. The SAB concludes that EPA's "first-cut" 50% cancer differential should be refined before employed in cost-benefit analysis.

API strongly agrees with the SAB's comments on hazard specific differentials in general and in particular to the "cancer premium". API recommends that before hazard specific differentials are incorporated in government benefit-cost analysis, additional research is needed to establish their existence and to reduce the uncertainty surrounding the magnitude of estimates.

EPA should strongly consider the lack of evidence and lack of analysis pertaining to measures of altruism.

API strongly agrees with the SAB's conclusion that substantive empirical evidence does not exist for supporting the claim that altruistic concerns are significant drivers of values for risk reduction. The SAB recommends that EPA should strive to adhere to the principle of using studies that most closely match the risk reduction under consideration without any adjustments for altruistic considerations.

Reducing uncertainty associated with benefit estimates should receive high priority

API recommends that resources be devoted to more accurately characterizing the level of uncertainty surrounding benefit estimates of reduced air pollution particularly given data limitations, the inherent uncertainties associated with benefit-transfer functions, and stated preference methodologies.

API supports the SAB recommendation that EPA establish a protocol for updating the value of risk reduction (VRR) estimates (or VRR's successor). The SAB points out that EPA currently uses estimates from studies that are in the approximate age range of 20-35 years old. Not only may some of these studies not meet SAB's proposed criteria, estimates provided in newer studies, using "better techniques and better data" are not included. It appears reasonable to establish an updating protocol following the SAB's five criteria, to ensure the inclusion of new research.

In sum, API suggests that the Agency's scarce resources would be better served through efforts aimed at reducing the fundamental uncertainties associated with estimates of VOLY and VSL, e.g., developing parameter estimates for relevant subgroups of the population, developing better data sets, and moving to VOLY estimates, to name a few.

Please contact me (202-682-8340 or feldman@api.org) should you wish to request any of the cited documents, or if you have any questions regarding these comments.

Sincerely,

Howard J. Feldman