

Environmental Client Service Group

To: Our Clients and Friends

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EPA Issues Proposed Positive Endangerment Finding for Greenhouse Gases Emitted by Motor Vehicles: First Step Toward Climate Change Regulation Under the Clean Air Act

On April 24, 2009, the U.S. Environmental Protection Agency (“EPA”) published in the Federal Register its “Proposed Endangerment and Cause or Contribute Findings for Greenhouse Gases Under Section 202(a) of the Clean Air Act” (the “Endangerment Finding” or “Finding”). See 74 Fed.Reg. 18886 (Apr. 24, 2009). In doing so, EPA takes the first step toward regulation of carbon dioxide and five other greenhouse gases under the Clean Air Act.

The Endangerment Finding constitutes EPA’s response — after more than two years — to the U.S. Supreme Court’s decision in *Massachusetts v. EPA*, which held that greenhouse gases met the Clean Air Act definition of “air pollutant” and required that EPA either issue a positive or negative endangerment finding under section 202(a) based on a consideration of statutory factors or provide a reasonable explanation as to why it could not make such a determination. Section 202(a), codified at 42 U.S.C. § 7521(a)(1), requires that “the [EPA] Administrator shall by regulation prescribe ... standards applicable to the emission of any air pollutant from any class or classes of new motor vehicles or new motor vehicle engines, which in his judgment cause, or contribute to, air pollution which may reasonably be anticipated to endanger public health or welfare.”

Although the proposed Endangerment Finding addresses only emissions from motor vehicles and motor vehicle engines, the cascading effects of a final Endangerment Finding could dramatically expand the scope of the Clean Air Act and result in the regulation of stationary sources (*e.g.*, manufacturing facilities) as well.

This Client Alert summarizes the Endangerment Finding, discusses the next steps that may be taken by EPA and others, and provides an overview of how the Endangerment Finding could result in regulation of greenhouse gases under the Clean Air Act.

I. Summary of the Proposed Finding

The Endangerment Finding has two elements: the “endangerment” finding and the “cause or contribute” finding. EPA proposes positive findings for both.

A. EPA Proposes to Find that Greenhouse Gases in the Atmosphere Constitute Air Pollution that Endangers Public Health and Welfare.

For the purposes of the Endangerment Finding, EPA defines the “air pollution” at issue as “the combined mix of six key directly-emitted and long-lived greenhouse gases which together constitute the root cause of human-induced climate change”: carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons and sulfur hexafluoride.¹ EPA believes that the case for finding that this air pollution endangers public health and welfare is “compelling, and, indeed, overwhelming.”

With respect to public health, EPA admits that greenhouse gases do not cause direct adverse health effects such as respiratory or toxic effects, but argues instead that greenhouse gases cause a number of adverse health effects indirectly through a wide range of pathways. In particular, EPA cites evidence that increases in greenhouse gas concentrations will result in: (i) increases in the magnitude and duration of severe heat waves over portions of the United States, with likely increases in mortality and morbidity; (ii) increases in regional ozone pollution due to higher temperatures and a modification of meteorological factors; and (iii) increases in the spread of several food- and water-borne pathogens.

With respect to public welfare (*e.g.*, the environment), EPA points to a number of adverse effects that have occurred or are expected to occur in the United States in the near and long term. The effects identified by EPA include: (i) increased risk of flooding, greater runoff and erosion, and thus the potential for adverse water quality effects; (ii) water shortages; (iii) crop failure and other adverse effects on crop yields; (iv) increased size and number of forest fires, insect outbreaks and tree mortality; (v) impairment of function at drinking water and wastewater treatment plants; (vi) ocean acidification, and resulting reduction in biological production of marine calcifiers, including corals; and (vii) rearrangement of U.S. ecosystems, as species shift north and to higher elevations.

In addition, EPA finds that climate change’s effects in the world outside the U.S. add support to the Endangerment Finding, but clearly states that it believes that the impacts to public health and welfare occurring within the U.S. alone warrant the Endangerment Finding.

¹ In addition, EPA notes in its proposed rule that it is currently engaged in other evaluations of greenhouse gases or aerosols that have warming and/or cooling effects, including: (i) consideration of the regulation of aircraft emissions (water vapor and NO_x) that lead to the formation of contrails; (ii) evaluation of the role of black carbon in climate change; and (iii) responding to petitions to address black carbon emissions from marine and aviation sources.

B. EPA Proposes to Find that Greenhouse Gas Emissions from New Motor Vehicles and Engines Contribute to this Air Pollution.

In the “cause and contribute” portion of the Endangerment Finding, EPA evaluates whether emissions of an air pollutant from new motor vehicles cause or contribute to the air pollution that was found to endanger public health and welfare in the “endangerment” portion of the Finding.

For purposes of the “cause and contribute” analysis, EPA proposes to treat the six greenhouse gases identified above (see Section I.A) as a single air pollutant. Four of these greenhouse gases are emitted by motor vehicles: carbon dioxide, methane, nitrous oxide and hydrofluorocarbons. Alternatively, EPA proposes to treat each greenhouse gas individually.

EPA states that in the Administrator’s judgment, greenhouse gas emissions from motor vehicles are significant whether considered on a global or domestic level. Greenhouse gas emissions from such sources constituted over 4 percent of total global greenhouse gas emissions in 2005 and almost 24 percent of total domestic greenhouse gas emissions in 2006. EPA therefore proposes to find that greenhouse gas emissions from motor vehicles contribute to the mix of greenhouse gases in the atmosphere that is endangering public health and welfare.

II. Next Steps

EPA’s actions demonstrate the agency’s clear intent to regulate greenhouse gases under existing laws. Regulation under the existing Clean Air Act could occur under multiple programs, including the motor vehicle standards and prevention of significant deterioration (“PSD”) programs. EPA would not need to modify its existing programs if Congress chooses to enact specific cap-and-trade or other legislation.

A. Public Comment Period and Promulgation of a Final Rule

EPA will conduct a 60-day public comment period ending on June 23, 2009. During this time, EPA will accept written comments and host two public hearings (one in Arlington, VA on May 18, and the other in Seattle, WA on May 21). Subsequent to the public comment period, EPA will determine whether to promulgate a final rule. If EPA decides to promulgate a final Endangerment Finding, the agency will summarize and respond to the comments it received, and explain why it has elected to revise or not to revise the Endangerment Finding in light of those comments.

B. Motor Vehicle Emission Standards

A final positive Endangerment Finding would obligate EPA to issue greenhouse gas emission standards for motor vehicles, such as passenger cars, light-duty trucks, motorcycles, buses and medium/heavy-duty trucks. EPA typically proposes such standards concurrently with its endangerment findings under the various provisions of the Clean Air Act, including section 202(a). In this case, however, EPA has elected to proceed separately with the Endangerment Finding prior to issuing proposed standards. EPA indicates that its proposed standards will be ready for public comment several months from now.

C. Prevention of Significant Deterioration

One concern that has been expressed is that the motor vehicle emission standards promulgated pursuant to a final Endangerment Finding could force consideration of greenhouse gas emissions in PSD permitting proceedings and immediately subject tens of thousands of new sources to preconstruction permitting requirements in the PSD program. Were greenhouse gases to become a pollutant regulated under the Clean Air Act, sources of greenhouse gases that have fallen below the thresholds for PSD permitting, such as large office and residential buildings, hotels, malls and hospitals, could become subject to the PSD program because they emit or have the potential to emit 250 tons per year (tpy) of greenhouse gases. In addition, there are several outstanding PSD permit appeals currently before EPA's Environmental Appeals Board. The environmental groups challenging these permits are likely to argue that the Endangerment Finding itself would trigger PSD regulation for these sources.

In the proposed Endangerment Finding, EPA indicates that a final positive endangerment finding would not make greenhouse gases or any individual greenhouse gas a regulated pollutant under the PSD program, and would therefore not invoke the need for consideration of greenhouse gases in permits or draw in new sources whose only "major" emissions are greenhouse gases. EPA refers interested parties to its reconsideration of its December 18, 2008 memorandum on "EPA's Interpretation of Regulations that Determine Pollutants Covered By Federal Prevention of Significant Deterioration (PSD) Permit Program." EPA recommends that comments on the PSD issue be made in the context of the reconsideration, not in response to the Endangerment Finding.

D. Impetus for Congressional Action

Though the Endangerment Finding represents a first step toward regulating greenhouse gases under the Clean Air Act, President Obama and Administrator Jackson continue to reiterate that they would prefer that Congress tackle climate change issues through comprehensive legislation specifically tailored to the climate change challenge. Such legislation could preempt regulation under the Clean Air Act and potentially simplify the regulatory environment for greenhouse gas sources. The prospects for such legislation in 2009 are uncertain, but the Endangerment Finding could serve as an impetus for congressional action because of the complexity of regulating greenhouse gases under the Clean Air Act.

III. Other Potential Ramifications of a Positive Endangerment Finding

The ramifications of the Endangerment Finding are potentially far-reaching. A number of other Clean Air Act sections contain language similar to that of section 202(a). The rationale for the Endangerment Finding under section 202(a) may therefore serve as precedent for EPA regulation of greenhouse gas emissions from non-motor vehicle sources. In particular, a final Endangerment Finding could ultimately expand the reach of the Clean Air Act in the following areas, among others:

- **Other mobile sources:** Although the Endangerment Finding addresses only emissions from new motor vehicles and motor vehicle engines, EPA has already received petitions requesting that it regulate greenhouse gas emissions from other mobile sources, including marine vessels, nonroad engines and equipment, aircraft and rebuilt heavy-duty highway engines pursuant to sections 213, 231, 211 and 202(a)(3) of the Clean Air Act. The

endangerment language in provisions addressing these sources is similar to that in section 202(a). EPA could look to a final Endangerment Finding under section 202(a) to support a determination that greenhouse gas emissions from these sources should be regulated.

- **NAAQS and SIPs:** Likewise, the rationale of the Endangerment Finding could force EPA to identify greenhouse gas emissions as an air pollutant under section 108, which would in turn compel the issuance of a national ambient air quality standard (“NAAQS”) for greenhouse gases. States would then have to prepare state implementation plans for the achievement and maintenance of the greenhouse gas NAAQS. The practical difficulties of establishing a NAAQS for greenhouse gases, which disperse globally, and of developing local programs to reduce concentrations of such pollutants have been widely noted. If a greenhouse gas NAAQS were set below current ambient levels, the entire country would be in nonattainment, triggering new requirements for existing, new and modified stationary sources, as well as transportation conformity requirements for federal funding of highways, bridges, airports and transit systems.
- **Title V Permitting:** In addition to requiring thousands of sources to comply with PSD permitting requirements for the first time (*see supra* Part II.C), the Endangerment Finding and subsequent Clean Air Act regulation of greenhouse gases could also increase – even more dramatically – the number of stationary sources requiring Title V operating permits. Such permits are required for all sources that emit or have the potential to emit 100 tpy of an air pollutant.
- **New Source Performance Standards (“NSPS”):** In the past, EPA relied on the rationale rejected by the Supreme Court in its decisions not to include limits on greenhouse gas emissions in new source performance standards under section 111 of the Clean Air Act. Even after *Massachusetts v. EPA*, EPA declined to set limits on greenhouse gas emissions in its NSPS program, instead citing the need for further study. The Endangerment Finding would appear to alter EPA’s outlook on this issue. It could indicate that the agency might include limits on greenhouse gas emissions in new source performance standards, which it must review every eight years. In addition, EPA could make previously unregulated source categories subject to NSPS based on their greenhouse gas emissions.
- **Consideration of health effects:** EPA may have broken new ground in its consideration of the indirect health effects of climate change as a basis for the Endangerment Finding. In doing so, EPA potentially broadens the scope of the Clean Air Act in arenas unrelated to climate change and greenhouse gas emissions. EPA may also have crystallized a legal issue on which business and industry groups will focus in challenges to EPA’s authority to regulate greenhouse gas emissions.

Conclusion

The Endangerment Finding represents a tectonic shift in U.S. climate change policy, but whether greenhouse gas emissions will ultimately be regulated under the Clean Air Act is not yet certain. Regulation of climate change under the Clean Air Act would take years, if not decades, to implement. Furthermore, the Clean Air Act imposes arduous tasks on EPA and state regulatory agencies, and litigation can certainly be expected to prolong the process. In the meantime, it remains to be seen

whether the political will for congressional climate change action is strong enough to result in the comprehensive legislation sought by the Obama administration and others. Regardless of the ultimate outcome, the Endangerment Finding will provide a fixed point from which the future policy debates and decisions will emanate.

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