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June 18, 2014

The Honorable Lamar Smith, Chairman
House Committee on Science, Space and Technology
2321 Rayburn House Office Building
Washington, DC 20515

Dear Chairman Smith:

I am writing to offer my strong support for the principles contained in H.R. 4012, the Secret Science Reform Act. This important legislation is directed at what should be a core tenet of the U.S. Environmental Protection Agency – all of the Agency's regulations and actions should be grounded in sound science that is transparent and reproducible. My strong support for the legislation is based on my personal knowledge of the Agency's development and promulgation of the National Ambient Air Quality Standards (NAAQS), knowledge I gained as Chair of the EPA's Clean Air Scientific Advisory Committee (CASAC) and service on numerous CASAC Panels dealing with all six criteria pollutants.

I consider myself a student of the Clean Air Act and the role of the NAAQS in improving air quality in the United States. It is vitally important that the NAAQS be based on sound science informing the Administrator's policy judgments. The attached figure illustrates the regulatory pyramid used to promulgate the NAAQS. The base of that pyramid is Sound Science that should be presented in a transparent manner and reproducible. If the science has not been presented in a transparent manner and is not reproducible, there is a high probability that the policy judgments made by the Administrator will be arbitrary and capricious. The result may be flawed NAAQS that fail to deliver the intended public health benefits. In short, the NAAQS regulatory pyramid must have a solid scientific foundation.

Transparent and reproducible science is multi-faceted. It requires that large and complex data sets that frequently cost tens of millions of dollars to assemble are shared with other responsible scientists to (a) reproduce the original findings, and (b) perform alternative analyses. The methods and models used in the analyses must also be shared. Technical and statistical approaches are available today to achieve these objectives while protecting confidential personal data on individual subjects.

I have had 40 years of experience serving on CASAC Panels, including 4 years as CASAC Chair, advising on the science under-girding the Administrator's policy judgments in setting NAAQS. On numerous occasions, the results from a single data set analyzed by a single group of investigators played a central role in the advice offered to the Administrator. In my opinion, there is a high likelihood different scientific findings and conclusions would have emerged if another group had analyzed the same data. I say that because in the few instances where the same data set has been analyzed by multiple teams, new and different results have emerged.

As you know, the regulations developed by the EPA under the CAA have extraordinarily large potential impact on human health and the U.S. economy. The potential impact is even greater with EPA's involvement in climate change. In reviewing the EPA's "Regulatory Impact Analysis for the Proposed Carbon Pollution Guidelines for Existing Power Plants and Emission Standards for Modified and Reconstructed Power Plants," I noted how a few papers reporting results that had not been replicated had enormous impact. This is exactly what was observed in setting some of the NAAQS. Indeed, some of the papers whose results have not been adequately replicated have been used over and over to support multiple regulations.

The changes in scientific practices called for in HR 4012 are long overdue. It is unfortunate that legislative remedies are required for development of a common sense approach the Agency should have initiated long ago.

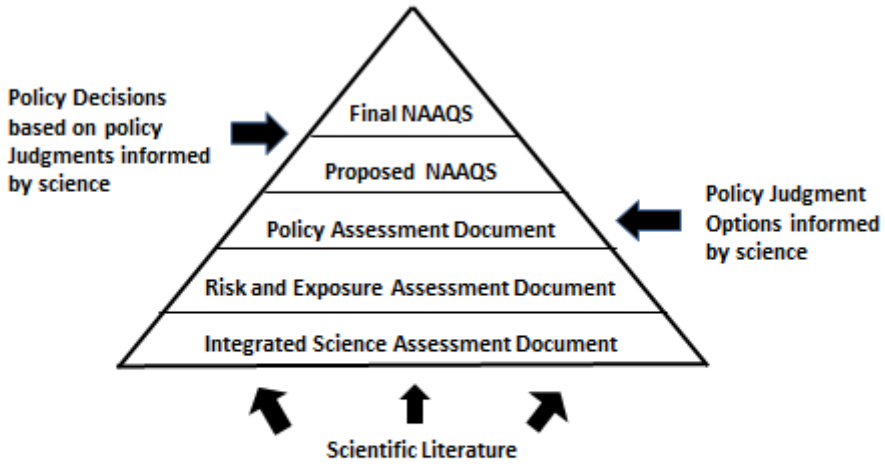
I urge passage of this legislation and, indeed, hope for volunteer action by the Agency in advance of passage of the legislation.

Respectfully,

Roger O. McClellan
Former Chair, EPA Clean Air Scientific Advisory Committee
Member, Institute of Medicine of the National Academy of Science

Attachment: Role of Science and Policy Judgments in Setting National Ambient Air Quality Standards

cc: Eddie Bernice Johnson, Ranking Member
House Committee on Science, Space and Technology



Role of Science and Policy Judgments in Setting National Ambient Air Quality Standards