

UPDATES ON AIR QUALITY PLANNING ACTIVITIES

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Briefing – Overview: EPA Actions

- Affordable Clean Energy Rule
- Considering Benefits and Costs in Rule Making Process
- Science Transparency Rule
- National Standards for Particulate Matter (PM)
- National Standards for Ozone
 - Region's Status

ACE Rule - Background

- June 19, 2019 - EPA issued the *Affordable Clean Energy* rule (ACE)
- The rule was an effort to provide existing coal-fired electric utility generating units (EGUs) with achievable and realistic standards for reducing greenhouse gas (GHG) emissions.
- As part of this rule, EPA repealed the Clean Power Plan (CPP) for reducing GHG emissions from existing EGUs.
- The major difference in the two plans is that while CPP allowed power generation shifting from higher emitting plants (e.g, coal fired) to lower emitting ones (e.g, natural gas fired) and zero emitting ones (renewable energy based), ACE rule prevented this approach for emission reduction and instead only allowed emission reduction at individual plants using measures such as, retrofits or add-ons.

Court Decision

- January 19, 2021 - The U.S. Court of Appeals for the DC Circuit vacated EPA's ACE Rule and associated implementation timeline.
- ACE Rule and its embedded repeal of the CPP hinged on a fundamental misconstruction of Section 111(d) of the Clean Air Act.
- EPA misinterpreted that the statutory text in the above section expressly foreclosed consideration of GHG reduction measures other than those that apply at and to individual power plants.
- While developing ACE, EPA did not consider more cost-effective measures such as, power generation using the cleanest sources that plants have already adopted and that have been demonstrated to work. Instead, it only chose add-ons or retrofits confined to the level of the individual fossil-fuel-fired power plant.

Benefit-Cost Analysis Rule - Introduction

- December 9, 2020 - EPA announced the final Benefit-Cost Analysis (BCA) rule.
- According to EPA, this rule will:
 - Ensure a consistent approach to the EPA's BCA
 - Provide transparency by requiring the generation of relevant information in all significant rulemakings.
 - Provide clarity for states, local communities, industry, and other stakeholders regarding EPA's rulemaking considerations.
 - Ensure all future significant regulations are accompanied by a transparent BCA using the best available information and practices from the economic, engineering, physical, and biological sciences.

Rule Requirements & Executive Order

Three main requirements:

1. EPA will prepare a BCA for all future significant proposed and final regulations under the CAA. Significant regulations will include those with the largest annual impact on the economy (over \$100 million); those that would disproportionately affect an industry, group, or area; or those that are novel or relevant for other policy reasons.
2. BCAs must use “best practices” in economic, engineering, physical and biological sciences. BCAs must make underlying data available to the public to the extent permitted by law.
3. Separate “benefits” from “co-benefits”. BCAs should separately report the public health and welfare benefits attributable to the specific pollution-reduction or other objectives under which the rule is promulgated.

STATUS: An Executive Order issued by the current Administration asked EPA to review this rule by July 2021.

Science Transparency Rule - Introduction

- December 30, 2020 - EPA finalized a rule called “*Strengthening Transparency in Pivotal Science Underlying Significant Regulatory Actions and Influential Scientific Information*”.
- Rule establishes how EPA will consider the availability of underlying dose-response data that it relies upon to promulgate significant regulatory actions and develop influential scientific information.

Transparency Rule Requirements

Four Main Requirements:

1. Determination of studies that constitute pivotal science

EPA needs to determine which studies constitute pivotal science.

EPA needs to give greater consideration to those studies where the underlying dose-response data are available in a manner sufficient for independent validation.

For studies where no underlying dose-response data is publicly available, EPA will consider additional factors when determining the level of consideration to give those studies.

EPA intends to identify such studies in the documentation at the proposed rule stage for significant regulatory actions and when influential scientific information is disseminated for peer review.

Transparency Rule Requirements

2. Identifying All Science Informing Significant Regulatory Actions

EPA needs to identify and make available all science that serves as the basis for informing a significant regulatory action to the extent permitted by law.

3. Requirements for Independent Peer Review of Pivotal Science

If the individual studies identified as pivotal science have already undergone journal peer review, EPA is not required to conduct a second review. However, the Agency can evaluate whether or not to initiate additional peer review, consistent with the OMB Bulletin for Peer Review and EPA Peer Review Manual.

Transparency Rule & Court Decision

4. Administrator Exemptions to Rule

The final rule includes criteria for the Administrator to consider when granting case-by-case exemptions to the requirements of this rule.

If an exemption is granted, EPA is required to document the rationale for granting that exemption.

STATUS: The U.S. District Court for the District of Montana vacated the rule on February 1, 2021.

Final Rule - PM NAAQS

- December 18, 2020 - EPA finalized its decision to retain the current National Ambient Air Quality Standard (NAAQS) for particulate matter (PM) without revision.
- Decision to retain the current standards applies to the primary and secondary NAAQS for PM_{2.5} and PM₁₀.
- Annual primary PM_{2.5} standard – 12 µg/m³
- Annual secondary PM_{2.5} standard – 15 µg/m³
- 24-hour primary and secondary PM_{2.5} standards – 35 µg/m³
- Primary PM_{2.5} standards - Decision not in line with recommendations made by EPA staff and a minority of current CASAC members though it is consistent with the majority of current CASAC members.

STATUS: An Executive Order issued by the current Administration asked EPA to review this rule by July 2021. 17 states and New York City filed lawsuit against this rule.



Final Rule - OZONE NAAQS

- December 31, 2020 - EPA finalized its decision to retain the current primary and secondary NAAQSs (70 ppb) for ozone without revision.
- EPA also retained the form (3-year average of the annual 4th-highest daily maximum 8-hour average ozone concentrations) of the NAAQS.
- With regard to the primary standard, while one part of CASAC concluded that the primary standard should be retained, another part expressed support for a lower standard.
- With regard to the secondary standard, all CASAC members agreed that the current evidence supported retaining the current standard without revision.

STATUS: An Executive Order issued by the current Administration asked EPA to review this rule by July 2021. Environmental groups, 15 states, and 2 cities have filed lawsuits against this rule.



2015 Ozone Standards: Region's status

Background

- EPA designated the Washington region as a Marginal nonattainment (NAA) area for the 2015 ozone NAAQS (70 parts per billion, ppb) on August 3, 2018.
- The Washington region was expected to attain by August 3, 2021 (Based on data for the full ozone season periods of 2018 through 2020).
- Based on the draft design value¹ for 2018-2020 (71 ppb), the region did not attain the NAAQS. Having missed the attainment deadline, the region now has to decide on the next course of action.

¹ Design Value = Parameter used to evaluate attainment is based on three consecutive years of data.

Potential Ozone Planning Options

1. Voluntary Reclassification (Bump Up)

Region voluntarily requests for a reclassification (bump up), EPA will bump it up to a Moderate ozone NAA.

Implications

- This will extend the attainment date to August 3, 2024 (attainment to be based on 2021-2023 data).
- Moderate ozone nonattainment area requirements including submittal of applicable SIPs would apply immediately.
 - a) Demonstration of 15% Reasonable Further Progress(RFP) VOC/NOx emission reduction over 6 years (likely between 2017-2023) - Due likely January 2023

Potential Ozone Planning Options

- b) Attainment Demonstration SIP for the current ozone NAAQS by 2023 -
Due likely January 2023
 - Emissions inventory for attainment year 2023
 - Reasonably Available Control Measures (RACM) - Enforceable emission limits & other control measures, means, and techniques as needed that may also include emission sources outside of nonattainment area that are within state's jurisdiction
 - Mobile and stationary source controls (as needed)
 - Contingency measures for failure to attain
 - New 2023 MVEBs based on the latest available mobile model version (Will replace the current MVEBs developed for 2008 ozone NAAQS)
- c) Reasonably Available Control Technology (RACT) SIP for Major/CTG sources (To be submitted by OTR states by August 3, 2020)
- d) Nonattainment New Source Review SIP (Due by August 3, 2021)

Potential Ozone Planning Options

2. Request 1-Year Extension

This will extend the attainment date to August 3, 2022 (attainment DV to based on 2019-2021 data) and will not trigger requirements to submit SIPs.

Implications

- If the region, hoping to attain, waits till end of 2021 to start developing SIPs for the Moderate ozone NAA and fails to attain, it will have a relatively short amount of time (about a year) left to develop and submit those SIPs (likely due by January 2023).
- Also, in the event of non-attainment, waiting for a formal EPA reclassification (likely after May 1, 2022) will not allow sufficient time to develop and submit SIPs (by January 2023).
- Advisable that region starts developing SIPs in 2021 even as it requests a 1-year extension of the attainment deadline. This will allow timely development and submittal of SIPs in case the region fails to attain by the extended deadline.

Potential Ozone Planning Options

3. No Regional Action

In this scenario, the region waits for an EPA action.

Implications

- In this scenario, EPA may reclassify the region to a Moderate ozone NAA any time after May 1, 2021 (states' deadline to submit QA/QC data).
- Depending on the timeline of EPA's action on reclassification, the region will likely have 1.5 years or less to submit SIPs (likely due January 2023).
- Therefore, it is advisable that the region starts developing SIPs in 2021. This will allow timely development and submittal of SIPs.

Can the EPA grant a one year extension?



Conclusion

- Regardless of whether the region opts for the voluntary bump-up, 1-year extension, or simply chooses not to take either of the two actions, it needs to start working on RFP and attainment demonstration SIPs as soon as possible given the limited time available to develop and submit them in case they are needed.
- This will ensure the region's ability to comply with federal requirements in a timely fashion.

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