

**U.S. EPA Office of Research and Development
Charge to the Board of Scientific Counselors (BOSC)
Subcommittee for the Air and Energy Research Program
Virtual Meeting on February 17 – 19, 2021**

Introduction: The mission of the EPA Office of Research and Development (ORD) is to provide the best available science and technology to inform and support public health and environmental decision making at federal, state, tribal, and local levels. Having incorporated BOSC recommendations into the planning phase for ORD's Air and Energy (A-E) national research program, ORD is now seeking BOSC input focused on implementation of the research portfolio.

The A-E research program includes nine research areas (RAs) which will be addressed over two A-E BOSC Subcommittee meetings in 2021. Each BOSC meeting will focus on specific themes and emphasize different elements of the A-E portfolio to illustrate core capabilities and innovative thinking to address critical partner research needs. By the end of this cycle, the A-E BOSC Subcommittee will have been provided an implementation overview of all nine A-E RAs and more in-depth information on a selected set of research deliverables (products and outputs). To illustrate A-E's integrated and partner-oriented approach, which often includes working across the entire A-E research portfolio, information will be provided at the February 2021 BOSC Subcommittee meeting on two particularly challenging areas of focus:

- i. Informing the development, review, and attainment of **national ambient air quality standards (NAAQS)** and
- i. Understanding the health and ecological impacts of **wildland fires** to inform strategies aimed at decreasing negative impacts.

Throughout the meeting, information will be shared on efforts to better address environmental justice issues and to engage most effectively with those interested in the A-E research results. The meeting format will include an introduction to the scientific challenges, examples of work within the ORD Research Centers to address these challenges, and an opportunity to interact with some of the scientists leading specific research activities.

Charge Questions:

Q1: ORD is pursuing a coordinated approach across disciplines and among partners to prepare the science necessary to support the development, periodic review, and attainment of the national ambient air quality standards (**NAAQS**). What suggestion(s) or recommendation(s) does the Subcommittee offer regarding progress to date of research activities to develop measurement and modeling methods and strategies to reduce concentrations of criteria air pollutants? [RA1, RA2, RA7]

Q2: Reviews of the **NAAQS** rely on understanding exposures and associated effects and impacts to human health and the environment, including identification of at-risk populations and lifestyles. What suggestion(s) or recommendation(s) does the Subcommittee offer on how to enhance implementation of the research portfolio to optimize health and environmental benefits, particularly regarding the identification and characterization of exposures and responses in at-risk groups? [RA3, RA8]

Q3: Recent increases in **wildland fires** activity have highlighted the challenges associated with protecting public health and environmental quality during these events. The A-E program is working to improve understanding of wildland fire impacts and to develop knowledge and tools to inform strategies aimed at decreasing negative effects. What suggestion(s) or recommendation(s) does the Subcommittee offer on the progress of the research aimed at identifying and mitigating the health and environmental impacts of wildfires? [RA2, RA3, RA7, RA8, RA9]