

Oral Testimony of Dr. Paul J. Miller
Northeast States for Coordinated Air Use Management
on U.S. Environmental Protection Agency's Proposed Rule on the
National Ambient Air Quality Standards for Ozone
(79 FR 75234-75411)
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Washington, DC

Good morning, my name is Paul Miller. I am Chief Scientist with the Northeast States for Coordinated Air Use Management (NESCAUM). NESCAUM is an association of eight state air quality agencies in the Northeast, which includes the six New England States, New Jersey, and New York.

I am speaking today on behalf of NESCAUM's member states on EPA's proposal to revise the primary and secondary National Ambient Air Quality Standards for ozone. My testimony reflects the majority views of NESCAUM as a state membership organization. Individual NESCAUM member states may hold views different from the NESCAUM states' majority consensus, and may submit separate comments to the docket reflecting those differing views.

Today marks the third time since 2007 that NESCAUM has appeared at an EPA hearing concerning a proposed change to the ozone NAAQS. And for the third time, NESCAUM calls for EPA to establish a primary ozone NAAQS within the range of 0.060 to 0.070 parts per million (ppm) to better protect the public's health. This range is supported by the science, required by the Clean Air Act, and consistently recommended by EPA's independent Clean Air Scientific Advisory Committee (CASAC).

Ground-level ozone is a respiratory irritant that adversely affects both people with respiratory disease and healthy children and adults. It can cause premature death. The science was sufficiently strong in 2007 to justify a more protective ozone health standard, but the standard set by EPA at that time fell short of what was needed. The science remained sufficiently strong in 2010 when EPA tried to reconsider its earlier revision, but ultimately could not do so. It is now 2015, and the science has only become stronger. It is now long past time for EPA to do what is needed – to adopt an ozone health standard consistent with the science, consistent with the requirements of the Clean Air Act, and consistent with the CASAC's recommendations.

We are also cognizant of CASAC's June 26, 2014 letter where it advised EPA "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."¹ Lung function changes in healthy adults have been demonstrated to occur in controlled chamber studies at ozone levels relevant to the 70 ppb upper range.² These data do not account for increased sensitivities due to age or pre-existing respiratory conditions such as asthma. They also do not account for exposures that can

¹ Letter from CASAC Chairman H. Christopher Frey to EPA Administrator Gina McCarthy. CASAC Review of the EPA's *Second Draft Policy Assessment for the Review of the Ozone National Ambient Air Quality Standards*. June 26, 2014, at p. ii (EPA-CASAC-14-004).

² Brown, J.S.; T.F. Bateson, and W.F. McDonnell, W.F. 2008. Effects of exposure to 0.06 ppm ozone on FEV1 in humans: A secondary analysis of existing data. *Environ Health Perspect* 116: 1023-1026; Schelegle, E.S.; Morales, C.A.; Walby, W.F.; Marion, S; Allen, R.P. 2009. 6.6-hour inhalation of ozone concentrations from 60 to 87 parts per billion in healthy humans. *Am J Respir Crit Care Med*. 180: 265-272; Kim, C.S., N.E. Alexis, A.G. Rappold, H. Kehrl, M.J. Hazucha, J.C. Lay, M.T. Schmitt, M. Case, R. B. Devlin, D.B. Peden, D. Diaz-Sanchez. 2011. Lung function and inflammatory responses in healthy young adults exposed to 0.06 ppm ozone for 6.6 hours. *Am J Respir Crit Care Med*. 183: 1215-1221.

occur for longer than 6.6 hours. All of these factors mitigate against the 70 ppb level being protective with an adequate margin of safety.

By extension, the current ozone NAAQS of 0.075 ppm remains inadequate. Retaining this as a standard should not be an option.

For the ozone secondary NAAQS, designed to protect the public welfare, NESCAUM supports a cumulative, seasonal standard in the form referred to as "W126." We continue to question the view that many of the benefits of a secondary NAAQS would be achieved by attaining an 8-hour NAAQS. In 2010, EPA stated that "[a]n 8-hour form and averaging time is an indirect way to measure biologically relevant exposure patterns, is poorly correlated with such exposure patterns, and therefore is less likely to identify and protect against the kind of cumulative, seasonal exposure patterns that have been determined to be harmful."³ The latest proposal to continue using an 8-hour form for the secondary NAAQS is a retreat from EPA's previous stance, and does not reflect a science-based metric for biologically relevant exposures.

Furthermore, EPA's proposed W126 range of 13 to 17 ppm-hrs as the starting basis for setting an 8-hour standard is at and above the upper end of CASAC's recommended range of 7 to 15 ppm-hrs,⁴ and is above levels that cause vegetation damage in the NESCAUM region. NESCAUM continues to support a secondary NAAQS of the W126 form towards the lower end of the

³ 75 FR 2938, *Proposed Rule: National Ambient Air Quality Standards for Ozone* (January 19, 2010), at 3019.

⁴ Letter from CASAC Chairman H. Christopher Frey to EPA Administrator Gina McCarthy. CASAC Review of the EPA's *Second Draft Policy Assessment for the Review of the Ozone National Ambient Air Quality Standards*. June 26, 2014, at p. iii (EPA-CASAC-14-004).

CASAC-recommended range of 7 to 15 ppm-hrs, particularly if EPA bases the standard on a 3-year averaging period.

In attaining the ozone NAAQS, we note that the NESCAUM states are subject to significant ozone contributions from pollution sources in upwind states in addition to pollution emitted within the NESCAUM region. As a result, the NESCAUM states, whether individually or collectively, cannot on their own meet a more protective ozone standard called for by the existing body of science *unless* EPA and the upwind states adequately address long-range interstate transport of ozone pollution and its precursors in a timely manner. There is no rule currently in place or proposed that addresses ozone transport for the current 0.075 ppm ozone NAAQS, much less what will be needed to achieve a more protective ozone standard.

Mobile sources remain an important emissions sector for ozone-forming pollution, and EPA needs to be forward-looking in addressing these as the full benefits of their emissions reductions take time to be realized due to fleet turnover rates.

The NESCAUM states also request that EPA issue implementation rules and guidance at the same time as the revised ozone NAAQS, which should cover infrastructure SIPs, RACT, attainment demonstration requirements, etc. These are needed in order for states to successfully meet their clean air act obligations on time, as well as better capture the full economic value of revised ozone standards. And while NESCAUM firmly believes that science must drive the standards, as state resources continue to be constrained it is incumbent upon EPA to ensure the

continuation of our federal – state partnership through the provision of adequate resources that will enable states to successfully plan for and implement the new standards. EPA needs to address this when the standard is promulgated.

NESCAUM will be submitting more detailed written comments into the docket, and we thank you for your attention to our oral testimony today.