



State of Ohio Environmental Protection Agency

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June 23, 2009

Air and Radiation Docket and Information Center  
Environmental Protection Agency  
Mail code: 6102T  
1200 Pennsylvania Ave., NW.  
Washington, DC 20460

RE: Comments on Proposed Endangerment and Cause or Contribute Findings for Greenhouse Gases (GHGs) Under Section 202(a) of the Clean Air Act, Docket ID No. EPA-HQ-OAR-2009-0171.

Dear Administrator Jackson,

Thank you for the opportunity to comment on the GHG Endangerment Finding published in 74 Federal Register (page 18886) on April 24, 2009. Ohio EPA has reviewed the package and presents the attached comments on the proposed rule.

If you have any questions on the submittal, please contact Robert Hodanbosi at 614-644-2270.

Sincerely,

Chris Korleski  
Director

Ted Strickland, Governor  
Lee Fisher, Lt. Governor  
Chris Korleski, Director



Ohio EPA Comments on  
U.S. EPA's Proposed Endangerment and Cause or Contribute Findings for  
Greenhouse Gases (GHGs) under Section 202(a) of the Clean Air Act  
(74 FR 18886, April 24, 2009)

Background

On April 24, 2009, U.S. EPA proposed rules outlining the U.S. EPA Administrator's endangerment and cause or contribute findings for GHGs under Section 202(a) of the Clean Air Act (hereinafter, the "endangerment finding"). The endangerment finding is U.S. EPA's response to the landmark U.S. Supreme Court decision *Massachusetts vs. U.S. EPA* on April 2, 2007. The Court ruled that GHGs are "air pollutants" under the Clean Air Act and required U.S. EPA to determine if GHGs from motor vehicles contribute to climate change which may reasonably endanger public health and welfare. When the Clean Air Act was amended in 1977, the revised endangerment language was intended to serve several purposes consistent with the decision in *Ethyl Corp vs EPA*<sup>1</sup>. Specifically with regard to the current rulemaking, U.S. EPA determined that the endangerment analysis under the CAA (1) emphasizes the preventive or precautionary nature of the CAA; (2) authorizes the Administrator to reasonably project into the future and weigh risks; (3) assures the consideration of the cumulative impact of all sources; (4) instructs that the health of susceptible individuals, as well as healthy adults, should be part of the analysis; and (5) indicates an awareness of the uncertainties and limitations in information available to the Administrator.<sup>2</sup> Ohio EPA makes the following comments on U.S. EPA's proposed section 202(a) findings.

General Comments

When the Supreme Court ruled that GHGs fit within the Clean Air Act's definition of "air pollutant", the Court found that U.S. EPA has the statutory authority to regulate the GHG emissions from new motor vehicles. The Court also explained that U.S. EPA can avoid taking further action *only* if the agency determines that GHGs do not contribute to climate change or provides some reasonable explanation as to why it cannot or will not exercise its discretion to determine whether they do. U.S. EPA considers two issues when determining if GHGs endanger public health and welfare:

1. Whether the air pollution at issue may reasonably be anticipated to endanger public health or welfare, and
2. Whether emissions from new motor vehicles cause or contribute to that air pollution.

Ohio EPA believes U.S. EPA is correct in proposing that GHG emissions from motor vehicles meet the endangerment test under Section 202 of the Clean Air Act. Although we agree that GHG emissions from motor vehicles endanger public health and welfare, U.S. EPA may be asked to invoke the same endangerment finding for GHG emissions under other sections of the Clean Air Act. Ohio EPA believes that endangerment

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<sup>1</sup> See *Ethyl Corp v. EPA*, 541 F.2d 1, 6 (D.C. Cir.1976), cert. denied 426 U.S. 941 (1976).

<sup>2</sup> See 74 FR 18886, at 18891 (2009).

findings under other sections of the Clean Air Act will have a series of unintended consequences that can lead to serious deleterious effects for state and federal regulators. The Clean Air Act, in general, was not meant to be the regulatory mechanism for global pollutants like GHGs. In cases where the Clean Air Act has focused on global pollutants (e.g. CFCs), the pollutant was identified under a separate and unique section of the Act. We urge U.S. EPA not to go any further than the endangerment finding. Congress should adopt legislation to address climate change comprehensively in a stand-alone national program.

#### Definition of "Air Pollutant"

U.S. EPA proposes to define a class of six greenhouse gases as a single air pollutant, similar to how volatile organic compounds (VOCs) are regulated. The collection of greenhouse gas emissions includes; carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF<sub>6</sub>). This collection of GHGs can be evaluated on a carbon dioxide equivalent basis (CO<sub>2</sub>e). The proposed endangerment finding does not discuss the global warming potential and how the characteristics of each gas will be incorporated into CO<sub>2</sub> equivalents. Ohio EPA recommends that U.S. EPA utilize the most recent Intergovernmental Panel on Climate Change (IPCC) values to determine global warming potentials and atmospheric lifetimes.

#### Endangerment to Public Health

In the proposed rule, the Administrator determines that current and projected levels of the six GHGs endanger the public health and welfare of current and future generations. Ohio EPA agrees with U.S. EPA's proposed finding of endangerment to public health but we also recognize that the full future potential impact of climate change on various geographic regions is still uncertain.

We must note that the ambient concentrations of CO<sub>2</sub> and the other GHGs do not cause direct adverse health effects such as respiratory or toxic effects. All public health risks and impacts described in the proposed endangerment finding occur via climate change as a result of elevated atmospheric concentrations of GHGs. The pathway or mechanism occurs through changes in climate, but the end result is an adverse effect on the health of the population, particularly the populations most sensitive to higher temperatures such the very old and very young. Thus these effects from climate change are appropriately denoted public health effects.

Ohio has nonattainment areas for the ozone national ambient air quality standards (NAAQS) in all of our major cities. Because we expect climate change will produce higher temperatures that will increase regional ozone pollution, it will be increasingly difficult for Ohio to attain the NAAQS, thereby inhibiting economic development in Ohio's nonattainment areas. These increases in regional ozone pollution will further increase the risks of respiratory infection, aggravation of asthma, and premature death.

### Endangerment to Welfare:

The Clean Air Act defines “effects on welfare” as including, but not limited to, “effects on soils, water, crops, vegetation, manmade materials, animals, wildlife, weather, visibility, and climate, damage to and deterioration of property, and hazards to transportation, as well as effects on economic values and on personal comfort and well-being.” Ohio EPA believes there is evidence that GHG emissions are endangering the welfare of our natural resources and the public’s well being. In the Great Lakes and major river systems, for example, lower water levels are likely to exacerbate challenges relating to water quality, navigation, recreation, hydropower generation, water transfers, and bi-national relationships.

### Cause or Contribute Test:

Ohio EPA agrees that U.S. EPA adequately outlines the cause or contribution test for GHG emissions emitted from motor vehicles. In this case, the motor vehicle source category emits four gases (CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, and HFC) which share common physical properties relevant to climate change: all are long-lived in the atmosphere; all become globally well mixed in the atmosphere; all trap outgoing heat that would otherwise escape to space; and all are directly emitted as GHGs rather than forming from a precursor gas. There are other gases which share these common properties which are not emitted by the section 202(a) source categories. Nonetheless, we agree with U.S. EPA that it is entirely appropriate for the Administrator to define an air pollutant in a manner that recognizes the shared relevant properties of all six of the identified GHG, even though they are not all emitted from the motor vehicle source category.

Ohio EPA understands that U.S. EPA did not conduct climate modeling analyses to determine what fraction of global greenhouse gas concentrations are due to the emissions from section 202(a) source categories. Rather, consistent with prior practice and with current science, U.S. EPA used emissions as a perfectly reasonable proxy for contributions to atmospheric concentrations. Based on the contribution the U.S. section 202(a) emissions has on global GHG emissions, we believe these emissions significantly contribute to the effects of climate change. For example, using 2005 emissions, if U.S. section 202(a) source category GHG emissions were ranked against total greenhouse gas emissions for entire countries, U.S. section 202(a) emissions would rank behind only China, the U.S. as a whole, Russia and India, and would rank ahead of Japan, Brazil, Germany and every other country in the world.<sup>3</sup> Whether the comparison is global (over 4 percent of total GHG emissions) or domestic (24 percent of total GHG emissions), Ohio EPA agrees with U.S. EPA’s contribution finding that the collective GHG emissions from section 202(a) source categories are significant.

### Regulating GHG Emissions under other sections of the Clean Air Act vs. Federal Legislation

A finding of endangerment under Section 202 of the CAA would not by itself constitute a complete finding of endangerment under other sections of the CAA. Extending a finding

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<sup>3</sup> See 74 FR at 18906

of endangerment to other sections of the Act would depend on: 1) the basis for the finding, 2) the pollutant at hand (e.g., pollutants considered as a group or as individual pollutants), 3) the statutory tests in each CAA section, and 4) the underlying facts. However, a positive endangerment finding for GHG emissions under Section 202 may invoke the same endangerment finding under other CAA sections containing similar endangerment language.

It is our strong belief that the best method to reduce GHG emissions is to pass federal legislation authorizing a federal GHG cap and trade program rather than relying on the Clean Air Act as the regulatory mechanism to reduce GHG emissions. If national legislation does not come swiftly on such an important issue, the cost to reduce GHGs and mitigate the impacts will continue to increase, and state governments will continue a piecemeal regulatory approach, burdening businesses to comply with different policies across the United States.

The current Clean Air Act places the primary responsibility for reducing air pollution on state government. For over 30 years, the handling of traditional pollutants has been successful with the state lead and federal oversight. In order to address climate change, the current Clean Air Act is not adequate and should not be the vehicle to regulate GHGs.