JONES DAY

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CLIMATE CHANGE LITIGATION ISSUES

I. CLIMATE CHANGE LITIGATION

A. INTRODUCTION

Global warming has been called "the Ultimate Public Nuisance" (see Environmental Law Institute's *Creative Common Law Strategies for Protecting the Environment*, Chapter 5, 107), and the plaintiffs' bar has described climate change litigation as "the next big tobacco" in terms of the litigation model it may use to pursue claims against those allegedly responsible. Whatever perspective, and whether you come from the government, industry, or an NGO, we all can agree that this is an emerging area of law that most likely will have profound social, political, economic, environmental, and legal impacts. From a litigation perspective, the Supreme Court's recent decision clarified some issues and perhaps opened the door on a few others. This outline discusses some, but not all, of those issues and also addresses the science of climate change in court.

1. *Massachusetts v. EPA*

The Supreme Court in *Massachusetts v. EPA*, 127 S. Ct. 1438 (2007), held that (i) at least Massachusetts had standing to challenge EPA's rejection of the petition for rulemaking to limit greenhouse gas emissions from new cars under § 202(a)(1) of the Clean Air Act ("CAA"), (ii) EPA has the statutory authority under the CAA to regulate such gases as air pollutants, and (iii) any decision by EPA as to whether to regulate under its judgment "must relate to whether an air pollutant cause[s], or contribute[s] to, air pollution which may reasonably be anticipated to endanger public health or welfare," 42 U.S.C. § 7521(a)(1), and cannot be based on policy reasons outside the statute. Thus, the case was remanded back to EPA to decide whether greenhouse gases contribute to climate change and, if so, either to regulate their emission from motor vehicles or to articulate a policy argument supported by the CAA to avoid regulating them. Four Justices dissented. Chief Justice Roberts, joined by Scalia, Thomas, and Alito, first focused on the Court's conclusion that Massachusetts had standing. These Justices argued that the Court expanded traditional standing analysis as to when a state can sue the federal government.

In a separate dissent by Scalia, the four Justices would have found that EPA offered valid reasons for not regulating greenhouse gases from vehicles at this time.

2. A Closer Look at *Massachusetts v. EPA* and Its Possible Impact Going Forward

Three public nuisance cases filed over climate change are currently pending: one in the Second Circuit (*Connecticut v. American Electric Power Company*, 406 F. Supp. 2d 265 (S.D.N.Y. 2005), appeal pending 05-5119), another in the Fifth Circuit (*Comer v. Murphy Oil*, No. 1:05 cv-00436, S.D. Miss. (August 30, 2007), Notice of Appeal filed September 17, 2007), and a third in the Ninth Circuit (*California v. General Motors Corp.*, 2007 U.S. Dist. LEXIS 68547 (N.D. Cal. September 17, 2007), Notice of Appeal filed October 17, 2007).[1] In addition, there are a number of other circuits where issues of preemption of state authority are directly at issue. *See*, *e.g.*, *Green Mountain Chrysler Plymouth Dodge Jeep v. Crombie*, 2007 U.S. Dist. LEXIS 67617 (D. Vt. September 12, 2007), Notice of Appeal filed October 5, 2007.[2]

B. STANDING

1. While holding that Massachusetts has standing, and pointing to the loss of coastal lands, the majority relied heavily on the fact that Congress had created the right to challenge agency action in 42 U.S.C. § 7607(b)(1), based upon which it noted that a party " 'can assert that right without meeting all the normal standards for redressability and immediacy.' " 127 S. Ct. at 1453 (quoting *Lujan*). This premise for the Court's decision provides a basis for distinguishing the Court's standing decision as it relates to the state's interests in *Connecticut*, *Comer*, and *General Motors*, particularly with respect to the causation element.

2. At the same time, the Court's statements regarding injury are troubling and will almost certainly be used by plaintiffs to bolster their standing arguments. The Court stated that "[t]he harms associated with climate change are serious and well recognized." 127 S. Ct. at 1455. The Court went on to discuss the types of environmental hazards linked to global warming and, in particular, rising sea levels. Indeed, the standing discussion in the Roberts dissent echoed many of the arguments defendants have made in the pending cases.

3. The Court stated that because Massachusetts is a major owner of coastal property, "it has alleged a particularized injury in its capacity as a landowner." 127 S. Ct. at 1456.

4. Also with respect to redressability, the majority stated that "[w]hile it may be true that regulating motor-vehicle emissions will not by itself *reverse* global warming, it by no means follows that we lack jurisdiction to decide whether EPA has a duty to take steps to *slow* or *reduce* it." 127 S. Ct. 1458. In rejecting the redressability argument, the Supreme Court went on to state that a "reduction in domestic emissions would slow the pace of global emissions increases, no matter what happens elsewhere." *Id.*

5. Conclusion: While the precise nature of the standing holding makes it distinguishable from the *Connecticut*, *Comer*, and *General Motors* cases, the specific discussions of injury, causation, and redressability include a number of statements that arguably may make the standing arguments stronger for plaintiffs.

C. POLITICAL QUESTION

1. The Supreme Court made only one reference in its opinion to "political question," the basis for the dismissal in *Connecticut*, *Comer*, and *General Motors*. The Court noted that the political question doctrine is sometimes a basis for a lack of jurisdiction but stated that "[t]his case suffers from none of these defects." 127 S. Ct. at 1452.

2. Again, however, the procedural posture of the *Massachusetts* case makes the political question discussion distinguishable. In that case, the construction of the CAA and congressional authorization of such a rulemaking challenge eliminated any political question argument. *See id.*

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1. Another tort case, *Korinsky v. EPA*, was dismissed by the district court and affirmed by the Second Circuit on standing grounds. 192 F. App'x 171 (2d Cir. 2006).

2. These are by no means the only cases before the courts that involve global warming, but the issues raised by these tort cases will be the principal focus of my discussion. Other global-warming or climate change cases pending include, but are not limited to, *Center for Biological Diversity v. NHTSA*, No. 06-71891 (9th Cir., filed April 12, 2006) (challenge to CAFE standards), and *Friends of the Earth v. Mosbacher*, 2005 WL 2035596 (N.D. Cal. Aug. 23, 2005) (challenge to funding decisions by Export-Import Bank and others for not taking into account climate change impacts).

D. FEDERAL QUESTION JURISDICTION[3]

1. Plaintiffs in the *Connecticut* and *General Motors* cases based federal jurisdiction on the purported existence of "federal common law of public nuisance." Plaintiffs in *Comer* propose the same basis for jurisdiction in their proposed Fourth Amended Complaint (where they add certain nondiverse defendants).

2. Defendants argued in *Connecticut* and *General Motors* that no such federal common-law claim exists that could be applied to this case and that if it ever had existed, it had been displaced by substantial federal legislation in the area. Defendants argued the same in their opposition to plaintiffs' motion for leave to amend in *Comer*.

3. The *Massachusetts* holding that greenhouse gases come within the CAA should conclusively resolve the displacement issue in defendants' favor. As a result, for example, the federal district court in *Connecticut* would lack a basis for subject-matter jurisdiction, and the Second Circuit should affirm dismissal on this ground, declining to exercise supplemental jurisdiction over plaintiffs' alternative state law claims.

E. CAUSATION

1. As mentioned above in the discussion of standing, the majority makes a number of statements on causation that are at least facially troubling. Nonetheless, those statements are made in the context of the challenge to EPA's rulemaking decision and should be distinguishable.

2. In the context of the pending nuisance cases, and in particular *Comer*, the remoteness argument should continue to be a powerful—indeed, perhaps even more important—argument.[4] EPA may be compelled to act and can act without regard to other potential causes and without having to make a finding sufficient for legal causation that would tie a particular emission source to a particular harm. By its nature, EPA's actions are generalized.

3. In contrast, defendants are entitled to a specific determination of legal causation as to each defendant. Moreover, as defendants argued in *Comer*, the links in the causation chain from coal-powered electric plant to damage from Hurricane Katrina are simply too many and too varied to allow a finding of legal causation. Accepting the overall concept of global warming and that it may be caused by manmade activities, as the Supreme Court seems to do, does not relieve a particular private plaintiff from the duty of showing causation as to a particular defendant.

F. PREEMPTION OF STATE LAW CLAIMS[5]

1. The effect of the Court's decision on preemption is unclear. On the one hand, the Court states that "[c]ollaboration and research do not conflict with any thoughtful regulatory effort; they complement it." 127 S. Ct. at 1461. The Court's statement was directed at EPA's argument that the congressional actions since the CAA are inconsistent with the notion that Congress intended to regulate greenhouse gases when it passed the CAA. That is arguably different from saying that *state* regulation of greenhouse gases would not be in conflict with the federal approach.

2. The opinion also contains some statements that may be helpful in bolstering a preemption argument and in asserting EPA's primary jurisdiction under the CAA. The Court noted that "[w]hen a State enters the Union, it surrenders certain sovereign prerogatives. Massachusetts cannot invade Rhode Island to force reductions in greenhouse gas emissions . . . . These sovereign prerogatives are now lodged in the Federal Government . . . ." 127 S. Ct. at 1455. This and other language in

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3. The defendants and plaintiffs in these cases dispute whether, given various Supreme Court cases since *Erie v. Tompkins*, 304 U.S. 64 (1938), a federal cause of action to abate public nuisance still may lie and, if so, whether it has effectively been displaced by federal legislation.

4. Courts have long recognized that while any tortious act can cause "ripples of harm" extending to a multitude of eventual persons, only those harms that are direct, proximate, and not remote are actionable. *See Holmes v. Securities Investor Prot. Corp.*, 503 U.S. 258, 266, n. 10 (1992). If the alleged injuries are too remote, proximate causation is missing as a matter of law without the need for factual development. The remoteness doctrine has been applied uniformly by federal courts of appeals to dismiss union health-fund cases against tobacco companies and by courts to dismiss cases brought by cities and counties against firearms manufacturers in their communities. *See*, *e.g.*, *Steamfitters Local Union No. 420 Welfare Fund v. Philip Morris, Inc.*, 171 F.3d 912, 933–34 (3d Cir. 1999) ("sheer number of links in the chain of causation" demonstrated absence of proximate cause); *Camden County Bd. of Chosen Freeholders v. Beretta U.S.A. Corp.*, 273 F.3d 536, 541 (3d Cir. 2001).

5. The plaintiffs and defendants in the pending cases dispute whether under cases such as *Crosby v. Nat'l Foreign Trade Council*, 530 U.S. 363 (2002), the states' authority to regulate in the area of climate change is preempted by, among other things, the federal government's unique federal interests in the area, including the president's foreign affairs power.

the opinion is consistent with and supports the argument Xcel has made in both cases that in areas of a unique or predominant federal concern, any asserted state interest that conflicts with those federal interests necessarily is preempted.

II. THE SCIENCE OF CLIMATE CHANGE IN COURT AND *DAUBERT*

The recent working group reports of the United Nations' Intergovernmental Panel on Climate Change ("IPCC") have been characterized by some as definitively resolving the debate over the causes of climate change. The IPCC's reports will certainly provide plaintiffs with ammunition to support their claims. In the context of any such litigation, some of the legal and evidentiary issues are described below.

A. GENERAL VS. SPECIFIC CAUSATION

1. To establish that a particular chemical caused a particular effect, such as mortality, a toxicological assessment must meet four criteria:

- **a.** The alleged injured parties must have been exposed to the chemical;
- **b.** The chemical must generally be capable of causing the sort of injuries alleged to have occurred (known as "general causation");
- **c.** The injured party must have actually received an amount (or dosage) of the chemical sufficient to cause the specific injury alleged (known as "specific causation"); and
- **d.** All other stressors capable of causing the specific injury alleged must be investigated and affirmatively ruled out as potential causes.

2. Some issues to consider:

- **a.** Even if the IPCC's findings were scientifically appropriate methods and data, could those findings support an opinion that would meet Rule 702's reliability standard if no expert could reasonably address and "rule out" other potential causes of climate change?
- **b.** The IPCC's findings are for regulators to make policy judgments. Should fact finders, especially juries, be permitted to consider such findings on the question of causation?
- **c.** Climate change effects involve shifts in climatic activity, which means that there are several distinct factors that produce a particular climate phenomenon. How can plaintiffs prove that in our chaotic climate system, they can differentiate a particular change caused by CO_2 vs. natural variability?

B. *DAUBERT*

Does the so-called consensus on the science of climate change mean no *Daubert* challenge can be successful?

Daubert v. Merrell Dow Pharmaceuticals, Inc., 509 U.S. 579 (1993), sets forth the principles to be applied by the Court in determining whether any plaintiff can meet its burden under Federal Rules of Evidence 104(a) and 702 to establish by a preponderance of proof that proffered scientific testimony from an otherwise qualified expert (i) is based upon sufficient facts or data, (ii) is the product of reliable principles and methods, and (iii) is based upon a reliable application of those principles and methods.

This standard will be met if the Court is persuaded that such testimony is both "reliable" (meaning that "the reasoning or methodology underlying the testimony is scientifically valid") and "relevant" (meaning that the witness's "reasoning or methodology properly can be applied to the facts in issue"). *Id*. at 589, 592–93.

Green Mountain Chrysler Plymouth Dodge Jeep v. Crombie, 508 F. Supp. 2d 295 (D. Vt. 2007), is the only reported decision where a court has dealt with climate change experts in the context of *Daubert*. A summary of the court's decision on the issues is below:

James Hansen. Dr. Hansen provided testimony on climate change, including a "tipping point" theory positing that at a certain point, the changes associated with global warming will become dramatically more rapid and out of control. The "tipping point" is the point at which very little, if any, additional forcing (by greenhouse gases warming the atmosphere) will be necessary for substantial changes to occur. Dr. Hansen's testimony concluded that the challenged regulations in Vermont were consistent with the rate of change necessary to avoid the most drastic consequences of global warming. *Green Mt.*, 508 F. Supp. 2d at 312.

Dr. Hansen cited data in support of his theories, including historical data gathered from a number of sources, which included measured temperatures, ice cores, and ocean cores, as well as modeling results. Plaintiffs claimed the available data was insufficient to support Dr. Hansen's conclusions. The court rejected that argument. It noted the imperfection of Dr. Hansen's historical analysis but stated that "[t]he unprecedented nature of current human-made forcings means that history is not a perfect guide. However, that the situation is unprecedented does not mean that scientists may not testify reliably as to global warming's likely effects."

Plaintiffs also challenged Dr. Hansen's hypothesis regarding rapid sea-level rise, specifically criticizing Dr. Hansen's use of satellite data that, though accurate, gave only a few years' worth of data. Here, too, the court rejected the challenge. The court noted that because the satellite data was only part of the data underlying Dr. Hansen's opinion, this issue went to the weight of opinion, not its admissibility.

Dr. Hansen's use of historical models to predict the sea-level rise that would result from ice-sheet disintegration was also challenged. Acknowledging that there is no existing mathematical or scientific model to predict sea-level rise, the court ruled that predictions need not be certainties and that estimates of sea-level rise need not be exact. *Id.* at 317–18. The court noted that "[i]t is true that Hansen's predictions do not have a known error rate that can be tested, at least not in a laboratory." The court then deferred to *Daubert*'s flexibility and stated that "Hansen's testimony is of a different nature from much of the expert testimony on which there is more extensive case law. Hansen presented a wide-reaching theory regarding the worldwide effects of unprecedented human-created climate change, not a theory about a drug's causation of birth defects, as in *Daubert*. . . . Although this theory must still be proven reliable, some *Daubert* factors may be less applicable here than in other cases involving expert testimony." *Id*. at 318.

The court responded to a challenge that Dr. Hansen provided no controlled scientific experimentation by noting that "[i]t is difficult to imagine a conclusive test for any theory about the future of climate effects on the world's current emissions of greenhouse gases . . . . The absence of controlled scientific testing does not undermine the reliability of Dr. Hansen's opinions, given the nature of opinions he offers." *Id.* Moreover, the court, taking note of Dr. Hansen's many publications, stated that "[a]lthough not extensively peer-reviewed . . . [his] opinions have been thoroughly presented to the scientific community and are longstanding rather than framed for litigation purposes alone." *Id*. at 319.

Finally, the plaintiffs argued that Dr. Hansen's testimony was inadmissible due to a lack of evidence that the regulations at issue would prevent the trigger of a "tipping point." The court disagreed. It explained that his testimony was not that the regulation would itself prevent such a trigger, but that the regulation was consistent with a "pressing need for the worldwide community to act in a comprehensive variety of arenas to reduce GHG emissions." *Id*. at 320.

Barrett N. Rock. Dr. Rock testified that the past 100 years have seen a warming trend in the New England region and the state of Vermont and that this warming jeopardizes "iconic elements of the Vermont experience," including fall foliage, maple syrup, and skiing. *Id*. at 321.

Dr. Rock relied on temperature increase models that he conceded "were not ideal" and did not account for regional factors potentially relevant in Vermont (coastal elements, elevation). The court rejected plaintiffs' challenge to his testimony on these grounds. It noted that the models used by Dr. Rock were also selected by the United States government for use in the U.S. Global Climate Change Research Project's assessment of regional global-warming impacts. *Id*. at 323. The court stated that " '[f]acts or data' on which an expert relies may include reliable opinions of other experts . . . . Rock's use of the models essentially amounts to reliance on the experts who created and validated them; their primary function is to provide a scenario for him to use in describing the effects of the warmer temperatures that they predict." *Id*. at 324.

The court also rejected the argument that Dr. Rock inappropriately applied to Vermont a study of how warmer temperatures affect New Hampshire's ski industry. He said it was simply to show that warmer temperatures will affect snow pack, a conclusion that the court deemed "inarguably true," even in Vermont. *Id*.

Finally, plaintiffs argued that Dr. Rock did not provide a test to prove that warmer temperatures would affect fall foliage. The court found that because Dr. Rock was an expert on such matters, the lack of a test did not render his testimony inadmissible. *Id*.

K.G. Duleep. K.G. Duleep examined whether the automobile industry as a whole could comply with the Vermont regulation. The court first accepted his qualifications in the study of fuel economy and emissions in the automobile industry. The court accepted Duleep's complex analysis and dismissed the following challenges from plaintiffs:

Duleep conducted a general study of the auto industry's ability to comply with the regulations, rather than specific manufacturers. Plaintiffs challenged this broad analysis, calling it egregious and a source of unreliability. But because the testimony was "perfectly transparent as to the boundaries," the court found the analysis helpful. *Id*. at 329.

The court found that Duleep's models, though challenged, were widely accepted in the community of experts on fuel economy. *Id*. at 331.

The court also found that Duleep's work, even though it had not been widely published, had been subjected to scrutiny by government clients and various labs from which he requested feedback. The court found that such a review process, despite not taking place through the publication mechanism, "fully serves the purpose of testing the validity of methods and increases the likelihood that significant flaws in his analysis would be exposed." *Id*. at 333.

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