**EPN Comments on the List of Candidates for the
Environmental Protection Agency's Clean Air Scientific Advisory Committee Particulate
Matter Review Panel**

August 19, 2021

The Environmental Protection Network (EPN) is an organization of more than 550 U.S. Environmental Protection Agency (EPA) alumni volunteering their time and expertise to protect the integrity of EPA, human health, and the environment. These comments include the perspective of EPN members with extensive experience with National Ambient Air Quality Standards (NAAQS) reviews and working with the Clean Air Scientific Advisory Committee (CASAC) and pollutant-specific expert panels.

Overview:

A high-quality, independent science update and review of the recent scientific information on the health and welfare effects of particulate matter (PM) by CASAC, supported by experts in multiple disciplines, are essential for EPA to meet its mission to protect human health and the environment, as well as to restore the scientific credibility of the agency. As a result of the widely acknowledged inadequacy of the PM review concluded in December 2020, EPN agrees with EPA's decision that a timely update of the review of the PM standards is a priority. EPN's comments recommend important factors EPA should consider in the selection of the CASAC PM Review Panel.

Comments:

We applaud the Administrator's decision to conduct a timely update of the science and the PM standards and to reinstate the PM expert review panel to support the CASAC. As noted in EPN's previous comments on the list of candidates for the CASAC submitted to EPA on May 29, 2021, the PM and ozone reviews concluded in 2020 were compromised by numerous and obvious deficiencies, with significant gaps in expertise and groundless changes in process. Moreover, the public health implications of ignoring the most recent science on the health effects of PM are enormous. We commend the restored process and the criteria used in selecting the charter members of the CASAC. This select group meets the key criteria EPN recommended in our May comments, including strong scientific expertise and experience, an emphasis on disciplines most important in past NAAQS reviews, including experts familiar with the process, as well as increased gender and racial diversity.

As in our comments on selecting CASAC members, EPN is not recommending specific candidates for the PM panel from the list of 75 candidates. Our comments focus on criteria, priorities, and emphasis that we believe EPA should consider in selecting members. Several of these recommendations overlap with those we provided previously for both the CASAC and pollutant panels.

1) **Maintain the traditional distinction between CASAC members and the PM pane**l. All

seven CASAC members were included among the panel candidates. We understand that this was done so that the public could take their expertise into account in evaluating prospective PM panel members, but that may not have been clear to some commenters. As EPA recognizes, pollutant panels traditionally have served to expand the expertise and perspectives available to support the CASAC in conducting its reviews and recommendations.

2) **Scientific expertise and experience.** Consistent with CASAC's long history (excluding the recent past) that only the best scientists from academia, industry, and the private sector are rigorously vetted for conflicts of interest.

3) **Specific expertise needed.** We strongly agree that experts in *all* of the disciplines identified by the Science Advisory Board (SAB) staff will be needed in reviewing updates to the science and policy documents that were completed last December and January. We recommend inclusion of some expert candidates who followed that review closely. Because this review will focus on consideration of relevant peer-reviewed studies published since these documents were mostly "closed" to new studies in early 2018, it is important that experts selected for the panel also include individuals familiar with most recent literature relevant to studies addressing particle pollution in each of the critical disciplines. In reviews before the most recent one, both CASAC and panel members played important roles in recommending studies that had not been included in draft science documents. Selecting individuals with significant experience in more than one discipline, e.g., epidemiology *and* risk assessment, is of particular importance.

4) **Continuity and efficiency of operation.** To restore continuity and efficient operation of the new CASAC in this review, it is important that the PM panel include some individuals with experience working on the CASAC or PM panels over the last decade, ensuring familiarity with the process. Among candidates not familiar with the CASAC and PM panel process, preference should be given to those who have previously served on multidisciplinary committees involved in developing a scientific consensus on issues pertinent to decisions by federal, state, or local governmental entities.

5) **Diversity**. The recent selection of the reconstituted CASAC provided a unique opportunity to address gender and racial diversity in selecting new members. The generally much larger group of experts in each of the pollutant-specific panels also provide a significant opportunity for EPA to address this need.

We agree that in considering the candidates, it is important to begin by assessing the needed strengths of the CASAC for the updated review of the PM standards. CASAC members and members of the Independent PM Research Panel who closely followed the review ending in 2020 had expertise in epidemiology, biostatistics, controlled human studies, exposure, air quality, and air quality modeling and monitoring. However, they had only limited or no expertise in the remaining areas SAB staff listed, including toxicology, risk assessment/modeling, visibility impairment, and air quality and climate. The list contains a number of qualified expert candidates in each of these areas. We recommend that EPA focus on candidates in the fields of toxicology, risk assessment, and climate who have experience in assessing ambient PM.

In filling these obvious gaps, it is also appropriate to provide additional experts in areas represented

on CASAC. We are aware of the significant growth of innovative approaches, including advances in the use of causal inference in recently published epidemiology studies of air pollution, including PM. These recent studies will be a major focus in this review. The candidates list includes some strong experts in causal inference and alternative approaches to epidemiology study design and measuring exposure. These include experts in biostatistics, epidemiology, and exposure assessment/atmospheric modeling. Some studies have begun to emphasize the disparity in exposures and health effects for minority groups. Several of the candidates have done work in environmental justice, and it is important that this perspective be represented in the review.

In summary, EPN is in strong support of EPA's efforts to ensure the highest quality independent reviews and sees a number of highly qualified candidates for the CASAC PM panel that can provide the breadth of expertise, experience, perspectives, and diversity needed to assist the CASAC in its upcoming PM NAAQS review.

Again, we 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), Penny Fenner-Crisp (former Deputy Office Director and Senior Science Advisor, EPA Office of Pesticide Programs), and Chris Zarba (former Director, EPA Science Advisory Board).