

TESTIMONY OF DAVID BOOKBINDER
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Before the House Select Committee on
Energy Independence and Global Warming

Hearing on *Massachusetts v. U.S. EPA* Part II:
Implications of the Supreme Court Decision
March 13, 2008

Mr. Chairman, thank you for the opportunity to testify today as to some of the consequences of EPA's failure to comply with the Supreme Court's decision in *Massachusetts v. EPA*. My name is David Bookbinder, and I am the Chief Climate Counsel for Sierra Club. Sierra Club is a national non-profit organization, founded by John Muir in 1892, whose 1.1 million members and supporters are dedicated to exploring, enjoying, and protecting the planet.

I. *Massachusetts v. EPA* and the Endangerment Question

A. The *Massachusetts* Decision

Almost a year ago, on April 2, 2007, the Supreme Court handed down its landmark decision in *Massachusetts v. EPA*. At issue was a petition from a group of environmental organizations that asked EPA to regulate greenhouse gas emissions from motor vehicles, on the grounds that such emissions met the criteria laid out in Section 202(a) of the Clean Air Act, *i.e.*, that carbon dioxide and other greenhouse gases were "pollutants" that "may reasonably be anticipated to endanger public health or welfare."

Although submitted to EPA in 1999, the agency refused to take any action on this petition until EPA was sued in December of 2002 to compel the agency to answer it. As a result, in September of 2003 EPA denied the petition on three grounds: First, that the Clean Air Act did not give EPA any authority to regulate greenhouse gases; second, that even if EPA had such authority generally, it did not have it with respect to motor vehicle emissions; and third, even if it had this authority, it would not use it because it had better ways of dealing with climate change. We found this last justification particularly odd, as the Bush Administration's climate change policy has been to do absolutely nothing about it and, if possible, to stop anyone else from doing anything about it either.

A coalition of states, cities and environmental groups challenged this decision, and eventually we wound up in the Supreme Court. There, the Court categorically rejected EPA's claim that the Clean Air Act, which explicitly requires the agency to regulate any substance that adversely affects "weather" or "climate", did not give the agency the authority to regulate pollutants that cause climate change, and regardless of the source of the emissions. It also reminded

the agency that the Act did not allow EPA to avoid its responsibility to protect health and the environment in favor of its own preference of doing nothing.

As a result, the Court sent the petition back to EPA to perform one task: decide whether greenhouse gases are “reasonably anticipated to endanger public health or welfare.” Because in the Clean Air Act Congress defined “welfare” to mean “effects on soils, water, crops, vegetation, manmade materials, animals, wildlife, weather, visibility, and climate”, this may be restated as asking whether greenhouse gases are “reasonably anticipated to endanger public health or soils, water, crops, vegetation, manmade materials, animals, wildlife, weather, visibility, or climate”. This is the “endangerment finding” that is so eagerly anticipated.

The Supreme Court gave EPA three ways to answer this question: “Yes, greenhouse gases are reasonably anticipated to endanger public health or soils, water, crops, vegetation, manmade materials, animals, wildlife, weather, visibility, or climate”; “No, greenhouse gases are not reasonably anticipated to endanger public health or soils, water, crops, vegetation, manmade materials, animals, wildlife, weather, visibility, or climate”; or the agency could explain why it could not answer this question.

B. And the Answer Is . . . ?

Although the Administration – from the President on down – promised swift action, almost a year later we are still awaiting an answer. On May 14, 2007, President Bush announced from the Rose Garden:

Last month, the Supreme Court ruled that the EPA must take action under the Clean Air Act regarding greenhouse gas emissions from motor vehicles. So today, I'm directing the EPA and the Department of Transportation, Energy, and Agriculture to take the first steps toward regulations that would cut gasoline consumption and greenhouse gas emissions from motor vehicles, using my 20-in-10 plan as a starting point.

Developing these regulations will require coordination across many different areas of expertise. Today, I signed an executive order directing all our agencies represented here today to work together on this proposal. I've also asked them to listen to public input, to carefully consider safety, science, and available technologies, and evaluate the benefits and costs before they put forth the new regulation.

This is a complicated legal and technical matter, and it's going to take time to fully resolve. **Yet it is important to move forward, so I have directed**

members of my administration to complete the process by the end of 2008.¹

In a press briefing immediately after this, Administrator Johnson stated:

On April 2, 2007, the U.S. Supreme Court decided in *Massachusetts versus EPA* that the Clean Air Act provided EPA the statutory authority to regulate greenhouse gas emissions from new vehicles if I determine in my judgment whether such emissions endanger public health and welfare under the Clean Air Act. Today the President has responded to the Supreme Court's landmark decision by calling on EPA and our federal partners to move forward and take the first regulatory step to craft a proposal to control greenhouse gas emissions from new motor vehicles.

* * *

[O]ur target for a draft proposal will be fall of this year. And as part of that proposal, we will address the endangerment finding as part of the proposal.²

On September 29, 2007, Administrator Johnson told an audience of representatives from 17 nations at the State Department:

[T]he President has directed the federal government to take the first step towards regulations, using his "20 in 10" plan as a starting point. **We will issue a proposed rule regulating greenhouse gases later this year and are planning on issuing a final rule by the end of next year.**³

At a hearing on November 8, 2007, before the House Committee on Oversight and Government Reform, Administrator Johnson said:

Of course, before the agency, given the Supreme Court decision in *Massachusetts v. EPA*, the focus is on mobile sources. **So we are, as I have already mentioned, going to be proposing regulating CO₂, greenhouse gases, from mobile sources by the end of this year.**⁴

¹ Statement of President Bush, May 14, 2007, *available at* <http://www.whitehouse.gov/news/releases/2007/05/20070514-4.html> (emphasis added).

² Briefing, May 14, 2007, *available at* <http://www.whitehouse.gov/news/releases/2007/05/20070514-6.html> (emphasis added).

³ Administrator Stephen Johnson, Luncheon Address at the Major Economies Meeting, Washington, D.C., Sept. 27, 2007, *available at* <http://yosemite.epa.gov/opa/admpress.nsf/a883dc3da7094f97852572a00065d7d8/1692a2d0944f40b9852573630063eab3!OpenDocument> (emphasis added).

⁴ Hearing on EPA Approval of New Power Plants: Failure To Address Global Warming Pollutants, before the Committee on Oversight and Government Reform, House of Representatives, at 38, 87 (Nov. 8, 2007), *available at* <http://oversight.house.gov/documents/20071115145634.pdf>.

Finally, EPA reaffirmed that schedule in a formal “regulatory plan” published in the Federal Register (72 Fed. Reg. 69934) on December 10, 2007.

Despite these statements, there was no draft endangerment finding or draft regulations by the end of 2007. Nor has there been any progress on this issue as we approach the end of the first quarter of 2008.

In fact -- and this should come as no surprise to anyone who is familiar with the Administration’s approach to global warming -- EPA is now actually going backwards. In response to an inquiry from the *Massachusetts* petitioners as to when the agency would be complying with the Supreme Court’s mandate, on February 27, EPA stated that the agency no longer “has a specific timeline for responding to the remand”. Administrator Johnson then reiterated this position in a March 3 letter to Senator Feinstein.

EPA’s latest rationale for doing nothing is the Energy Independence and Security Act of 2007 (“EISA”); passed last October, EPA claims that this law has so complicated matters that the agency cannot tell when it might get around to answering the endangerment question. However, as Professor Heinzerling has explained, this argument is nonsense; nothing in EISA in any way alters the question whether the pollutants that are causing global warming are “reasonably anticipated to endanger public health or soils, water, crops, vegetation, manmade materials, animals, wildlife, weather, visibility, or climate.” As a question, this one ranks right up there with “Who is buried in Grant’s Tomb?”

Remarkably, outside of the context of an endangerment finding, EPA has no problem in describing – and quite graphically – the effects greenhouse gases are having, and will continue to have, on the United States. Just last week, EPA stated (73 Fed. Reg. 12156, 12167; footnotes omitted):

The IPCC made the following conclusions with *very high confidence* regarding what are expected to be key impacts for North America: coastal communities and habitats will be increasingly stressed by climate change impacts interacting with development and pollution; climate change will constrain North America’s over-allocated water resources, increasing competition among agricultural, municipal, industrial and ecological uses; climate change impacts on infrastructure and human health and safety in urban centers will be compounded by aging infrastructure, maladapted urban form and building stock, urban heat islands, air pollution, population growth and an aging population; and, disturbances such as wildfire and insect outbreaks are increasing and are likely to intensify in a warmer future with drier soils and longer growing seasons.

Severe heat waves are projected to intensify in magnitude and duration over the portions of the U.S. where these events already occur, with likely increases in mortality and morbidity, especially among the elderly, young and frail. Ranges of vector-borne and tick-borne diseases in North America may expand but with modulation by public health measures and other factors.

Climate change is also expected to facilitate the spread of invasive species and disrupt ecosystem services. Over the 21st century, changes in climate will also cause species to shift north and to higher elevations and fundamentally rearrange U.S. ecosystems. Differential capacities for range shifts and constraints from development, habitat fragmentation, invasive species, and broken ecological connections will alter ecosystem structure, function, and services.

The IPCC projects with virtual certainty declining air quality in U.S. and other world cities due to warmer and fewer cold days and nights and/or warmer/more frequent hot days and nights over most land areas. Climate change is expected to lead to increases in ozone pollution, with associated risks in respiratory infection and aggravation of asthma. Ozone exposure also may contribute to premature death in people with heart and lung disease. In addition to human health effects, tropospheric ozone has significant adverse effects on certain vegetation. The directional effect of climate change on ambient particulate matter levels remains uncertain.

It should be noted that moderate climate change in the early decades of the century is projected to have some “positive” effects including an increase aggregate yields of rainfed agriculture by 5-20% in the U.S. Such effects, however, contain important variability among regions. Moreover, major challenges are projected for crops that are near the warm end of their suitable range or depend on highly utilized water resources. Recent studies indicate that climate change scenarios that include increased frequency of heat stress, droughts and flooding events reduce crop yields and livestock productivity beyond the impacts due to changes in mean variables alone. Climate variability and change also modify the risks of pest and pathogen outbreaks.

Following this rather grim recitation, EPA concluded:

As the previous section indicates, global climate change is a substantial and critical challenge for the environment. There is little question that the conditions brought about as a result of global

climate change are serious, whether reviewing the issue as a global, national or state-specific issue.

Despite these findings, for some reason EPA still cannot decide whether greenhouse gases are “reasonably anticipated to endanger public health or welfare.” I caution this Committee, the Congress, the people of the United States, and indeed the whole world, not to hold their breath waiting for EPA to formally acknowledge the obvious.

II. The Impact of an Endangerment Finding on Pending Agency Actions

Professor Heinzerling has testified as to how an endangerment finding would affect various provisions of the Clean Air Act. I would like to describe how an endangerment finding would affect matters pending before the agency, followed by a look at how an endangerment finding might affect two specific provisions in the Act.

A. Greenhouse Gas Matters Pending Before EPA

While EPA fiddles, the number of petitions, rulemakings and other demands for agency action on this issue is growing daily. A few examples:

On October 3, 2007, four environmental groups pointed out that CO₂ emissions from the world’s marine vessels were greater than CO₂ emissions from all but six countries, and petitioned EPA for regulation of greenhouse gas emissions from maritime sources under Section 213 of the Act on the grounds that these emissions “cause, or significantly contribute to, air pollution which may reasonably be anticipated to endanger public health or welfare.” EPA has taken no action on this petition.

On December 4, 2007, the states of California, Connecticut, New Jersey, New Mexico and Pennsylvania, along with the District of Columbia and New York City, petitioned EPA under Section 231 of the Clean Air Act, seeking regulation of greenhouse gas emissions from aircraft. Section 231(a)(2)(A) requires EPA to promulgate emission standards for -- you guessed it -- “any air pollutant from any class or classes of aircraft engines which . . . causes, or contributes to, air pollution which may reasonably be anticipated to endanger public health or welfare.” EPA has taken no action on this petition.

Nor is the Clean Air Act the only statute in play. On December 18, 2007, the Center for Biological Diversity petitioned EPA for revised water quality criteria for pH under Section 304 of the Clean Water Act. The petition noted that “Carbon dioxide pollution has already lowered average ocean pH by 0.11 units, with a pH change of 0.5 units projected by the end of the century under current emission trajectories”, and warning that “Absent significant reductions in carbon dioxide emissions, ocean acidification will accelerate, likely ultimately leading to

the collapse of oceanic food webs and catastrophic impacts on the global environment.” EPA has taken no action on this petition.

On January 28, 2008, six states – California, Connecticut, Massachusetts, New Jersey, Oregon and Pennsylvania – and several environmental groups petitioned EPA for regulation of greenhouse gas emissions from non-road vehicles and engines, also under Section 213 of the Act, and again on the basis that these emissions “cause, or significantly contribute to, air pollution which may reasonably be anticipated to endanger public health or welfare.” EPA has taken no action on this petition.

Two other matters pending before the agency also speak volumes about EPA’s climate policy.

The first concerns New Source Performance Standards for fossil-fuel fired power plants, facilities that account for approximately 40% of U.S. greenhouse gas emissions. Section 111 of the Act requires the agency to issue such standards for any category of sources which “causes or contributes significantly to, air pollution which is reasonably anticipated to endanger public health or welfare.” In 2003, Sierra Club sued EPA to force it to review the NSPS for these power plants, which the Act requires the agency to review every 8 years (EPA had failed to conduct such a review, in some instances, for close to two decades). Under the ensuing consent decree, in 2005 the agency proposed revised emission standards for a variety of pollutants, but no standards for carbon dioxide. EPA’s one-sentence response to comments noting this problem was that “it does not presently have the authority to regulate CO₂ or other greenhouse gases that contribute to global climate change.” 71 Fed. Reg. 9866, 9869. After *Massachusetts*, of course, this reasoning is no longer valid . . . but again, almost a year later, we have heard nothing more from the agency.

Interestingly, EPA is under court order to promulgate final NSPS revisions for petroleum refineries by April 30, 2008, and in that rulemaking we have pointed out that the agency now has the legal authority it needs to address greenhouse gases and documented, yet again, why these emissions obviously meet the endangerment standard. Over the next six weeks the suspense will continue to build as to what new excuse EPA will offer as to why it will not regulate yet another significant sources of U.S. greenhouse gas emissions.

This brings me to the *Bonanza* case.

On August 30, 2007, EPA Region 8 issued a Clean Air Act permit for the proposed Bonanza coal-fired power plant in Uintah County, Utah. Although this plant would emit 1.8 million tons of CO₂ a year, EPA did not impose any CO₂ emissions limits. Sierra Club challenged this decision on the grounds that Section 165(a)(4) of the Act requires Best Available Control Technology (“BACT”) “for each pollutant subject to regulation” under the Clean Air Act.

Massachusetts held that CO₂ was a “pollutant”, and in Section 821 of the Clean Air Act Amendments of 1990 Congress mandated that EPA “shall promulgate regulations within 18 months . . . to require all affected sources subject to Title IV of the Clean Air Act” to “monitor carbon dioxide emissions . . .” 42 U.S.C. § 7651k note; Pub. L. 101-549; 104 Stat. 2699. EPA then promulgated these regulations in 1993. 40 C.F.R. § 75.1 *et seq.*

Because carbon dioxide is thus clearly both a “pollutant” (per *Massachusetts*) and is “subject to regulation” (per Congressional command), it seemed obvious that the Bonanza permit must require a BACT limit for CO₂. Obvious, except, of course, to EPA, which claimed that Congress did not mean the word “regulation” in Section 165(a)(4) to mean the same thing as the word “regulation” in Section 821. According to EPA, “regulation” in Section 165(a)(4) means “subject to actual emissions limits”, and does not include the monitoring and reporting “regulations” required under Section 821. (That is EPA’s lead argument; its back-up argument is that Section 821 of the 1990 Amendments is not actually part of the Clean Air Act; this matter is now before the agency’s Environmental Appeals Board.)

B. Two Clean Air Act Regulatory Provisions: NAAQS and PSD

National Ambient Air Quality Standards

The first specific Clean Air Act provision that I would like to discuss in terms of an endangerment finding are the National Ambient Air Quality Standards (“NAAQS”). A NAAQS air quality standard is expressed in terms of the concentration of a pollutant in the air, and under Section 109(b) are set at levels “requisite to protect public health” and “the public welfare”. For example, the current ozone NAAQS is 0.08 parts per million (“ppm”)(averaged over 8 hours).

Because Section 108(a)(1)(A) requires EPA to set a NAAQS for “each air pollutant which . . . cause or contribute to air pollution which is reasonably anticipated to endanger public health or welfare”, concerns have been raised about the difficulty of administering a CO₂ NAAQS. However, it is possible that a CO₂ NAAQS may be both unnecessary and not required by the Act.

The argument that a CO₂ NAAQS is unnecessary is based on the fact that, given the significant climate change effects we are already experiencing, the NAAQS would presumably need to be set below current atmospheric concentrations of CO₂ (approximately 383 ppm), and possibly close to the pre-industrial CO₂ level of approximately 250 ppm. In other words, the argument is that this would all be an exercise in futility, as the entire planet is working toward a goal of holding CO₂ concentrations at 450 – 550 ppm.

Alternatively, the argument has been made that the Act as currently written may not even require a NAAQS. Section 108(a)(1)(c) limits EPA's obligation to establish a NAAQS to those pollutants "for which [EPA] plans to issue air quality criteria", and thus appears to contemplate some discretion on EPA's part in whether to establish a NAAQS. In light of the circumstances described above, this may be an instance where such discretion would be justified. In any event, Sierra Club would support amending the Clean Air Act so as to make it clear that a CO2 NAAQS is not a necessary consequence of an endangerment finding.

Prevention of Significant Deterioration ("PSD")

The second specific Clean Air Act regulatory provision that I want to mention is the Prevention of Significant Deterioration ("PSD") requirements, found in Sections 165 and 169. Without getting into the minutiae of the PSD program, the regulated community has raised the concern that an endangerment finding would necessarily lead, under the PSD requirements, to regulation of all sources emitting more than 250 tons per year ("tpy") of CO2.

The short answer to this is that Sierra Club believes that imposing individual permitting requirements on CO2 sources emitting at that level is unnecessary, and that the appropriate regulatory threshold for such permitting is more likely to be in the range of 5,000 – 10,000 tpy.

There are at least two possible solutions to this problem. First would be amending Section 169 to clarify that while the 250 tpy limit applies to all other pollutants, a "major source" of CO2 is one that emits above a more appropriate regulatory threshold, possibly the 5,000 -10,000 tpy level.

A second possibility would be a regulatory program that maintained the 250 tpy threshold, but allowed for coverage of all sources below an individual permitting level (again, possibly 5-10,000 tpy) to be covered by a general permit, analogous to the sorts of general permits issued under Section 404(e) of the Clean Water Act. (Professor Heinzerling deserves credit for this idea.)

III. Conclusion

In *Massachusetts* EPA claimed that although it required the agency to regulate any substance that adversely affected "weather" or "climate", the Clean Air Act did not give EPA any authority to address climate change. The result: no federal emissions limits on any sources of greenhouse gases.

Three months ago, EPA claimed that California did not meet the criteria for implementing its own motor vehicle greenhouse gas standards, on the grounds that the Clean Air Act phrase "compelling and extraordinary" actually means "unique". The result: the thirteen states that have adopted these

standards (and the half dozen in the process of doing so) are prevented from limiting greenhouse gas emissions from the second-largest source in the U.S.

In the *Bonanza* case, EPA claims that Congress did not mean the word “regulation” in Section 165 of the Clean Air Act to mean the same thing as the word “regulation” in Section 821. The result: dozens of coal-fired power plants may be built without any CO2 emission controls.

EPA’s consistent response to the terrible threat of climate change has been to twist the words of the Clean Air Act so as to justify the agency in both its own refusal to act and in preventing anyone else from doing so. In the end, the only reason that I can see for EPA’s delay in answering the endangerment question is that it cannot figure out how to torture the statutory language into supporting a finding that greenhouse gases are not “reasonably anticipated to endanger public health or welfare.”