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Global Warming: The Litigation Heats Up

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Summary

The scientific, economic, and political questions surrounding global warming have long been with us. This report focuses instead on a relative newcomer: the legal debate. Though the first court decisions related to global warming appeared over a decade ago, the quantity of such litigation has increased significantly in recent years.

The court cases, decided and pending, address four principal issues. First, a two-parter, is whether EPA has the *authority* under the Clean Air Act (CAA) to regulate greenhouse gas (GHG) emissions, from either stationary or mobile sources. The follow-up question: If EPA has such authority, does the state of scientific knowledge about GHGs and global warming, and EPA's past pronouncements on the topic, create a *statutory duty* on EPA's part to act? The active litigation in this area is a pending suit by 12 states and others challenging EPA's denial of a Clean Air Act "section 202 petition" seeking to have the agency regulate GHG emissions from automobiles.

Second, is state regulation of GHG emissions from motor vehicles (limited to California at the moment) preempted by federal law? In California, car dealers have challenged recently adopted state regulations imposing limits, beginning in model year 2009, on emissions of four types of GHG emissions from cars and light-duty trucks.

Third, independent of any statute, can the common law of nuisance be used to force cutbacks in GHG emissions? Invoking the federal and state common law of public nuisance, eight states and New York City are now suing five electric utility companies, chosen as allegedly the five largest CO2 emitters in the U.S. Three non-governmental organizations have brought a similar suit against the same defendants, adding a private nuisance claim.

And fourth, do the alleged global warming impacts of federal agency actions allow a National Environmental Policy Act challenge? This issue is the only one covered in this report where in addition to the pending suit, there are decided cases. In the pending action, environmental groups and the City of Boulder, Colorado sued federal agencies on the ground that they were not assessing the global warming impacts of overseas projects made possible through their efforts.

Finally, the report discusses whether the United States, as a major emitter of GHGs that has declined to participate in the Kyoto Protocol, could be sued under international law for global warming impacts. No such claims have been filed as yet.

Overall, it seems that plaintiffs pressing the environmental side of the argument in the pending cases face an uphill climb. In all their cases, establishing standing and proving causation will be significant hurdles, given the nascent state of global warming science. Their best chances may lie with the petition for review of EPA's section 202 petition denial, where at least they have the plain meaning of statutory language on their side.

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Global Warming: The Litigation Heats Up

The scientific, economic, and political questions surrounding the prospect of global warming have long been with us. This report focuses instead on a relative newcomer: the legal debate. Though the first court decisions related to global warming appeared over a decade ago, the quantity of such litigation has increased significantly in recent years. At this writing, at least four cases pursuing multiple avenues of challenge are pending. Legal commentary posing creative new approaches to compelling abatement of greenhouse gas (GHG) emissions also is on the rise.

The court cases, decided and pending, address four principal issues. First, a two-parter, is whether EPA has the *authority* under the Clean Air Act (CAA) to regulate GHG emissions, from either stationary or mobile sources. The follow-up question: If EPA has such authority, does the state of scientific knowledge about GHGs and global warming, and EPA's past pronouncements on the topic, create a *statutory duty* on EPA's part to act? Second, is state regulation of GHG emissions from motor vehicles (limited to California at the moment) preempted by federal law? Third, independent of any statute, can the common law of nuisance be used by private plaintiffs to force cutbacks in GHG emissions? And fourth, do the alleged global warming impacts of federal agency actions allow a National Environmental Policy Act challenge?

Sections I through IV of this report address these four issue areas in turn, summing up the key legal events and congressional testimony. Because there are so few decided cases, the key arguments raised in court briefs filed in pending litigation are set out. Such arguments may ultimately be of solely historical interest, once a court decision in the case is rendered. Yet the range of these arguments is important in suggesting the profound challenge that a phenomenon as complex and potentially wide-ranging as global warming poses for our legal system. Looking beyond the issues raised by filed lawsuits, Section V summarizes some arguments that international law might be used in some future legal action to compel GHG emission reductions from the United States or other major GHG emitters. Finally, Section VI offers comments.

This report will be updated as circumstances warrant.

I. Does EPA Have the Authority to Regulate GHG Emissions? If So, Based on Existing Scientific Knowledge and Past EPA Pronouncements Does It Have a Statutory Duty to Do so?

Stationary sources of GHG emissions.

The first EPA General Counsel memorandum. In 1998 the United States signed the Kyoto Protocol.¹ This document committed the nation to reductions of GHG emissions – upon Senate approval and ratification by the President. Aware that near-term prospects for Senate approval were dubious, some members of Congress became concerned during this period that the Clinton Administration EPA might seek to regulate GHG emissions in the absence of ratification, under either of two claimed authorities. One authority would derive from an argument that even prior to ratification, the Protocol provided some sort of legal basis for emissions restrictions, perhaps citing past treaties signed by the United States that were given provisional implementation prior to going into effect.² This possibility provoked a series of enactments barring EPA's use of appropriated funds to implement the Kyoto Protocol in the absence of approval and ratification.³

Our concern here is with the second perceived possibility: that EPA might assert authority to regulate GHG emissions independently of the Protocol, under the CAA. During hearings on EPA's FY1999 appropriations, Representative Tom DeLay asked then-EPA Administrator Carol Browner whether the EPA believed it had such authority. This led, weeks later, to an EPA General Counsel memorandum,⁴ which immediately elevated the political profile of the EPA-authority issue.

The EPA General Counsel memorandum concluded that CO2 satisfies the CAA definition of "air pollutant," and thus may *potentially* be regulated under the act. The act, in section 302(g),⁵ defines "air pollutant" to include "any physical, chemical, biological, [or] radioactive ... substance or matter which is emitted into ... the ambient air." Plainly, the memo argued, CO2 is such a "substance or matter." Moreover, it said, a substance can be an air pollutant even though it is naturally present in the ambient air in small quantities, as is true of many air pollutants EPA

³ Pub. Law 105-276, 112 Stat. at 2496 (1998) (barring EPA's use of FY1999 funds to implement Protocol); Pub. Law No. 106-74, 113 Stat. at 1080 (1999) (same for FY2000); Pub. Law 106-377, 114 Stat. at 1141A-41 (2000) (same for FY2001).

¹ Kyoto Protocol to the United Nations Framework Convention on Climate Change, concluded Dec. 10, 1997, U.N. Doc. FCC/CP/1997/L.7 Add. 1, reprinted at 37 I.L.M. 22 (1998).

² See generally David M. Ackerman, *Global Climate Change: Selected Legal Questions About the Kyoto Protocol*, CRS Report for Congress 98-349 A (updated Oct. 1, 2002). This report concluded that "there does not appear to be any clear legal authority that could be invoked to sustain the provisional application of the Kyoto Protocol." *Id.* at 6.

⁴ Memorandum from Jonathan Z. Cannon, EPA General Counsel, to Carol M. Browner, EPA Administrator, EPA's Authority to Regulate Pollutants Emitted by Electric Power Generation Sources (Apr. 10, 1998).

⁵ 42 U.S.C. § 7602(g).

regulates under the CAA. EPA can regulate them because human activities have increased the quantities in the air to harmful levels.

But, the memorandum continued, determining that a substance is an "air pollutant" is only the first step. Before EPA can regulate emissions of the substance, the agency must further conclude that it meets criteria in other CAA provisions, often requiring the agency to determine that the substance poses harm to public health, welfare, or the environment. Identified by the memorandum as "potentially applicable" other CAA provisions for regulating CO2 emissions from electric generating plants are, first, three interconnected ones: CAA section 108⁶ directs EPA to issue "air quality criteria" for pollutants that cause air pollution reasonably anticipated to endanger public health or welfare and that derive from "numerous or diverse mobile or stationary sources"; section 109⁷ then instructs EPA to promulgate national primary (health protecting) and secondary (welfare protecting) ambient air quality standards for these "criteria pollutants"; and section 110⁸ orders states to submit plans governing stationary emission sources to meet those standards. Other CAA provisions said by the memorandum to arguably give EPA authority to regulate CO2 emissions from stationary sources are section 111(b),⁹ requiring EPA to set federal performance standards for new sources, and section 115,¹⁰ authorizing EPA to require state action to control certain air pollution if the agency believes it may endanger public health or welfare in a foreign country that gives the U.S. reciprocal rights.

This next step, determining that CO2 meets these added criteria, EPA declined to take. The 1998 memo concluded by stating that while CO2 is an "air pollutant," EPA had not yet determined that it met the criteria for regulation under one or more of the above provisions. (Nor has it made that determination since.)

The House of Representatives hearing. At a House hearing in October, 1999,¹¹ a panel of legal experts argued the question of EPA's authority to regulate CO2 under the CAA.

First and foremost, a new EPA General Counsel endorsed his predecessor's analysis in the 1998 memorandum.¹² Indeed, he presented two additional rationales

⁶ 42 U.S.C. § 7408.

⁷ 42 U.S.C. § 7409.

⁸ 42 U.S.C. § 7410.

⁹ 42 U.S.C. § 7411(b).

¹⁰ 42 U.S.C. § 7415.

¹¹ *Is CO2 a Pollutant and Does EPA Have the Power to Regulate It?*, Joint Hearing Before the Subcomm. on National Environmental Growth, Natural Resources and Regulatory Affairs of the Comm. on Gov't Reform, and the Subcomm. on Energy and Environment of the Comm. on Science, 106th Cong. (1999).

¹² Testimony of Gary Guzy, General Counsel, EPA, Hearings, *supra* note 11.

for EPA's authority to regulate CO2. First, CAA section 103(g)¹³ explicitly recognizes CO2 emissions from stationary sources as air pollution, albeit in a research and technology provision of the act, not a regulatory one. Second, CAA section 302(h)¹⁴ defines "welfare" (what secondary national ambient air quality standards are designed to protect) as including "effects on soil, water, crops, vegetation ... *weather*, visibility, and *climate*."¹⁵ But just as his predecessor, he stressed that the EPA's legal analysis was "largely theoretical" since "EPA currently has no plans to regulate carbon dioxide"¹⁶ This hands-off position was prompted in part by strong congressional opposition based on uncertainties as to the economic impact of regulating a pollutant as widespread as CO2. In addition. some in Congress argued that CAA implementation of a CO2 standard was barred by the aforementioned enactments (appropriation riders) prohibiting implementation of the Kyoto Protocol.¹⁷

A contrary view was offered by an industry attorney, arguing that the CAA did *not* allow EPA to regulate CO2 emissions. Given that such regulation "would have major consequences for all sectors of the economy," he asserted, "the fact that Congress never expressly gave EPA the authority to regulate such emissions is highly convincing of Congress' intent not to do so."¹⁸ Moreover, he said, there is "no rational way" to regulate a global phenomenon such as global climate change under the national ambient air quality standards. Similarly, CO2 regulation does not fit under CAA sections 111 (new source performance standards), 112 (hazardous air pollutants), or 115 (transboundary air pollution). Finally, he pointed to a "long history of congress' rejection of a provision to regulate CO2 emissions when enacting the CAA Amendments of 1990.

Two law professors of opposing views rounded out the legal witnesses. One endorsed the EPA General Counsel view.¹⁹ He disagreed with the view that Congress' rejection of CO2 restrictions on various occasions undercuts EPA authority under the CAA, on the ground that where a statute is unambiguous, as he argued the CAA to be on the CO2 issue, no resort to legislative history is necessary. Moreover, Congress' failure to enact authority for CO2 restrictions as part of the 1990 CAA amendments tells us nothing, he said, about what an earlier Congress enacting the original CAA intended. The other academic invoked the constitutional separation of powers, under which an executive agency such as EPA is confined to carrying out

¹³ 42 U.S.C. § 7403(g).

^{14 42} U.S.C. § 7602(h).

¹⁵ Emphasis added.

¹⁶ Testimony of Gary Guzy, Hearings, *supra* note 11, at 11.

¹⁷ See Veronique Bugnion and David M. Reiner, A Game of Climate Chicken: Can EPA Regulate Greenhouse Gases Before the U.S. Senate Ratifies the Kyoto Protocol?, 30 Envtl. L. 491 (2000).

¹⁸ Testimony of Peter Glaser, Hearings, *supra* note 11, at 27.

¹⁹ Testimony of Prof. Jeffrey Miller, Hearings, *supra* note 11, at 46.

authorities granted by Congress, the law-making body.²⁰ He argued that in light of that principle, EPA could not regulate CO2 emissions, with its potential for "dramatic and long-reaching effects for all Americans," without express statutory authorization. Such authorization he did not discern in the CAA. Making EPA regulation of CO2 emissions "doubly offensive" to separation of powers considerations, he said, was that such regulation would effectuate the spirit, if not the precise standards, in the Kyoto Protocol, a treaty negotiated by the same administration that had not submitted it to the Senate for approval.²¹

In a significant exchange during questioning by Members, Representative David McIntosh homed in on the extreme breadth, in his view, of EPA's reading of the CAA definition of "air pollutant." He noted that the very CAA section 103(g) that recognizes CO2 as an air pollutant says that "[n]othing in this subsection shall be construed to authorize the imposition ... of pollution control requirements." In response, EPA's General Counsel clarified that the agency cited section 103(g) only in support of its argument that Congress viewed CO2 as an air pollutant, not for the purpose of drawing regulatory authority from 103(g). The General Counsel's position was that because the CAA definition of air pollutant has few qualifiers, it must be read quite broadly; the significant hurdles to regulating an emission under the CAA come instead from the added prerequisites imposed by *other* sections of the act. The industry attorney objected at this point, arguing that notwithstanding its lack of qualifiers, the CAA definition of air pollutant must be read in light of the act's overall design, which is geared to pollutants having a direct effect on the environment, not, as in the case of GHGs, only indirect global effects.

Finally, the hearing record includes a letter from Representative John Dingell, who as a conferee on the 1990 CAA amendments was asked by Representative McIntosh what the views of the conference had been as to GHG coverage.²² Representative Dingell said that the House bill at no stage made mention of GHGs or global warming, but the Senate bill did. The conferees had left those Senate provisions out. The 1990 CAA amendments also required EPA to issue regulations to "monitor carbon dioxide emissions" from "all affected sources subject to title V" of the CAA, but did not designate CO2 as a pollutant.²³ Mr. Dingell concluded: "I would have difficulty concluding that the House-Senate conferees, who rejected the Senate regulatory provisions [on GHGs], contemplated regulating greenhouse gas emissions or addressing global warming under the Clean Air Act." (Of course, the Dingell letter is subsequent legislative history, usually given little deference by courts, nor does it address the 1970 and 1977 CAA enactments, when the key provisions pertinent to GHGs were added. On the other hand, Congress was far more

²⁰ Testimony of Prof. James Huffman, Hearings, *supra* note 11, at 51.

²¹ Prof. Huffman's further reliance on American Trucking Ass'ns v. EPA, 175 F.3d 1027 (D.C. Cir. 1999), is not included in the text above because the decision was later overruled. Whitman v. American Trucking Ass'ns, 531 U.S. 457 (2001).

²² Letter from Rep. John D. Dingell to Rep. David M. McIntosh, Chairman, Subcomm. on National Economic Growth, Natural Resources, and Regulatory Affairs, Comm. on Gov't Reform, Oct. 5, 1999, reprinted in Hearings, *supra* note 11, at 65.

²³ 42 U.S.C. § 7651k note.

acutely aware of the GHG and global warming issue in 1990 than at the time of the earlier enactments, so its rejection of GHG language in 1990 arguably has added significance.)

Commonwealth of Massachusetts v. Whitman: under CAA section 108, *must* EPA regulate GHG emissions? This case, filed June 4, 2003, was the first effort to use the courts to compel EPA action against GHG emissions. Plaintiffs were three Northeast states (MA, CT, ME). They argued that on various occasions (including the 1998 General Counsel memorandum), EPA has indicated its belief that CO2 emissions contribute to global warming, with its attendant harmful effects. These EPA statements constituted, in the words of CAA section 108, a "judgment [that GHG emissions] cause or contribute to air pollution which may reasonably be anticipated to endanger public health or welfare" and that such emissions "result[] from numerous or diverse mobile or stationary sources." These criteria being satisfied, the suit argued, section 108 requires that EPA add CO2 to its list of "criteria pollutants," and proceed under section 109 to develop national ambient air quality standards for CO2. EPA had not done so, hence this citizen suit.

On September 3, 2003, the plaintiff states dismissed their suit without prejudice. The previous week, EPA had denied a CAA "section 202 petition" seeking EPA regulation of GHG emissions from mobile sources, and had issued its new General Counsel opinion that EPA lacked authority over GHG emissions (see Mobile Sources section, *infra* this page). Plaintiff states therefore decided to transfer their energies to a suit challenging that denial, putting the instant case on inactive status.

Mobile sources of GHG emissions.

The "section 202" petition to EPA. On October 20, 1999, the International Center for Technology Assessment (ICTA) and 19 other organizations²⁴ petitioned EPA to regulate emissions of GHGs (specifically CO2, methane, nitrous oxide, and hydrofluorocarbons) from new motor vehicles. The petition cited the agency's alleged mandatory duty to do so under CAA section 202(a)(1).²⁵ That section directs the EPA Administrator to prescribe emission standards for any "air pollutant" from new motor vehicles "which, in his judgment cause[s], or contribute[s] to air pollution which may reasonably be anticipated to endanger public health or welfare."

The petition's argument is straightforward. CAA section 202(a)(1) requires three determinations before EPA's mandatory duty to regulate is triggered: (1) there is an "air pollutant," (2) that is emitted by motor vehicles, and (3) that causes or contributes to air pollution reasonably anticipated to endanger public health or welfare. Each of the GHGs listed in the petition, it contends, satisfies these three conditions. That CO2 is an "air pollutant" emitted by motor vehicles was determined by the first General Counsel memorandum, and the argument presented there applies as well to the other three GHGs addressed by the petition. And, EPA already has made findings that GHGs from motor vehicles may reasonably be anticipated to

²⁴ The 19 organizations comprise environmental groups and groups advocating greater use of renewable energy.

²⁵ 42 U.S.C. § 7521(a)(1).

endanger public health and welfare, a standard that does not require complete certainty. Moreover, it is technically feasible to reduce GHG emissions from new motor vehicles, as by increasing their fuel economy. Thus, EPA not only may, but *must*, regulate GHG emissions under section 202(a)(1).

The Clinton EPA did not rule on the 202 petition, so it was carried over to the Bush Administration.

The second EPA General Counsel memorandum. On August 28, 2003, a third EPA General Counsel, this time in the Bush Administration, took on the GHG authority question.²⁶ Contrary to earlier agency counsels, this latest memorandum said that the CAA does *not* grant EPA authority to regulate CO2 or other GHG emissions for the purpose of addressing global warming impacts. Thus, the 1998 memorandum and the later EPA congressional testimony based on it were formally withdrawn.

The memorandum from the Bush Administration EPA takes a more wideranging look at the GHG authority issue than the 1998 memorandum, going well beyond the immediately pertinent CAA provisions. Its arguments rejecting agency authority begin with two based on the broader CAA. First, three provisions in the 1990 CAA amendments expressly touch on global warming, but none of them authorize regulation. Rather, they seek to learn more about the problem. And as mentioned, a Senate committee included in its 1990 CAA amendments bill a requirement that EPA set CO2 emission standards for motor vehicles, but the provision was not enacted. Second, the CAA contains a separate program explicitly addressing stratospheric ozone depletion,²⁷ showing that Congress understands the need for specially tailored solutions to global atmospheric issues such as global warming, rather than leaving such issues to the general regulatory authorities in the CAA. In particular, the national ambient air quality standard (NAAOS) concept at the very heart of the CAA is "fundamentally ill-suited" to dealing with global warming - e.g., it presumes that actions taken by individual states and EPA can generally bring all areas of the U.S. into NAAQS attainment.

The memorandum's other two arguments reach well beyond the CAA. First, various congressional enactments from 1978 to 1990, it asserted, reveal a Congress interested in developing a foundation for considering whether future legislative action on global warming was warranted. This suggests that while Congress was debating the CAA Amendments of 1990, it was awaiting further information before deciding whether regulation on global warming was needed. Second, the views of the Clinton-era EPA on GHG authority were rendered prior to a key Supreme Court decision in 2000. That decision held that when Congress makes facially broad grants of authority to agencies, they must be interpreted in light of the statute's purpose,

²⁶ Memorandum from Robert E. Fabricant, EPA General Counsel, to Marianne L. Horinko, EPA Acting Administrator, EPA's Authority to Impose Mandatory Controls to Address Global Climate Change Under the Clean Air Act (Aug. 28, 2003).

²⁷ CAA §§ 601-618, 42 U.S.C. §§ 7671-7671q.

structure, and history.²⁸ Due to the "unusually profound implications of global climate change regulation," the memo argued, this decision suggests that the CAA should not be read to delegate an authority of such significance in so cryptic a fashion.

EPA's denial of the section 202 petition. On August 28, 2003, almost four years and almost 50,000 comments after the section 202 petition was filed, EPA denied it.²⁹ Much of the agency's rationale followed its new General Counsel memorandum, issued the same day, denying the existence of EPA authority under the CAA to regulate GHG emissions.

The agency's rationale also went beyond the new General Counsel memorandum, making further arguments. The first was that the CAA does not authorize EPA to regulate CO2 emissions from motor vehicles to the extent such standards would effectively regulate the *fuel economy* of cars and light-duty trucks. The only practical way to reduce CO2 emissions, EPA contends, is to improve fuel economy, but Congress has already created standards for the fuel economy of cars and light-duty trucks under a different statute (Energy Policy and Conservation Act³⁰) administered by a different agency (Department of Transportation). That statute, EPA concluded, is the only means for regulating the fuel economy of cars and light-duty trucks. EPA's second argument was that CAA section 202(a)(1) imposes on the EPA Administrator only a *discretionary* duty to make the requisite judgment whether a vehicle emission "may reasonably be anticipated to endanger public health or welfare." Prior EPA statements as to the global warming impacts of GHG emissions do not rise to the level of such a formal judgment by the Administrator.

Beyond the above issues of CAA authority and interference with fuel economy standards, EPA disagreed as a matter of Bush Administration policy with the mandatory standards approach urged by petitioners. Not surprisingly, EPA endorsed President Bush' non-regulatory approaches to climate change.

Commonwealth of Massachusetts v. EPA; the challenge to EPA's denial. Shortly after EPA's denial of the section 202 petition, the denial and the supporting General Counsel memorandum were challenged in court by twelve states (CA, CT, IL, MA, ME, NJ, NM, NY, OR, RI, VT, WA), three cities (New York, Baltimore, and Washington, D.C.), two U.S. territories (American Samoa and Northern Mariana Islands), and several environmental groups. *Commonwealth of Massachusetts v. EPA*, No. 03-1361 (D.C. Cir. filed October 23, 2003).

Petitioners in *Commonwealth of Massachusetts* argue that EPA's conclusion that it lacks authority to set motor vehicle emission standards for GHGs contravenes the plain language of the CAA – in particular, section 202(a)(1)'s grant of authority to regulate "any air pollutant" that may adversely affect "public health or welfare,"

²⁸ FDA v. Brown & Williamson Tobacco Corp., 529 U.S. 120 (2000).

²⁹ EPA, Control of Emissions from New Highway Vehicles and Engines, 68 Fed. Reg. 52922 (Sept. 8, 2003).

³⁰ 49 U.S.C. § 32902.

section 302(h)'s definition of "welfare" to include effects on "weather" and "climate," and section 302(g)'s broad definition of "air pollutant." None of EPA's arguments, in petitioners' view, come close to proving that Congress did not intend the plain meaning of these words. In addition, petitioners contend that there is no conflict between the CAA and the fuel economy standards in the Energy Policy and Conservation Act. The two statutes, they claim, have subject matter and purposes different from one another, and since they both set only minimum standards, an automobile manufacturer's compliance with one does not preclude its compliance with the other. Where, as here, there is no conflict between statutes, a court must give effect to both.

Also, petitioners argue that EPA acted unlawfully in stating its refusal to regulate GHGs from motor vehicles *even if* the CAA confers authority to promulgate such regulations. EPA's statement that it would be inappropriate to proceed with regulation due to lingering uncertainties about the causes of global warming leaves unclear whether it refuses to regulate simply because it prefers not to, despite those emissions meeting the 202(a)(1) "endanger"standard, or because the emissions do not in fact contribute to such endangerment. And, EPA is incorrect in arguing that even when the injury standard is met, promulgation of standards remains entirely discretionary.

On the other side of the suit, EPA has been joined as defendant by ten state intervenors (AK, ID, KS, MI, ND, NE, OH, SD, TX, UT), plus several automobileand truck-related trade groups. At this writing, briefing is proceeding apace. Oral argument before the D.C. Circuit is scheduled for April 8, 2005.³¹

II. Is State Regulation of GHG Emissions from Motor Vehicles Preempted by Federal Law?

The question whether federal law preempts state regulation of GHG emissions appears to arise solely in connection with *mobile* sources. By various arguments, the CAA seems not to preempt state air pollution controls on stationary sources.³² And the Energy Policy and Conservation Act does not set fuel economy standards for other than mobile sources, so it too would be unlikely to preempt state regulation of stationary sources. Hence, states acting to limit GHG emissions from stationary sources should have little concern about being preempted by federal law.

³¹ For an analysis of both the currently inactive section 108 suit and this section 202 suit, see Richard W. Thackeray, Jr., Note, *Struggling for Air: The Kyoto Protocol, Citizens' Suits Under the Clean Air Act, and the United States Options for Addressing Global Climate Change*, 14 Ind. Int'l & Comp. L. Rev. 855 (2004).

³² If GHGs are regarded as an "air pollutant" under the CAA, then non-preemption is dictated by CAA section 116. 42 U.S.C. § 7416. Section 116 expressly disavows any preemptive effect for the CAA as to any state "standard or limitation respecting emissions of air pollutants" or any state "requirement respecting control or abatement of air pollution." If GHGs are not "air pollutants," then the principal authorities in the CAA give EPA no authority to regulate GHG emissions, and accordingly, the preemption question may not arise.

Not so for mobile sources. On July 22, 2002, Governor Gray Davis of California signed into law what was then, and still remains, the only state statute calling for limits on GHG emissions from cars. The law, Assembly Bill 1493,³³ instructs the California Air Resources Board (CARB) to adopt regulations that achieve the maximum feasible reduction of GHGs emitted by passenger vehicles and light-duty trucks, and any other vehicles whose primary use is noncommercial personal transportation. Enactment was accompanied by official statements that the law aimed at filling the void left by federal inaction as to regulation of GHG emissions.

The CARB adopted the required regulations on September 24, 2004. The regulations target CO2, methane, nitrous oxide, and hydrofluorocarbon emissions, setting "fleet average greenhouse gas exhaust mass emission requirements for passenger car, light-duty truck, and medium-duty passenger vehicle weight classes." The first model year to which the fleet averages apply is 2009. The averages are reduced for each subsequent model year through 2016.

On December 7, 2004, Assembly Bill 1493 and the implementing CARB regulations were challenged by 13 California car dealers plus the Alliance of Automobile Manufacturers. *Central Valley Chrysler Jeep, Inc. v. Witherspoon*, No. 1:04-CV-06663 (E.D. Cal. filed December 7, 2004). Plaintiffs seek to enjoin enforcement of the CARB regulations, on the grounds that they (1) are preempted by the fuel economy standards set under the Energy Policy and Conservation Act, which instructs that states not enforce any rule related to fuel economy standards;³⁴ (2) are preempted by the Clean Air Act,³⁵ absent a waiver approved by EPA;³⁶ (3) are preempted as conflicting with federal policy to address global warming through multilateral international agreements; (4) violate the dormant commerce clause of the Constitution by imposing economic burdens far outweighed by any benefits; and (5) offend federal antitrust laws, by requiring cooperation among otherwise competitive automobile manufacturers in the California new-vehicle market.³⁷

³³ Cal. Heath & Safety Code § 43018.5.

³⁴ EPCA states: "When an average fuel economy standard prescribed under this act is in effect, a State ... may not adopt ... a law or regulation related to fuel economy standards or average fuel economy standards for automobiles covered by an average fuel economy standard under this act." 49 U.S.C. § 32919(a).

³⁵ CAA § 209(a), 42 U.S.C. § 7543(a). This prohibition on state regulation appears to apply even in the absence of a federal emission standard. Thus, despite EPA's having no vehicle emission standards for CO2, methane, and hydrofluorocarbons, a state would still be preempted from setting its own emission standard.

³⁶ CAA § 209(b), 42 U.S.C. § 7543(b).

³⁷ Also on December 7, 2004, four auto and truck dealers and two auto manufacturers filed a separate suit against the GHG regulations in state court, alleging violations of state law. Fresno Dodge, Inc. v. California Air Resources Bd., No. 04 CE CG 03498 (Cal. Super. Ct. filed Dec. 7, 2004).

The law of the second, CAA preemption argument is worth a pause.³⁸ The CAA preempts states from adopting any "standard relating to the control of emissions from new motor vehicles"³⁹ But the CAA defines the similar phrase "emission standard" as certain limits on "emissions *of air pollutants*"⁴⁰ – and the Bush Administration EPA General Counsel memorandum concluded that CO2 and other GHG emissions are not "air pollutants." Thus, if the preemption provision phrase is no broader than the definition of "emission standard," there is an argument that the preemption provision does not apply to state regulation of mobile-source emissions for purposes of addressing global warming. Contrariwise, if "relating to" imparts a broader reach to the preemption provision phrase than the definition, there may indeed be preemption. If this issue is resolved in favor of preemption, there is the subsequent question whether the CAA waiver provision is available given EPA's position as to the non-"air pollutant" status of GHG emissions.⁴¹ If the waiver is seen to be potentially available, EPA must still decline to make any of three findings that, under the CAA, bar granting the waiver.⁴²

III. Can the Common Law of Nuisance Be Used to Limit GHG Emissions?

We turn now from efforts to have GHG emissions regulated to action by aggrieved parties directly against GHG emitters. On July 21, 2004, eight states (CA, CT, IA, NJ, NY, RI, VT, WI) and New York City sued five electric utility companies.⁴³ *State of Connecticut v. American Electric Power Co.*, Civ. No. 04 CV 05669 (S.D.N.Y. filed July 21, 2004). These defendants were chosen as allegedly the five largest CO2 emitters in the U.S., through their fossil-fuel-fired electric powerplants. Invoking the federal and state common law of public nuisance,⁴⁴

³⁹ CAA § 209(a); 42 U.S.C. § 7543(a).

⁴⁰ CAA § 302(k); 42 U.S.C. 7602(k). Emphasis added.

⁴¹ See Motor and Equipment Mfrs. Ass'n v. EPA, 627 F.2d 1095, 1107 (D.C. Cir. 1979) ("plain meaning of the statute indicates that Congress intended to make the waiver power coextensive with the preemption provision").

⁴² No waiver shall be granted, states the CAA, if EPA finds that (1) the state's determination that its standards are at least as protective as the federal standards is arbitrary and capricious, (2) the state does not need the standards to meet "compelling and extraordinary conditions," and (3) the state standards and accompanying enforcement procedures are not consistent with CAA section 202(a). CAA § 209(b)(1)(A)-(C), 42 U.S.C. § 7543(b)(1)(A)-(C).

⁴³ American Electric Power Co., Inc., The Southern Co., Cinergy Corp., Tennessee Valley Authority, and Xcel Energy, Inc.

⁴⁴ An activity is a public nuisance if it creates an unreasonable interference with a right common to the general public. Unreasonableness may rest on the fact that the activity significantly interferes with public health and safety, or has produced a permanent or long-(continued...)

³⁸ See generally Rachel L. Chanin, *California's Authority to Regulate Mobile Source Greenhouse Gas Emissions*, 58 N.Y.U. Ann. Survey Amer. Law 699 (2003); Ann E. Carlson, *Federalism, Preemption, and Greenhouse Gas Emissions*, 27-Fall Environs Envtl. Law & Pol'y J. 281 (2003).

plaintiffs seek a mandatory injunction requiring defendants to abate their contribution to the nuisance of global warming by capping CO2 emissions and then reducing them by a specified percentage each year for at least a decade. Plaintiffs sue both on their own behalf to protect state-owned property (e.g., the hardwood forests of the Adirondack Park in New York), and as *parens patriae* on behalf of their citizens and residents to protect public health and well-being.

Also on July 21, 2004, three non-governmental organizations (the Open Space Institute, Open Space Conservancy, and Audubon Society of New Hampshire) filed a similar suit against the same defendants, in the same court, adding a private nuisance claim.⁴⁵ *Open Space Inst. v. American Electric Power Co.*, No. 04 CV 05670 (S.D.N.Y. filed July 21, 2004). They seek to protect land owned and preserved by them in the state of New York.⁴⁶

In a series of motions filed September 30, 2004, defendants have sought to dismiss these actions. Because the legal theories in these motions may recur in future GHG-based tort litigation, they are worth canvassing. Each of the defendants' arguments presents an obstacle that must be surmounted before the court even reaches the merits of the case.

In a motion for dismissal based on lack of subject matter jurisdiction, one subset of defendants argues there is no federal common law cause of action to sue for global warming. Creating such common law, they argue, runs afoul of Supreme Court directives that federal courts create common law only in limited areas – especially where, as with global warming, the problem at issue has sweeping national and international implications. Moreover, because the political branches are actively engaged in international negotiations about global warming, this matter is not one that a court should resolve in private litigation. Even assuming a federal commonlaw nuisance action that plaintiffs could invoke, Congress' enactment of a comprehensive scheme of air pollution regulation in the Clean Air Act displaces federal court authority in this area. Defendants also challenge plaintiffs' standing to sue.⁴⁷ Plaintiffs, defendants argue, have not demonstrated the "injury in fact"

⁴⁴ (...continued)

lasting effect and, as the actor knows or has reason to know, has a significant effect on the public right. Restatement (Second) of Torts §§ 821B (1979).

⁴⁵ An activity is a private nuisance if it is a nontrespassory invasion of another's interest in the private use and enjoyment of land. *Id.* at 821D.

⁴⁶ See Vincent S. Oleskiewicz and Douglas B. Sanders, *The Advent of Climate Change Litigation Against Corporate Defendants*, BNA Daily Env't Rpt. B-1 (Nov. 15, 2004). The authors review the *State of Connecticut* and *Open Space Institute* suits in some detail, assess the defenses available in tort-based climate change suits generally, and extract clues as to the potential success of such litigation from the history of litigation against tobacco companies.

⁴⁷ Article III of the Constitution limits the jurisdiction of federal courts created under that article, such as the district courts, to certain plaintiffs. Only those persons and entities have "standing to sue" in Article III courts whose claims involve (1) injury in fact that is concrete and particularized, and actual or imminent; (2) a causal connection between the injury and (continued...)

requisite of standing because they allege only injuries from global warming that will occur only in the indefinite future. Nor, say the defendants, have they shown "causation" because they do not allege that defendants' conduct will directly cause the consequences of global warming – especially since defendants' collective emissions are admitted to be less than 2-1/2% of the global total from human activities.

A second motion, filed by a different subset of defendants, seeks dismissal for lack of personal jurisdiction. Defendants allege that while their powerplants are located in 20 states, none is in New York (where the case was filed) or any other plaintiff state except Wisconsin. The jurisdiction of a federal district court in New York, they argue, cannot be invoked to enjoin non-resident defendants from conducting lawful activities outside of New York with alleged effects occurring almost entirely outside of New York. Doing so would violate the New York personal jurisdiction statutes. Nor do plaintiffs satisfy the "sufficient minimum contacts" (with New York) standard of constitutional substantive due process.

A third motion to dismiss was filed by Tennessee Valley Authority alone. TVA notes that it is a federal agency, charged by statute with generating electricity. It is fundamental federal law, it argues, that the performance by federal agencies of discretionary functions entrusted to them is not subject to tort suits for damages or injunction.

A final motion to dismiss was filed by several defendants solely in the suit by private plaintiffs. They assert that to the limited extent a federal common law claim to abate an interstate nuisance has been recognized, it has been limited to actions brought by state entities. Nor, say defendants, can plaintiffs assert state law claims for public nuisance, because they have not alleged special injury to their properties, or for private nuisance, because they have not alleged substantial harm.

Assuming the suit survives these motions, plaintiffs will still face classic hurdles of a type seen in acid rain and toxic tort litigation. Presumably the lenient civil standard of proof (preponderance of the evidence) can be met by plaintiffs on the threshold question of whether human activity, as a general matter, contributes to global warming. The hard part for plaintiffs will be to show that global warming is a cause of specific climate events in their states, and, if so, how to apportion damages as between the defendants collectively and non-defendant emitters, and among the defendants themselves.

⁴⁷ (...continued)

the conduct complained of; and (3) a likelihood that the injury will be redressed by a favorable decision.

In addition to these constitutional preconditions for standing, the courts additionally have established certain *prudential* hurdles, such as that the injury alleged by plaintiff be within the "zone of interests" protected by the statute under which suit is brought.

IV. Do the Alleged Global Warming Impacts of Federal Agency Actions Allow a National Environmental Policy Act Challenge?

This issue is the only one covered in this report where in addition to a pending suit, there are decided cases. In both, the dominant issue is whether plaintiffs have standing to sue, an issue encountered in Section III.⁴⁸ The standing issue has been particularly difficult for courts in the context of a statute such as the National Environmental Policy Act (NEPA) that confers only a *procedural* right (having a federal agency prepare an adequate environmental impact statement (EIS)), not a substantive right (having the agency select a particular course of action following EIS preparation). Of the four resolved cases revealed by our research that involve NEPA and global warming, standing has been held lacking in three.

The earliest case appears to be *City of Los Angeles v. National Highway Traffic* Safety Admin., 912 F.3d 478 (D.C. Cir. 1990). There, public interest groups and New York City challenged a National Highway Traffic Safety Administration (NHTSA) decision not to prepare an EIS when it set the corporate average fuel economy (CAFE) standard at 26.5 mpg for model year 1989 passenger cars, below the statutory default setting of 27.5 mpg.⁴⁹ The majority of the panel concluded that petitioners had standing based on their argument that had NHTSA done an EIS considering the global warming impacts of its one mpg rollback, the agency might have rejected it. This provided the requisite causal nexus, said the majority, between NHTSA's decision not to do an EIS and global warming. In dissent, however, one judge argued that Article III demanded a more precise causal showing, with clear proof of a nexus between the agency action and harm to the petitioners. On the merits, one judge in the majority concluded that NHTSA had "inadequately explained why the admitted increase in carbon dioxide is insignificant within the context of the environmental harm posed by global warming."50 She would have remanded NHTSA's NEPA decision but left the rollback in place in the meantime. Because the other majority judge ruled for the agency, however, the petition was denied.

The status of the *City of Los Angeles* standard for finding global-warming-based standing is now up in the air, however, reflecting the judicial ups and downs of standing doctrine generally. Six years after *City of Los Angeles*, a divided D.C. Circuit declared *en banc* that to obtain standing, a procedural-rights plaintiff must show not only that the government omitted a required procedure, but that it is substantially probable that the procedural omission *will cause a particularized injury to the plaintiff*⁵¹ – adopting the dissenter's position in that case. To the extent *City*

⁴⁸ See note 42 and accompanying text supra.

⁴⁹ Other model years were involved, too, but only the challenge to the Model Year 1989 CAFE standard involved a global warming argument.

⁵⁰ 912 F.2d at 501.

⁵¹ Florida Audubon Society v. Bentsen, 94 F.3d 658 (D.C. Cir. 1996). The four dissenting judges argued that the majority had "misapplied the doctrine of standing to the assertion of a procedural right, such as the preparation of an EIS, with the consequence that it will be (continued...)

of Los Angeles dispensed with the second, causation-of-a-particularized-plaintiffinjury requirement, it was expressly overruled. Still later court decisions, however, have cast doubt on this strict standard.⁵²

Two other decisions, from the district courts, deserve mention. In Foundation on Economic Trends v. Watkins, 794 F. Supp. 395 (D.D.C. 1992), plaintiffs claimed that NEPA required the Secretaries of Energy, Agriculture and Interior to evaluate the effect on global warming of 42 actions and programs under their authority. Plaintiffs' standing argument was based on the doctrine of "informational standing," under which failure to do an EIS discussing possible global warming impacts satisfies the injury requirement of standing merely by harming plaintiffs' programs for disseminating information about global warming to the public. In so arguing, plaintiffs relied on a line of D.C. Circuit decisions going back two decades. Unfortunately for them, however, informational standing was repudiated by the D.C. Circuit during the pendency of their suit. An amended complaint by the individual plaintiff, arguing that his expected use of his oceanfront cottage may be curtailed if oceans rise from global warming, was also rejected. Among other things, said the court, the plaintiff had not met the causation requirement of standing in that he had not related the environmental harm he predicted to any of the 42 challenged agency actions. "[T]here is no 'global warming' exception to the standing requirements of Article III or the [Administrative Procedure Act]."53

In the one non-NEPA decision on global warming and standing, plaintiffs sought enforcement of the Energy Policy Act as it related to the acquisition of alternative fuel vehicles by the United States.⁵⁴ In rejecting standing, the court described plaintiffs' global warming concerns as "too general, too unsubstantiated, too unlikely to be caused by defendant's conduct, and/or too unlikely to be redressed by the relief sought to confer standing."⁵⁵

Finally, there is a pending NEPA case. On September 3, 2002, environmental groups and the City of Boulder, Colorado, sued the Overseas Private Investment Corp. and Export-Import Bank of the United States for their alleged continued failure to comply with NEPA. *Friends of the Earth v. Watson*, No. 02-4106 (N.D. Cal. filed September 3, 2002).⁵⁶ These federal agencies provide insurance, loans, and loan guarantees for overseas projects, or to U.S. companies that invest in overseas projects. Plaintiffs allege that these overseas projects include oil and gas extraction and refining, and power plants, which together result in the annual emission of

⁵¹ (...continued)

effectively impossible for anyone to bring a NEPA claim in the context of a rulemaking with diffuse impact." *Id.* at 673.

⁵² See, e.g., Friends of the Earth v. Laidlaw Environmental Services, 528 U.S. 167 (2000).

^{53 794} F.2d at 401.

⁵⁴ Center for Biological Diversity v. Abraham, 218 F. Supp. 2d 1143 (N.D. Cal. 2002).

⁵⁵ *Id.* at 1155.

⁵⁶ Peter Watson is the President and Chief Executive Officer of the Overseas Private Investment Corp.

billions of tons of GHGs. Plaintiffs seek an injunction ordering defendants to fully comply with NEPA.

On November 3, 2004, defendants filed a motion for summary judgment arguing first that plaintiffs cannot demonstrate the facts necessary to satisfy any prong of the Supreme Court's constitutional standing test.⁵⁷ For example, they asserted, while some of the impacts alleged by plaintiffs are possible results of global warming, there is no clear link between specific GHG emissions and specific impacts. Thus, plaintiffs cannot show sufficient particularity and imminence of injury as required to meet the "injury in fact" prong of the standing test. Beyond standing, defendants argue that plaintiffs' claims fail Administrative Procedure Act (APA) preconditions for judicial review by not identifying any "final agency action," and that the claims against OPIC fail because OPIC's actions are not subject to judicial review under the APA and because the agency is not subject to NEPA. Oral argument on the motion is scheduled for February 11, 2005.

V. Could the United States or Major GHG Emitters Be Sued under International Law?

The question has been asked whether the United States, as a major emitter of GHGs that has declined to participate in the Kyoto Protocol, could be sued in international forums for the adverse effects of global warming. In contrast with the four issue areas above, no such claims have as yet been filed.

Gauging the possibility and legal viability of international global-warmingbased claims against the United States involves a good degree of guesswork, as such a claim would lie on the frontiers of international law. In this report, concerned primarily with actually filed claims, we note only a few highlights, taken from what appears to be the most scholarly article in the area.⁵⁸ The article suggests that the International Court of Justice (ICJ) might be one forum for resolution of global warming claims, with jurisdiction established through treaties that specifically provide for dispute resolution before the court. The problem with the ICJ approach is that the treaties most likely to be invoked are Friendship, Commerce, and Navigation or similar treaties, which focus on how each party *within its own country* treats the other country's nationals and property. A global warming suit, by contrast, likely would have an extraterritorial focus. Another ICJ possibility would be for the court to render an advisory opinion, at the request of a body authorized under the U.N. Charter to request one.

Other possibilities include voluntary submission of a global warming dispute to any of several international arbitral forums or resort to the specialized dispute resolution systems created under various treaties.

⁵⁷ See, e.g., Bennett v. Spear, 520 U.S. 154, 167 (1997).

⁵⁸ Andrew L. Strauss, *The Legal Option: Suing the United States in International Forums for Global Warming Emissions*, 33 Envtl. L. Rptr 10185 (2003).

The substantive rules that might be applied to a claim alleging GHG-caused injury presumably would be taken from the international law of transboundary pollution. For example, the Restatement (Third) of Foreign Relations Law describes an international law principle under which a nation must "take such measures as may be necessary, to the extent practicable under the circumstances, to ensure that activities within its jurisdiction or control ... are conducted so as not to cause significant injury to the environment of another state"⁵⁹ Similarly, the *Trail Smelter* arbitration decision, probably the seminal ruling on state liability for transboundary pollution, declared that "[a] State owes at all times a duty to protect other States against injurious acts by individuals from within its jurisdiction."⁶⁰ Of course, as with the domestic common law litigation described in section III, daunting hurdles confront the claimant in making the link between global warming in general and specific environmental harms, and in apportioning how much of such harms are attributable to the charged party or parties, in this instance the United States.

VI. Comments

Gauging the prospects of the pending global warming lawsuits is a precarious task; for most of the suits, there are no precedents. Still, it is hard to resist the conclusion that the plaintiffs pressing the environmental side of the argument (all but Section II of this report) face an uphill climb. Their best chances may lie with the petition for review of EPA's section 202 petition denial (Section I, Mobile Sources), where they at least have the plain meaning of key statutory language on their side, even if a GHG emission reduction program would be different, in the scope and indirectness of the adverse effects, than the pollutants for which the CAA's general regulatory provisions have been used thus far.

Plaintiffs pressing common law of nuisance and NEPA actions have a tougher row to hoe. Defendants have raised vigorous standing arguments, alleging a failure on plaintiffs' part to show the kind of imminent particularized injury usually required for standing. Causation and redressability, related standing prerequisites, will also be difficult to show in light of the nascent state of global warming science at present. And for the common law actions, allocation of damages among specific defendants will present both factual and legal challenges.

Causation, of course, is not only a component of the threshold standing test but a component of the plaintiff's case on the merits. No relief under CAA section 202, the federal common law of nuisance, NEPA, or international law will be forthcoming unless the science is there to link together the challenged acts of the GHG emitter with the alleged harms to the complainant. Several writers have identified proof of causation as a key obstacle to a tort action seeking relief from global warming injury.⁶¹

⁵⁹ Restatement (Third) of Foreign Relations Law § 601(1).

⁶⁰ Trail Smelter (U.S. v. Canada), 3 R.I.A.A. 1938, 1965 (Mar. 11, 1941).

⁶¹ Myles R. Allen and Richard Lord, *The blame game: Who will pay for the damaging consequences of climate change?*, 432 Nature 551 (Dec. 2004); David A Grossman, (continued...)

In either the standing or case-in-chief contexts, the global warming issues before the courts reprise a common problem in environmental law: imposing liability for harms that are remote in time and place from the pollution sought to be abated, particularly where the pollution comes from multiple sources.⁶² Lawmakers of yesteryear encountered this same redistributive conundrum in tackling the problem of acid rain, where pollution cause and effect are separated by hundreds of miles and by weeks or months. Attaching liability for harm from exposure to toxic chemicals is of the same ilk: exposure from multiple sources may result in cancer manifested only a decade or two later.

Perhaps because of these hurdles under existing law, new directions in the law are now being explored.⁶³ Within the United States, it was recently reported that although the Bush administration opposes controls on CO2 emissions, nine U.S. states from Maine to Delaware not only plan to impose them but also are exploring the idea of emissions trading with Europe.⁶⁴ Internationally, it was reported that Arctic Eskimos (Inuits) announced at the recent Kyoto Protocol follow-up conference in Buenos Aires that they will seek a ruling from the Inter-American Commission on Human Rights (an investigative arm of the Organization of American States) that the United States is threatening their existence by contributing substantially to global warming.⁶⁵ Lawyers at Earthjustice and the Center for International Environmental Law, according to the report, said the Inter-American Commission has a record of treating environmental degradation as a human rights matter. While the commission has no enforcement powers, its ruling could create a foundation for an eventual lawsuit against the United States in an international court or against U.S. companies in a U.S. federal court. Also reportedly, the low-lying Pacific nation of Tuvalu threatened to sue the United States and Australia two years ago in the ICJ, but held off for a variety of reasons.⁶⁶

⁶¹ (...continued)

Warming Up to a Not-So-Radical Idea: Tort-Based Climate Change Litigation, 28 Colum. J. Envtl. L. 1 (2003): Eduardo M. Penalver, Acts of God or Toxic Torts? Applying Tort Principles to the Problem of Climate Change, 38 Nat. Res. J. 563, 569 (1998).

⁶² See generally Richard J. Lazarus, The Making of Environmental Law ch. 1 (2004).

⁶³ See, e.g., Kristin Marburg, Combating the Impacts of Global Warming: A Novel Legal Strategy, 2001 Colo. J. Int'l L. & Pol'y 171 (2001).

⁶⁴ Congressional Green Sheets Newsroom, Dec. 17, 2004. The same source reports that Rep. Joe Barton (R-Texas), chairman of the House Energy and Commerce Committee, said that any international compact involving state governments would have to be approved by Congress and that "we would tend to look at it with a lot of skepticism." Kenneth Colburn, who is helping to coordinate the nine-state effort, was said to question the need for federal authorization, on the theory that any trans-Atlantic trades would be commercial transactions, not government-to-government.

⁶⁵ Andrew C. Revkin, *Eskimos Seek to Recast Global Warming as a Rights Issue*, NY Times, Dec. 15, 2004, at A3.

⁶⁶ See [http://www.tuvaluislands.com]. Tuvalu alleges that Australia is the biggest per capita producer of GHGs, and that the United States is the biggest single emitter.

Whether these new legal paths will yield results for complainants, only time will tell.