



EPA's 'Back-to-Basics'

Process for Review of the National Ambient Air Quality Standards

A primer of EPA's process for reviewing the National Ambient Air Quality Standards.

Consistent with the Administration's commitment to regulatory reform, cooperative federalism, and domestic manufacturing, the U.S. Environmental Protection Agency (EPA) is working to review and reform the National Ambient Air Quality Standards (NAAQS) program of the U.S. Clean Air Act (CAA). These efforts include a focus on getting "back-to-basics" for NAAQS setting, designations, and implementation. The United States has experienced tremendous progress in reducing the emission of criteria pollutants and their precursors. Still, challenges remain, both in implementing a number of increasingly stringent NAAQS and in undertaking several upcoming NAAQS reviews. This presents the agency with a unique opportunity, given the direction it has received from the President, to make meaningful changes to the program that, while consistent with EPA's responsibility under the CAA to support public health and the environment, will also ensure a timely, efficient, and transparent process that both respects state agency resources and facilitates robust economic activity.

Background

As readers of *EM* likely know, EPA sets primary and secondary NAAQS for criteria air pollutants that include ozone, nitrogen dioxide, sulfur dioxide, coarse and fine particulate matter, carbon monoxide, and lead. Primary NAAQS are set, based on the judgment of the EPA Administrator and allowing for an adequate margin of safety, at a level to protect the public health. Secondary NAAQS are set at a level to protect the public welfare, which may include effects on soils, water, crops, vegetation, and visibility from the presence of the pollutant in the ambient air. These standards are to reflect the best current scientific information. Under the CAA, EPA is required to review each NAAQS every five years. However, EPA has often failed to do so, sometimes taking twice that amount of time before finalizing a review and any accompanying revision. These delays result in uncertainty as

well as lost opportunities for implementing the NAAQS to protect health and the environment in a manner compatible with a vibrant U.S. economy.

In setting the NAAQS, the EPA Administrator receives advice from a critical federal advisory committee established by the CAA, the Clean Air Scientific Advisory Committee (CASAC). EPA staff in the Offices of Research and Development and Air and Radiation develop a comprehensive scientific and technical assessment, which CASAC then reviews in the process of providing advice to the Administrator. Having received this expert advice, EPA publishes a notice of proposed rulemaking and solicits public comment on the Administrator's proposal. After taking into consideration all of the significant public comments received, the Administrator reaches a final decision and issues a final rule either to maintain the current NAAQS or to set a revised standard. Where EPA sets a new NAAQS or revises an existing standard, then the Agency is required within two years, after taking into consideration the recommendations of governors, to designate areas as either attaining or not attaining the standard.

Each NAAQS revision requires significant new planning and permitting for states and regulated entities. In particular, a nonattainment designation can create challenges for the construction or expansion of industrial facilities. Under the NAAQS program, EPA and states cooperate as co-regulators to carry out the CAA's mission of protecting human health and the environment. Implementation of the standards must be accomplished in a manner that is both consistent with the principles of cooperative federalism and which also complies with statutory requirements.

Back-to-Basics

In April 2018, the President issued a memorandum, Promoting Domestic Manufacturing and Job Creation –



The themes of timeliness, cooperative federalism, and recognition of international and background sources of pollution are critical issues EPA is directed to address to ensure states can successfully implement the standards.

Table 1. April 2018 Presidential Memorandum Topics

Timely Processing of State Implementation Plans
Cooperative Engagement with States to Review Regional Haze Plans
Timely Processing of Preconstruction Permit Applications
Demonstrations or Petitions Submitted Pursuant to Sections 319 and 179B of the CAA Relating to Emissions Beyond the Control of State and Local Air Agencies
Monitoring and Modeling Data
Offsets
Future NAAQS Reviews
Timely Issuance of Implementing Regulations and Guidance
Review of Rules, Guidance, Memoranda, and Procedures Relating to State Implementation Plans and Permitting

Policies and Procedures Relating to Implementation of Air Quality Standards (<https://www.gpo.gov/fdsys/pkg/DCPD-201800239/pdf/DCPD-201800239.pdf>). This memorandum set forth nine primary directives intended to ensure EPA's efficient and cost-effective implementation of air quality standards under the NAAQS and regional haze programs. These directives are outlined in Table 1. The themes of timeliness, cooperative federalism, and recognition of international and background sources of pollution are critical issues the Agency is directed to address to ensure states can successfully implement the standards.

To advance the initiatives set out in the presidential memorandum, EPA has issued its own memorandum, Back-to-Basics Process for Reviewing National Ambient Air Quality Standards, (<https://www.epa.gov/sites/production/files/2018-05/documents/image2018-05-09-173219.pdf>) In May 2018. EPA's memorandum directs the agency and its independent science advisors to follow five principles for a transparent, timely, and efficient process in reviewing and revising future public health- and welfare-based NAAQS.

Principle 1: Meet Statutory Deadlines

As noted above, EPA routinely fails to meet the CAA requirements to review each NAAQS every five years. These delays result in uncertainty as well as lost opportunities for implementing the NAAQS to protect health and the environment in a manner compatible with a growing American economy. EPA and CASAC are encouraged to look for efficiencies and opportunities to streamline the NAAQS review process to ensure that it is completed within the statutorily-mandated five-year period. EPA's Back-to-Basics memorandum also directs the agency and CASAC to ensure that any potential revisions

to the NAAQS for ozone or particulate matter, last set in 2015 and 2012 respectively, be finalized by late 2020.

Principle 2: Address CAA Provisions for NAAQS Reviews

While the CAA clearly identifies the roles and responsibilities of CASAC in providing important advice in the review of air quality criteria, EPA has frequently failed to request that the committee provide advice with respect to all of the CASAC duties to which the statute specifically speaks. For example, Section 109(d)(2)(C) requires CASAC to advise the Administrator on the "relative contribution to air pollution concentrations of natural as well as anthropogenic activity," as well as "any adverse public health, welfare, social, economic, or energy effects which may result from various strategies for attainment and maintenance of such" NAAQS. To address these past failures, EPA intends to provide CASAC with a standardized set of key charge questions so that the entirety of the NAAQS review process is properly framed. While certain of these charge questions may elicit information which is outside the scope of the Administrator's standard-setting authority itself, such information, by providing important contextual insights, should nevertheless prove valuable to the public, co-regulators, EPA, and other policymakers.

Principle 3: Streamline and Standardize the Process for Development and Review of Key Policy-Relevant Information

CASAC has frequently identified reducing the length and complexity of the scientific assessments as a key process improvement for streamlining NAAQS reviews and ensuring the Agency adheres to the statutory deadlines. To help bridge the gap between the scientific assessments and the

judgments required of the Administrator, the memorandum recommends incorporating policy-relevant science earlier into the review process. EPA is also directed to ensure that the initial drafts of all technical and policy assessments are high quality and ready for robust review from CASAC and the public.

Principle 4: Differentiate Science and Policy Considerations in NAAQS Review Process

The Back-to-Basics memo directs EPA to establish a clearer distinction between its scientific findings (contained in the Integrated Science Assessment) and the wider range of policy concerns that the Administrator may consider in judgments about the level of the NAAQS. CASAC and EPA should seek to find consensus, but should allow for individual advisors to share their individual perspectives.'

Principle 5: Issue Timely Implementation Regulations and Guidance

When a NAAQS is revised, EPA should strive for expedition in the release of implementation tools for co-regulators, including regulations, guidance, and technical information to assist state agencies in developing approvable plans. In the past, EPA implementation regulations and guidance have often trailed NAAQS revisions by years, which may hinder co-regulators from completing the required steps to administer the NAAQS at the state level. Failure to issue timely implementation regulations and guidance may contribute to nonattainment areas not attaining the NAAQS as quickly as practicable, as well as to the misallocation of state planning resources.

Flexibilities

Based on requirements in the CAA and the President's April 2018 memorandum, EPA has also committed to a number of important milestones in implementing NAAQS collaboratively

with the states. Many of these critical measures have been incorporated in the agency's FY2018–FY2022 strategic plan, as well as other EPA priority documents. These efforts include:

- As an agency priority goal, reducing the number of NAAQS nonattainment areas, including a 20-per cent reduction in these areas in the next few years.
- Addressing the backlog in state implementation plan revision submissions, which the CAA directs EPA to act upon within 18 months of submission.
- Pursuant to Section 319B of the CAA, releasing and communicating a number of tools related to the exclusion of air quality data exceeding the NAAQS when such data result from "exceptional events" outside the control of state, local, or tribal air agencies. Since 2016, EPA has acted upon more than 20 "exceptional event" demonstrations, nearly all of which concurred with state recommendations and thus provided the state with regulatory relief.
- Maximizing states' flexibility to use other tools enabling regulatory relief for appropriate reasons, including CAA provisions to address emissions caused by international sources.
- Working closely with states to facilitate the submission of "Good Neighbor" state implementation plans for the 2015 ozone NAAQS. Under Section 110 of the CAA, states must address in their plans emissions that contribute significantly to nonattainment or interfere with maintenance of the NAAQS in other states.
- Revisiting aspects of the previous Administration's regional haze rule, including identifying flexibilities and technical tools for state plans due in 2021.
- Simplifying the New Source Review process and, by October 2019, reducing by 50 percent the number of permitting-related decisions that exceed six months. **em**

Alexander Dominguez is a Policy Analyst, and **Clint Woods** is Deputy Assistant Administrator, both with the U.S. Environmental Protection Agency's Office of Air and Radiation.