

October 1, 2020

Andrew Wheeler, Administrator
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW
Washington, DC 20460

Attention: Docket ID No. EPA-HQ-OAR-2018-0279

Re: *Review of the Ozone National Ambient Air Quality Standards, Proposed Action*

Dear Administrator Wheeler:

The Northeast States for Coordinated Air Use Management (NESCAUM) offer the following comments on the proposed “Review of the Ozone National Ambient Air Quality Standards” (ozone NAAQS proposal) [85 Fed. Reg. 49830-49917 (August 14, 2020)].

NESCAUM is the regional association of air pollution control agencies representing Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island, and Vermont. Our member state agencies have the primary responsibility in their states for implementing clean air programs that achieve the public health and environmental protection goals of the federal Clean Air Act. Strong, evidence-based NAAQS are essential to the fulfillment of that mission.

The Clean Air Act requires EPA to promulgate primary NAAQS that protect public health with an “adequate margin of safety” and secondary NAAQS that “protect public welfare from any known or anticipated adverse effects” (Clean Air Act, 42 U.S.C. §7409(b)). Because a wide range of air quality programs are tied to those standards, failure to adopt adequate NAAQS significantly hampers states’ abilities to protect the health and welfare of their residents. A protective national standard is particularly essential for ozone because ambient levels of that pollutant are strongly influenced by interstate transport of ozone and its precursors. States cannot achieve clean air within their borders without national requirements that limit interstate impacts.

The “streamlined” process used by EPA to review the ozone NAAQS is not consistent with the Clean Air Act mandate that EPA conduct a “thorough review” of the “latest scientific knowledge useful in indicating the kind and extent of all identifiable effects on public health or welfare” at five year intervals (42 U.S.C. §7409(d)). Due to the new profoundly flawed accelerated review process, it is not possible to ascertain whether the ozone NAAQS proposal, which would maintain the ozone NAAQS unchanged, is appropriately protective of public health and welfare. Therefore, NESCAUM urges EPA to withdraw this proposed action and to conduct a robust review before re-proposing a NAAQS for that pollutant.

The comments below address the following issues:

1. The NAAQS review process was compromised by the imposition of a highly compressed schedule which limited opportunities for Clean Air Scientific Advisory Committee (CASAC) review and public comment and resulted in inappropriate mixing of science and policy.
2. The review process was further compromised by EPA's replacement of all members of the CASAC and its failure to form a supporting CASAC advisory panel of experts.
3. A robust review process is essential to ascertain whether the proposed ozone NAAQS provides adequate protection of public health and welfare, as mandated by the Clean Air Act.

1. The NAAQS review process was compromised by the imposition of a highly compressed schedule which limited opportunities for Clean Air Scientific Advisory Committee (CASAC) review and public comment and resulted in inappropriate mixing of science and policy.

A key principle of the NAAQS review process is that a solid scientific foundation must be established before policy issues are addressed. In NAAQS reviews, EPA produces a series of sequential documents, each designed to inform the following stages of the review. First, an Integrated Review Plan (IRP) is developed to identify policy-relevant science issues and set forth the schedule and process for the review. EPA then prepares an Integrated Science Assessment (ISA), which forms the scientific foundation for the assessment of whether the NAAQS sufficiently protect public health and welfare. The ISA informs the preparation of a Risk and Exposure Assessment (REA), which presents quantitative estimates of exposures and health risks under defined air quality scenarios. Subsequently, EPA prepares a Policy Assessment (PA), which summarizes information from the ISA and REA and provides the Administrator with options regarding the indicator, averaging time, statistical form, and numerical level (concentration) of the NAAQS.

Because these documents are sequential, EPA has historically provided opportunity for peer review by the statutorily established CASAC, as well as public comment, on drafts of each document. EPA would then revise the document to address issues raised in the comments and, if appropriate, submit a second draft to CASAC for further review prior to finalization. In some cases, a third review of an ISA document was necessary, because of the critical role that this document has in establishing the scientific underpinnings of policy decisions. This long-standing process allowed scientific issues to be vetted and resolved before policy recommendations were developed.

In May 2018, then EPA Administrator Scott Pruitt issued the "Back-to-Basics" memorandum, which outlines a framework for "streamlining" NAAQS reviews. In conformance with the directives in that memorandum, the draft IRP for the ozone NAAQS, which was issued in October 2018, presented an accelerated review schedule that allowed for only one draft of the

ISA, followed by the release of a combined REA and PA document. Despite this acceleration, the draft IRP acknowledged the importance of obtaining comments on the ISA from CASAC and the public before the PA was developed, stating the following:

The current [draft IRP] timeline projects release of a draft ISA for CASAC review and public comment in Spring 2019. In addition to informing any revisions to the ISA, that review step and the associated comments and advice from the CASAC and the public will also inform development of the draft PA. Comments and recommendations from the CASAC, and public comment, on the draft PA later in the Fall will then inform completion of the final PA, including its presentation of options appropriate for the Administrator to consider in this review of the O₃ NAAQS.¹ [Emphasis added]

However, the schedule in the final IRP, which was issued in August 2019, did not provide an opportunity for EPA to obtain even one set of CASAC/public comments on the ISA prior to preparation of the PA. Instead, the draft ISA and PA (which included a REA) were published on September 26, 2019 and November 1, 2019, respectively, and were reviewed concurrently by CASAC in the first week in December. This schedule precluded the critical need to identify and resolve pertinent scientific issues prior to the development of policy recommendations.

CASAC's report on its review of the draft PA acknowledges this process flaw, stating that:

The Draft Ozone PA depends on a Draft Ozone Integrated Science Assessment (ISA) that, as noted in the CASAC Report on the Draft Ozone ISA, does not provide a comprehensive, systematic assessment of the available science relevant to understanding the health impacts of changes in exposure to ozone, due largely to lack of a sufficiently comprehensive, systematic, accurate, and balanced review of relevant scientific literature; inadequate evidence and rationale for altered causal determinations; and a need for clearer discussion of causality and causal biological mechanisms and relevance to public health of the evidence presented.

...

The CASAC recommends that it be given an opportunity to review a second draft of the Ozone PA (with an updated Risk and Exposure Assessment) after the final ISA for ozone is released.²

CASAC was not afforded that opportunity. EPA issued a final ISA in April 2020 and a final PA in May 2020 without allowing CASAC or the public the opportunity to determine whether the issues with the ISA identified in CASAC's comments had been adequately addressed and the PA had appropriately considered that science.

¹ USEPA, Integrated Review Plan for the Review of the Ozone National Ambient Air Quality Standards, External Review Draft, October 2018, page 1-9, EPA-452/P-18-001. Available at:

<https://www.epa.gov/sites/production/files/2018-11/documents/o3-irp-draft-oct2018-forrelease-oct31-2018.pdf>.

²Letter from Louis Anthony Cox, Jr., CASAC Chair, to Andrew R. Wheeler, EPA Administrator, dated February 19, 2020, pp. 1-2. Available at:

[https://yosemite.epa.gov/sab/sabproduct.nsf/LookupWebProjectsCurrentCASAC/4713D217BC07103485258515006359BA/\\$File/EPA-CASAC-20-003.pdf](https://yosemite.epa.gov/sab/sabproduct.nsf/LookupWebProjectsCurrentCASAC/4713D217BC07103485258515006359BA/$File/EPA-CASAC-20-003.pdf).

By establishing policy without first resolving the underlying science, the process used to develop the ozone NAAQS proposal is in violation of the Clean Air Act requirements that NAAQS be based on a “thorough review” of the “latest scientific knowledge useful in indicating the kind and extent of all identifiable effects on public health or welfare” (42 U.S.C. §7409(d)).

2. The review process was further compromised by EPA’s replacement of all members of the CASAC and its failure to form a supporting CASAC advisory panel of experts.

The ozone NAAQS review process was further hampered by EPA actions that limited the depth and breadth of the expertise available to CASAC. EPA took the unprecedented action of replacing all seven of the charter members of the CASAC in a one year period preceding the review, rather than staggering appointments to provide committee continuity. This action led to substantial loss of experience, expertise, and institutional memory in the chartered CASAC.

Historically, CASAC members were selected according to the criteria identified in a 2003 report from EPA’s Science Advisory Board (SAB) entitled “*Implementation Plan for the New Structural Organization of the EPA Science Advisory Board.*” That document states that selection of appointees to the SAB and to EPA advisory committees, like CASAC, should “*tak(e) into account the needed (a) breadth and depth of experience and expertise; (b) balance of scientific perspectives; (c) continuity of knowledge and understanding of EPA missions and environmental programs; and (d) diversity factors, including, geographical areas and professional affiliations.*”³

However, in October 2017, then EPA Administrator Scott Pruitt issued a memorandum entitled, “*Strengthening and Improving Membership on EPA Federal Advisory Committees (FACs)*” that sets forth a different set of principles for identifying committee members, namely: (a) strengthen member participation; (b) increase state, tribal and local government participation; (c) enhance geographic diversity and (d) promote fresh perspectives.⁴

Although the purported objective of this memo is to “*strengthen and improve the composition of EPA’s FACs in ways that advance the Agency’s mission to protect public health and welfare,*” the result was just the opposite. The SAB report lists “*breadth and depth of experience and expertise*” as its first selection criterion, but the principles in the Pruitt memo do not even include a consideration of scientific qualifications. As a result, the replacement CASAC, which was appointed subsequent to the issuance of that memo, lacked expertise in several areas crucial to NAAQS reviews, including epidemiology.

³ USEPA Science Advisory Board (2003), “Implementation Plan for the New Structural Organization of the EPA Science Advisory Board,” page 8, EPA-SAB-04-002. Available at: [https://yosemite.epa.gov/sab/sabproduct.nsf/Web/ImplementReorgSAB/\\$File/sab04002.pdf](https://yosemite.epa.gov/sab/sabproduct.nsf/Web/ImplementReorgSAB/$File/sab04002.pdf).

⁴ Memo from E. Scott Pruitt, USEP Administrator dated October 31, 2017. Subject: Strengthening and Improving Membership on EPA Federal Advisory Committees. Available at: https://www.epa.gov/sites/production/files/2017-10/documents/final_draft_fac_memo-10.30.2017.pdf.

Further, the “*strengthen member independence*” principle in the Pruitt memo excludes non-governmental recipients of EPA grants, who are often the highly experienced researchers working on the cutting edge of critical disciplines, from committee membership. In April 2020, the U.S. Court of Appeals for the D.C. Circuit ruled against this directive, noting that:

EPA operates pursuant to multiple statutory mandates requiring that its decisions rest on various formulations of “the best available science.” 15 U.S.C. § 2625(h). And as EPA’s Peer Review Handbook explains, the agency’s prior policy—allowing EPA grantees to serve on advisory committees—existed, in part, to “ensure that the scientific and technical bases of its decisions ... are based upon the best current knowledge from science, engineering, and other domains of technical expertise; and ... are credible.”^[5] Even the Directive itself agrees that “it is in the public interest to select the most qualified, knowledgeable, and experienced candidates.”^[6] Yet the Directive nowhere confronts the possibility that excluding grant recipients—that is, individuals who EPA has independently deemed qualified enough to receive competitive funding—from advisory committees might exclude those very candidates.⁷

The “*promote fresh perspectives*” principle in the Pruitt memo was used as a justification for removing all of the charter CASAC members, in clear contradiction of the “*continuity of knowledge*” criterion espoused in the SAB guidance. Those members were largely replaced with less experienced candidates who lacked the breadth and depth of expertise of the previous CASAC. Note that although the memo excluded the participation of recipients of EPA grants, it did not exclude from membership candidates who have potential conflicts of interest due to their ties to regulated industries. In fact, some of the new appointees were industry consultants with established histories of questioning generally accepted relationships between air pollution exposures and health.

CASAC’s capacity to provide an expert review of the ozone NAAQS was further limited when EPA announced in October 2018 that a CASAC advisory panel would not be appointed to support CASAC’s evaluation of that standard. Historically, EPA has appointed approximately 20 additional scientists to an advisory panel to augment the expertise of the CASAC charter members. Advisory panels were composed of experts in a wide range of pertinent disciplines who could provide a wide range of perspectives on critical issues. Advisory panel member participation in deliberative meetings was critical to CASAC’s ability to comprehensively assess all aspects of the NAAQS review. EPA’s decision to not form a review panel for the ozone NAAQS denied the largely inexperienced CASAC charter members the depth and breadth of expertise that a panel of supporting scientists traditionally has provided.

⁵Citing USEPA Science and Technology Policy Council, Peer Review Handbook, 4th Edition (October 2015), page A-4. Available at: https://www.epa.gov/sites/production/files/2016-03/documents/epa_peer_review_handbook_4th_edition.pdf.

⁶Citing Memo from E. Scott Pruitt, USEPA Administrator, dated October 31, 2017. Subject: Strengthening and Improving Membership on EPA Federal Advisory Committees, page 1. Available at: https://www.epa.gov/sites/production/files/2017-10/documents/final_draft_fac_memo-10.30.2017.pdf.

⁷*Physicians for Social Responsibility, et al. v. Wheeler*, D.C. Circuit, No. 19-5104 (decided April 21, 2020). Available at: <https://law.justia.com/cases/federal/appellate-courts/cadc/19-5104/19-5104-2020-04-21.html>.

In a letter dated July 25, 2019, EPA notified CASAC of its intention to:

Create a pool of subject matter expert consultants that the seven-person chartered CASAC, through the chair, will draw from as needed to support its PM and ozone reviews. The consultants will make themselves available as requested to provide feedback on the scientific and technical aspects of science and policy assessments and related documents. ... Requests for feedback from these consultants should be submitted in writing through you, the CASAC's chair, and the CASAC's designated federal official.⁸

While the availability of a “*pool of subject matter expert consultants*” provided CASAC with access to some additional expertise, it was not in any way an adequate substitute for an advisory panel. The pool of consultants did not include experts in all critical areas. Further, unlike the former advisory panels, the pool of consultants was not tasked to review the EPA draft documents, but instead to only respond to specific questions submitted by the chartered CASAC members. Historically, CASAC panels deliberated along with the charter members, providing a forum for discussion among scientists who have a wide range of expertise and perspectives on an issue. Written responses to specific CASAC questions by a selected pool of experts did not allow for a similar exchange.

CASAC has acknowledged the inadequacy of this process. In CASAC's report on the draft ISA, Dr. Mark W. Frampton, a member of the charter committee commented that:

The CASAC review of this ISA is limited by important changes in the review process that were recently implemented. For this ozone review, the EPA has failed to appoint an expert panel to assist CASAC in the review, as has been done for previous ozone reviews. The same panel of 12 consultants that was available for the PM review was available to respond to written questions from CASAC. However, notably this panel did not include any individuals actively participating in ozone health effects research, and did not include expertise in human clinical studies, which are critically important in understanding ozone health effects. These consultants did not attend the public meetings on the ISA, and there was no opportunity for interactive discussion. The limited expertise available for this review has adversely impacted CASAC's ability to provide the best advice to the Administrator.⁹

The CASAC ISA review included the following recommendation:

On overarching process issues, the CASAC strongly recommends that the EPA consider restoring a traditional interactive discussion process in which the CASAC can interact directly with

⁸ Letter from USEPA Administrator Andrew Wheeler to CASAC Chair Louis Anthony Cox, Jr., dated July 25, 2019. Available at: [https://yosemite.epa.gov/sab/sabproduct.nsf/6CBCBBC3025E13B4852583D90047B352/\\$File/EPA-CASAC-19-002_Response.pdf](https://yosemite.epa.gov/sab/sabproduct.nsf/6CBCBBC3025E13B4852583D90047B352/$File/EPA-CASAC-19-002_Response.pdf).

⁹ Letter from Louis Anthony Cox, Jr., CASAC Chair, to Andrew R. Wheeler, EPA Administrator, dated February 18, 2020, p. 16. Available at: <https://yosemite.epa.gov/sab/sabproduct.nsf/LookupWebProjectsCurrentCASAC/6b29a4de74ff843985258485005f18ca!OpenDocument&TableRow=2.3#2>.

external expert panels, while also keeping the option of obtaining written responses from external experts to specific questions.¹⁰

The combined effect of EPA's actions to replace the entire chartered CASAC with largely inexperienced members who were selected to satisfy criteria that did not include a comprehensive array of scientific expertise and to not appoint an expert advisory panel effectively purged the CASAC of the institutional experience and essential expertise necessary to conduct a complete review of the complex issues associated with the review of the ozone NAAQS.

3. A robust review process is essential to ascertain whether the proposed ozone NAAQS provides adequate protection of public health and welfare, as mandated by the Clean Air Act.

In the absence of a credible review process, EPA has not provided sufficient basis for the proposed determination that the NAAQS for ozone should be retained unchanged. The protectiveness of the current primary standard was called into question by CASAC during the previous ozone NAAQS review and was again questioned in the current review.

In its review of EPA's 2014 "Second Draft Policy Assessment for the Review of the Ozone National Ambient Air Quality Standards," CASAC concluded that "there is adequate scientific evidence to recommend a range of levels for a revised primary ozone standard from 70 ppb to 60 ppb," stating that:

The CASAC advises that, based on the scientific evidence, a level of 70 ppb provides little margin of safety for the protection of public health, particularly for sensitive subpopulations. In this regard, our advice differs from that offered by EPA staff in the Second Draft PA. At 70 ppb, there is substantial scientific evidence of adverse effects as detailed in the charge question responses, including decrease in lung function, increase in respiratory symptoms, and increase in airway inflammation. Although a level of 70 ppb is more protective of public health than the current standard, it may not meet the statutory requirement to protect public health with an adequate margin of safety.¹¹

The 2020 ISA provides further support for significant health effects at levels below 70 ppb, stating that:

Recent studies support and expand upon the strong body of evidence, which has been accumulating over the last few decades, that short-term ozone exposure causes respiratory effects. The strongest evidence comes from controlled human exposure studies demonstrating ozone-induced decreases in lung function and inflammation in healthy, exercising adults at concentrations as low as 60 ppb after 6.6 hours of exposure. In addition, epidemiologic studies

¹⁰ Ibid, page 1.

¹¹ Letter from H. Christopher Frey, CASAC Chair, to Gina McCarthy, EPA Administrator, dated June 26, 2014, p. ii, <https://yosemite.epa.gov/sab/sabproduct.nsf/5EFA320CCAD326E885257D030071531C/%24File/EPA-CASAC-14-004+unsigned.pdf>.

continue to provide strong evidence that ozone is associated with respiratory effects, including asthma and COPD exacerbations, as well as hospital admissions and emergency department visits for respiratory diseases. The results from toxicological studies further characterize potential mechanistic pathways and provide continued support for the biological plausibility of ozone-induced respiratory effects.¹²

The current CASAC did not reach consensus on the protectiveness of the current primary ozone standard, largely due to different interpretations among members of the insufficiencies in the ISA. CASAC's report on the draft PA states the following:

The Draft Ozone PA depends on a Draft Ozone Integrated Science Assessment (ISA) that, as noted in the CASAC Report on the Draft Ozone ISA, does not provide a comprehensive, systematic assessment of the available science relevant to understanding the health impacts of changes in exposure to ozone, due largely to lack of a sufficiently comprehensive, systematic, accurate, and balanced review of relevant scientific literature; inadequate evidence and rationale for altered causal determinations; and a need for clearer discussion of causality and causal biological mechanisms and relevance to public health of the evidence presented. Given these limitations in the underlying science basis for policy recommendations, some CASAC members conclude that the Draft Ozone PA does not establish that new scientific evidence and data reasonably call into question the public health protection afforded by the current primary ozone standard. Other members of the CASAC agree with the previous CASAC's findings and recommendations in their review of the 2014 Second Draft Ozone PA. In that review, the previous CASAC opined that a primary standard set at 70 ppb may not be protective of public health with an adequate margin of safety.¹³

Given the limitations in the review process delineated above and the questions about the adequacy of the primary NAAQS to protect public health with an adequate margin of safety, EPA should withdraw the current recommendation and establish a review process that adequately considers all relevant factors.

The previous CASAC also questioned the adequacy of the secondary ozone NAAQS. The June 2014 CASAC review of that NAAQS states the following:

We recommend retaining the current indicator (ozone) but establishing a revised form of the secondary standard to be the biologically-relevant W126 index accumulated over a 12-hour period (8 a.m. – 8 p.m.) over the 3-month summation period of a single year resulting in the maximum value of W126 (henceforth W126). The CASAC recommends that the level associated with this form be within the range of 7 ppm-hrs to 15 ppm-hrs to protect against current and anticipated welfare effects of ozone. [...]

The CASAC does not recommend the use of a three-year averaging period for the secondary standard. We favor a single-year period for determining the highest three-month summation

¹² EPA, *Integrated Science Assessment for Ozone and Related Photochemical Oxidants* (April 2020), page IS-1, <https://cfpub.epa.gov/ncea/isa/recordisplay.cfm?deid=348522>.

¹³ Letter from Louis Anthony Cox, Jr., CASAC Chair, to Andrew R. Wheeler, EPA Administrator, dated February 19, 2020, p. 1. Available at: [https://yosemite.epa.gov/sab/sabproduct.nsf/LookupWebProjectsCurrentCASAC/4713D217BC07103485258515006359BA/\\$File/EPA-CASAC-20-003.pdf](https://yosemite.epa.gov/sab/sabproduct.nsf/LookupWebProjectsCurrentCASAC/4713D217BC07103485258515006359BA/$File/EPA-CASAC-20-003.pdf).

which will provide more protection for annual crops and for the anticipated cumulative effects on perennial species. The scientific analyses considered in this review, and the evidence upon which they are based, are from single-year results. If, as a policy matter, the Administrator prefers to base the secondary standard on a three-year averaging period for the purpose of program stability, then the level of the standard should be revised downward such that the level for the highest three-month summation in any given year of the three-year period would not exceed the scientifically recommended range of 7 ppm-hrs to 15 ppm-hrs.¹⁴

EPA did not follow CASAC's recommendation, instead setting the 2015 secondary ozone NAAQS at the same level and form as the primary standard. In August 2019, the D.C. Circuit remanded that secondary ozone NAAQS to EPA (*Murray Energy v. EPA*, 936 F.3d 597 [D.C. Cir. 2019]). The remand instructed the EPA to:

[E]ither lower the standard to protect against unusually damaging cumulative seasonal exposures that will be obscured in its three-year average, or explain its conclusion that the unadjusted average is an appropriate benchmark notwithstanding CASAC's contrary advice. Alternatively, EPA could adopt the single-year W126 exposure index as the form and averaging time, which would presumably moot any problems with the way it translated that index to use as a benchmark.

The current CASAC did not recommend a change in the secondary NAAQS. However, it should be noted that neither the reconstituted CASAC nor the expert consultants provided to that committee by EPA include any experts on vegetation damage, which is the welfare effect that was the foundation of the earlier CASAC's recommendation for a more stringent standard and the remand. Such an expert review is necessary to ascertain that EPA has adequately evaluated new data available on this effect and has adequately addressed the issues identified in the remand.

Given the limitations of the review process, including the accelerated schedule and the deficiencies in the breadth and depth of expertise available to the CASAC, it is not possible to definitively ascertain that the proposed unchanged NAAQS are adequate to fulfill the Clean Air Act mandate that the primary NAAQS be set at level that protects public health with an "adequate margin of safety" and secondary NAAQS that "protect public welfare from any known or anticipated adverse effects." Therefore, EPA should withdraw the current ozone NAAQS proposal and complete a robust review process prior to proposing a standard.

Summary

The "streamlined" process used by EPA to review the ozone NAAQS severely limited CASAC and public participation and precluded full consideration of critical scientific information before policy was developed. Important opportunities for review and expert input were skipped or overlapped in the interest of expediency. The concurrent release of the ISA and PA did not allow

¹⁴ Letter from H. Christopher Frey, CASAC Chair, to Gina McCarthy, EPA Administrator, dated June 26, 2014, p. iii, <https://yosemite.epa.gov/sab/sabproduct.nsf/5EFA320CCAD326E885257D030071531C/%24File/EPA-CASAC-14-004+unsigned.pdf>.

for review of even one draft ISA prior to issuance of the draft PA document. The review was further compromised by the replacement of the entire CASAC with inexperienced members selected according to criteria other than scientific expertise and EPA's failure to form a CASAC advisory panel. Such panels have historically been invaluable to CASAC, providing the breadth and depth of expertise needed to fully evaluate the diverse studies and endpoints relevant to reviewing NAAQS.

Due to the profoundly flawed review process, EPA has not demonstrated that it has fulfilled the Clean Air Act mandates to conduct a thorough review of the latest scientific knowledge and to propose an ozone NAAQS that protects public health and welfare with an adequate margin of safety. Therefore, NESCAUM urges EPA to withdraw the ozone NAAQS proposal and to undertake a review process similar to those utilized in previous reviews. That process must allow for the resolution of critical science issues identified in a comprehensive CASAC review of the ISA before the PA is redrafted. In addition, EPA must reevaluate the composition of the CASAC to ascertain that all critical areas of expertise relevant to the primary and secondary standards for this pollutant are represented and correct deficiencies identified. As with previous NAAQS reviews, EPA must establish an advisory panel that deliberates alongside the chartered CASAC members to enhance the depth and breadth of expertise and perspective necessary for a comprehensive review.

In the absence of a credible, well informed review process, it is impossible to ascertain the adequacy of the ozone NAAQS proposal. Therefore, EPA's proposed action should be withdrawn, and the ozone NAAQS should not be re-proposed until the review process discussed above has been completed.

Sincerely,



Paul J. Miller
Executive Director

cc: NESCAUM Directors
NESCAUM Air Toxics & Public Health Committee
NESCAUM Attainment Planning Committee
Lynne Hamjian, EPA R1
Richard Ruvo, EPA R2