EPN Comments on the List of Candidates for the
Environmental Protection Agency's Clean Air Scientific Advisory Committee (CASAC)

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The [Environmental Protection Network](#) (EPN) is an organization of almost 550 U.S. Environmental Protection Agency (EPA) alumni volunteering their time to protect the integrity of EPA, human health, and the environment. These comments reflect EPN members with extensive experience with National Ambient Air Quality Standards (NAAQS) reviews and working with CASAC and pollutant-specific expert panels.

Overview:
EPN's comments discuss important factors that EPA should consider in the selection of the seven-member CASAC committee. High-quality, independent science reviews are essential for EPA to protect human health and the environment and for restoring the scientific credibility of the agency. Given the complexities and multidisciplinary attributes of all criteria pollutant reviews, we also stress the critical need to reinstate the use of pollutant-specific expert panels to advise the CASAC in all NAAQS reviews.

Comments:
Section 109 of the Clean Air Act specifies that CASAC consist of seven members with at least one each of the following three categories: a member of the National Academy of Sciences, a physician, and a person representing State air pollution control agencies. This committee is required to conduct periodic reviews of the scientific criteria supporting NAAQS as well as the standards themselves, making recommendations to the Administrator on new or revised standards. These core duties, as well as additional requirements for the committee in section 109, clearly indicate that all members must have strong scientific and technical credentials in the most critical disciplines that drive such NAAQS reviews.

In calling for nominations, the Science Advisory Board (SAB) staff called for experts in nine disciplines: air quality, biostatistics, ecology, environmental engineering, epidemiology, exposure assessment, medicine, risk assessment, and toxicology. EPA's call is consistent with the emphasis that most NAAQS reviews have given to assessing critical areas of science in setting primary standards. In addition, it makes clear that not all disciplines that are important in reviews of primary and secondary NAAQS can be represented on the seven-member CASAC.

The numerous and obvious deficiencies in the recent reviews of the particulate matter and ozone standards, with respect to significant gaps in expertise and changes in process, illustrate the need to restore the review process consistent with previous well-tested and validated practices. The highest priority should be placed on reinstating the use of pollutant-specific expert panels for all NAAQS reviews. For decades, these panels have successfully worked closely with CASAC to provide needed scientific expertise for the standards under review, as well as a broader set of perspectives on the science and standards. While the specific expertise needed on such panels will vary by pollutant, in general, they should include criteria used to select CASAC members. Consistent with well-established and validated past practices, the review of conflicts of interest for new members should be restored to the priority that it has been traditionally given. The recent restriction on

qualified academic researchers in favor of consultants and government employees was unwise, illegal, and significantly compromised the credibility of subsequent reviews.

While EPN is not recommending specific candidates from the list of 100 applicants, we do propose the following criteria EPA should consider in selecting CASAC members as well as members of the pollutant-specific panels. These include:

1) **Strong scientific expertise and experience** - thereby ensuring that only the best scientists from academia, industry, and the private sector are rigorously vetted for conflicts of interest.

2) **Specific expertise needs for CASAC** - Based on our experience in NAAQS reviews, we see a particular need that the committee itself include expertise in epidemiology, human clinical studies, statistics, toxicology, air quality (modeling, exposure, monitoring), and ecology. Individuals with significant experience in more than one discipline, e.g., epidemiology and human clinical studies, are of particular interest.

3) **Continuity and efficiency of operation** - To restore continuity and efficient operation of a new CASAC, it is important to include individuals from CASAC and/or pollutant panels over the last decade who are familiar with the process, including interaction between the committee and the panel. Equally important is to include an individual with proven leadership skills to lead the panel. Among candidates not familiar with the CASAC process, preference should be given to those who have previously served on multidisciplinary committees involved in developing a scientific consensus on issues pertinent to a decision by a federal, state, or local governmental entity.

4) **Diversity** - The planned reconstituted committee provides a unique opportunity to address gender and racial diversity in selecting new CASAC members. EPA should also consider that the generally much larger group of experts in each of the pollutant-specific panels provide a significant opportunity to address this need.

In examining the list of 100 candidates, we see a number of highly qualified candidates with the expertise, leadership, credibility, and experience needed to ensure continuity and high-quality credible reviews and recommendations required of the CASAC. EPA will, however, need to consider additional candidates to provide the breadth of expertise, experience, perspectives, and diversity needed for pollutant-specific panels to support upcoming NAAQS reviews.

Thank you for the opportunity to provide these comments.

Comments submitted on behalf of EPN and prepared by EPN members John Bachmann (former Associate Director for Science/Policy and New Programs, EPA Office of Air Quality Planning and Standards), Dan Costa (former National Program Director, Air, Climate, and Energy Research Program, EPA Office of Research and Development), Bernard Goldstein (former Chair, EPA Clean Air Scientific Advisory Committee and Assistant Administrator, EPA Office of Research and Development), and Chris Zarba (former Director, EPA Science Advisory Board).