

June 19, 2009

Lisa Jackson, Administrator
U.S. Environmental Protection Agency
Air and Radiation Docket and Information Center
Mail Code 2822 T
1200 Pennsylvania Avenue, NW
Washington, DC 20460

Attention: Docket ID No. EPA-HQ-OAR-2009-0171

Re: *Proposed Endangerment and Cause or Contribute Findings for Greenhouse Gases under Section 202(a) of the Clean Air Act*

Dear Administrator Jackson:

The Northeast States for Coordinated Air Use Management (NESCAUM) offer the following comments on the U.S. Environmental Protection Agency's (EPA's) proposed findings, published on April 24, 2009 in the Federal Register, entitled *Proposed Endangerment and Cause or Contribute Findings for Greenhouse Gases Under Section 202(a) of the Clean Air Act* (74 Fed. Reg. 18886-18910). NESCAUM is the regional association of air pollution control agencies representing Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island, and Vermont.

NESCAUM welcomes and endorses EPA's proposed finding that greenhouse gases (GHGs) endanger the public health and welfare of current and future generations. We also strongly support the Administrator's determination that mobile sources under § 202(a) of the Clean Air Act (CAA) contribute to the mix of six GHGs subject to this rulemaking.

NESCAUM previously commented in the Advanced Notice of Proposed Rulemaking *Regulating Greenhouse Gas Emissions under the Clean Air Act* (73 FR 44354 – 44520) that the focus of an endangerment finding appropriately responding to *Massachusetts v. EPA* (127 S.Ct. 1438 (2007)) should be within the bounds of CAA § 202(a). In *Massachusetts v. EPA*, the Supreme Court held that EPA was obliged under the law to issue an "endangerment" finding to determine whether GHGs "cause, or contribute to, air pollution which may reasonably be anticipated to endanger public health or welfare" [CAA § 202(a)]. We are pleased that EPA has done so in this proposed rule.

With regard to endangerment under CAA § 202(a), there is broad consensus that manmade emissions are contributing to adverse changes in climate and that these impacts will get worse over time without corrective action. The international scientific community, under the auspices of the International Panel on Climate Change (IPCC), has concluded, "*Observational evidence from all continents and most oceans shows that many natural systems are being affected by regional climate changes, particularly temperature increases.*"¹ We believe the science reveals that the onset of climate change-related threats is already affecting our member states, this nation, and the world.² We do not repeat our previous

¹ IPCC, Summary for Policymakers. In: *Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change* [Solomon, S.,

comments to EPA on the abundant scientific evidence supporting EPA's actions in this rulemaking, but incorporate these by reference (NESCAUM comments to EPA, *Docket ID No. EPA-HQ-OAR-2008-0318*, submitted November 26, 2008).

There is no question that GHGs are air pollutants under CAA § 202(a). As held by the Supreme Court, "Because greenhouse gases fall well within the Clean Air Act's capacious definition of air pollutant, we hold that EPA has the statutory authority to regulate the emission of such gases from new motor vehicles" (*Massachusetts v. EPA*, 127 S.Ct. 1438 (2007)).

NESCAUM supports defining GHGs for purposes of "air pollution" under the CAA as the combined six GHG groupings – carbon dioxide, nitrous oxide, methane, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride – rather than defining each GHG species as individual air pollutants. We also agree with EPA that GHGs do have health effects, even if a GHG itself doesn't cause adverse health impacts through direct inhalation (74 Fed. Reg. 18886, at 18902).

NESCAUM also supports EPA's finding that the mobile source categories encompassed by CAA § 202(a) cause or contribute to GHG levels in the atmosphere. These source categories in their own right contribute a significant portion of GHG emissions to the atmosphere. Furthermore, EPA correctly points out that no single source category is solely responsible for the climate change problem, and effective solutions need to address many source categories to achieve the necessary collective GHG reductions. This is also consistent with the Supreme Court's reasoning in *Massachusetts v. EPA*.

While we agree with EPA's finding on the six collective GHGs, we also encourage EPA to give future consideration to tropospheric ozone and black carbon as air pollutants that contribute to climate change, especially as the level of understanding of their contributions improves. For example, these air pollutants are subject to regulatory programs to achieve National Ambient Air Quality Standards (NAAQS) for tropospheric ozone and fine particulate matter (PM_{2.5}), but neither the current primary nor secondary NAAQS for ozone and PM_{2.5} take into account their climate impacts. We encourage EPA to improve the understanding of the global warming effects from tropospheric ozone and the aerosols, including black carbon,³ so that they can be quantified along with the other currently well known health and welfare effects from tropospheric ozone and PM_{2.5}. The recent court remand of the primary and secondary PM_{2.5} NAAQS and EPA's own reconsideration of the recent primary and secondary ozone NAAQS revisions are opportunities to do this.

D. Qin, M. Manning, Z. Chen, M. Marquis, K.B. Averyt, M. Tignor and H.L. Miller (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA (2007).

² See also *Global Climate Change Impacts in the United States*, Thomas R. Karl, Jerry M. Melillo, and Thomas C. Peterson, (eds.). Cambridge University Press (2009).

³ We note that in the Federal Register notice on p. 18897, EPA states, "black carbon results from incomplete combustion of the carbon contained in fossil fuels." Black carbon, however, also arises from the burning of biomass. The IPCC estimated in 2007 that the direct radiative forcing of black carbon from biomass burning is comparable to that of black carbon from fossil fuel combustion (IPCC, Chapter 2, "Changes in Atmospheric Constituents and in Radiative Forcing," in *Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change* [Solomon, S., D. Qin, M. Manning, Z. Chen, M. Marquis, K.B. Averyt, M. Tignor and H.L. Miller (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA (2007); at pp. 163-167, available at <http://www.ipcc.ch/ipccreports/ar4-wg1.htm>).

Considerations of black carbon as a climate warming air pollutant are needed to ensure that climate measures promoting the use of sustainable biomass to replace fossil fuels take into account emissions of black carbon from biomass burning in addition to avoided CO₂ emissions from fossil fuel combustion.

With EPA's affirmative finding that motor vehicle GHG emissions meet the endangerment test, CAA § 202(a) now requires EPA to set motor vehicle emission standards for GHG pollutants. NESCAUM, its member states, and NESCAUM's sister organization Northeast States Center for a Clean Air Future (NESCCAF) have explored existing and emerging light- and heavy-duty GHG reduction technologies and measures. We have determined that there are existing and soon-to-be-available options for these mobile source categories that will significantly and cost effectively reduce GHG emissions. We would be pleased to provide you and your staff with the results of our studies and findings for use in establishing GHG emission standards for these important source categories. Please contact Coralie Cooper (617-259-2022) or Paul Miller (617-259-2016) at NESCAUM for further information.

Sincerely,



Arthur N. Marin
Executive Director

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