

Recent Clean Air Act Developments—2006

by E. Donald Elliott, Bret C. Cohen, Ari G. Altman, and Sara M. Woldin

Editors' Summary: Creating law and policy for protection of the atmosphere is a complicated and contentious process. There are a great many stakeholders with different perspectives, and the federal government has taken a measured approach to responding to the evolving economic, technological, and scientific data on the state of the air in the United States and worldwide. Therefore, the states and the judiciary have taken on increasingly central roles as national policymakers in the areas of air pollution and climate change. In this Article, E. Donald Elliott, Bret C. Cohen, Ari G. Altman, and Sara M. Woldin explore the changes in the Clean Air Act that have occurred over the past year. The Article covers EPA standards, relevant case law, and state and regional initiatives.

I. Introduction

Air is the ultimate public good. No one owns it but everyone uses it. Protecting it is clearly a great challenge.

Since its inception in the mid-1960s, the federal Clean Air Act (CAA) has been a crucial component in managing this resource, but it has also been a source of strife and discontent. The law was forward-looking for its time, pressing polluters to radically change their ways, while still accounting for the fact that we would never be a zero-pollution society. It has also changed with the times, as problems that could not have been imagined in 1970, such as atmospheric ozone depletion and acid rain, have since been addressed, while other issues have been revisited as scientific understanding of atmospheric processes, such as those governing the formation of smog and the distribution of airborne toxics, has improved.

Nonetheless, one may ask whether the CAA can adapt quickly enough to address the complex and increasingly

global problem of managing the earth's atmosphere. In the year 2006, the CAA continued to spur vigorous debate among federal and state governments, industry, and nonprofits as to how we should best address air pollution problems. This Article summarizes some of the key legal developments in CAA law during 2006, starting with the broadest issues and moving on to more specific topics, including two key U.S. Supreme Court cases.

The Article begins with developments in the area of national ambient air quality standards (NAAQS). In 2006, the U.S. Environmental Protection Agency (EPA) issued stricter standards for both ozone and particulate matter (PM). These standards have been criticized both by states, who feel the new standards are too onerous, and by environmental groups, who have argued that the standards are too lax. States have also made their voice heard in the area of air emissions. For instance, EPA's decision last March to leave the Clean Air Interstate Rule (CAIR) largely intact prompted a lawsuit by North Carolina.¹ In addition, a number of states in the Northeast moved to enact their own more rigorous "CAIR Plus" regime. Similarly, 23 states have announced plans to adopt mercury emissions plans more stringent than EPA's Clean Air Mercury Rule (CAMR), and 16 states have filed a lawsuit challenging CAMR's cap-and-trade program.² As these examples show, states are taking an increasingly active role in CAA regulation.

Industry and environmental groups were also active in 2006. One example in particular relates to EPA's Clean Air Visibility Rule, which institutes special controls to protect visibility in national parks and wilderness areas. Both utilities and environmental groups have opposed the rule, challenging it before the U.S. Court of Appeals for the District of Columbia (D.C.) Circuit. Utilities argued that EPA lacked

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1. Sierra Club v. EPA, No. 06-1221 (D.C. Cir. filed June 23, 2006).
 2. New Jersey v. EPA, No. 05-1162 (D.C. Cir. filed June 19, 2006).

the authority to issue guidelines that apply to all large power plants. Environmental groups contended that the rule illegally exempted the states regulated by CAIR from instituting emissions controls to reduce haze. The D.C. Circuit decided in December 2006 to uphold the rule.³

This past year also saw continued activity regarding the new source review (NSR) program, including consideration of NSR before the Supreme Court. Of note was the circuit court split that developed in the interpretation of when NSR rules apply. EPA found itself arguing with industry in some cases and with states and environmental groups in others. Two major points of controversy were the applicable standard by which modified facilities should be evaluated (hourly versus yearly), and the definition of “modification.” The Supreme Court considered both issues in *Environmental Defense v. Duke Energy Corp.*,⁴ with a decision expected in spring 2007.

The Supreme Court also considered the issue of climate change, an area of law that generated considerable debate during 2006. This topic will likely remain a source of contention into 2007 and beyond. Again, there are a variety of players and positions on the many interconnected issues. Numerous states are developing their own climate change initiatives, which may in some cases conflict with federal policy. Furthermore, a number of states filed high-profile lawsuits against automakers, the power industry, and EPA for their alleged roles in contributing to the growing problem of climate change. The Supreme Court heard its first case directly addressing the issue of climate change, *Massachusetts v. U.S. Environmental Protection Agency*,⁵ in November. The Supreme Court’s decision, expected in mid-2007, may have lasting effects on the development of both climate change law and administrative law.

The decisions in the various cases mentioned throughout this Article, and especially the two Supreme Court cases already noted, will take on heightened importance in this new era of environmental governance. Divisiveness pervades the U.S. Congress, and with the change to Democratic leadership, there is little likelihood of agreement between Congress and the president. Thus, despite the highly touted environmental agendas of U.S. House of Representatives and U.S. Senate Democrats, major changes in law may instead come about by action of the courts, as they take on the role of “default policymakers.” Whether 2007 or 2008 will result in a legislated change in national climate change policy, for instance, remains to be seen, but if it does not, the Supreme Court’s decision in *Massachusetts v. EPA*⁶ may help to determine the national response to what appears to be one of the great environmental issues of our generation. In any case, *Massachusetts v. EPA* will be an important administrative law case for many years to come; if the Supreme Court gets past standing and reaches the merits, it is likely to address for the first time the extent of an agency’s discretion to decline to exercise statutory authority that Congress has given it. And as any regulator knows, the power to decline to take action is at least as important as the power to act.

II. NAAQS Revisions and State NAAQS Implementation

There were several developments during 2006 in the area of NAAQS, which regulate the six criteria pollutants: (1) nitrogen oxides (NO_x); (2) sulfur dioxide (SO₂); (3) lead; (4) ground-level ozone; (5) carbon monoxide (CO); and (6) particulates. In December 2006, EPA announced a revised process for reviewing and setting NAAQS.⁷ Furthermore, the Agency implemented changes in three specific areas: (1) PM standards⁸; (2) ozone standards⁹; and (3) the monitoring system for all six criteria pollutants.¹⁰ EPA addressed particulate limits in a new standard promulgated in September 2006. The Agency tightened its fine PM standard but decided not to pursue a proposal to lower its standard for coarse PM.¹¹ The new PM standard has prompted a series of lawsuits both from petitioners who argue that the new standard is not strict enough and from those who believe that it is too rigorous.¹² EPA is also in the process of reviewing the Phase 1 eight-hour ozone standard to determine if a stricter standard should be imposed.¹³ In addition, the Agency announced that it would reconsider provisions of the Phase 2 ozone standard, which had been challenged in the D.C. Circuit.¹⁴ Finally, EPA updated its 30-year-old criteria pollutant monitoring system, concentrating its broad web of monitors in areas with the greatest air quality problems.¹⁵ Developments in these areas are summarized below.

A. NAAQS Revisions

1. Revised NAAQS Process

EPA recently announced a revised process for reviewing and setting NAAQS. According to the Agency, these changes are intended to improve the efficiency of the NAAQS review process and to ensure that its decisions are informed by the best available science. On December 7, 2006, EPA Deputy Administrator Marcus Peacock issued a memo outlining the revised process.

Key changes include:

- the preparation of what EPA characterizes as an “integrated, policy-relevant” plan immediately following the completion of the NAAQS review;
- the restructuring of the integrated science assessment document that accompanies the review;

7. Memorandum from Marcus Peacock, EPA Deputy Administrator, Process for Reviewing National Ambient Air Quality Standards (Dec. 7, 2006), available at http://www.epa.gov/ttn/naaqs/memo_process_for_reviewing_naaqs.pdf.

8. National Ambient Air Quality Standards for Particulate Matter, 71 Fed. Reg. 61144 (Oct. 17, 2006) (to be codified at 40 C.F.R. pt. 50).

9. 71 Fed. Reg. 75902 (Dec. 19, 2006).

10. Revisions to Ambient Air Monitoring Regulations, 71 Fed. Reg. 61236 (Oct. 17, 2006) (to be codified at 40 C.F.R. pts. 53, 58).

11. 71 Fed. Reg. at 61144.

12. *New York v. EPA*, No. 06-1410 (D.C. Cir. filed Dec. 18, 2006); *Utility Air Regulatory Group v. EPA*, No. 06-1418 (D.C. Cir. filed Dec. 18, 2006).

13. *American Lung Ass’n v. Whitman*, C.A. 03-778 (ESH) (D.D.C. July 31, 2003) (consent decree issued).

14. *Natural Resources Defense Council v. EPA*, No. 06-1045 (D.C. Cir. filed Jan. 27, 2006); 71 Fed. Reg. at 75902.

15. 71 Fed. Reg. at 61236.

3. *Utility Air Regulatory Group v. EPA*, 417 F.3d 1333, 36 ELR 20246 (D.C. Cir. Dec. 12, 2006).

4. No. 05-0848 (cert. granted May 15, 2006).

5. No. 05-1120 (cert. granted June 26, 2006).

6. *Id.*

- the development of a more concise risk/exposure assessment document; and
- the creation of a policy assessment paper that discusses, among other things, a range of options for the standard setting.¹⁶

The revised process for reviewing and setting NAAQS has drawn some criticism. Sen. Barbara Boxer (D-Cal.), for example, charged EPA with “inject[ing] politics into the entire decision from start to finish.” She announced plans to hold an oversight hearing on the decision to try to convince EPA to amend the policy.¹⁷

2. Particulate Matter

EPA’s rules on PM were also reworked in 2006, and are in the process of being challenged. EPA proposed changes to NAAQS in 2005 for fine particles and some coarse particles. The revisions were intended to more adequately protect the public from short-term exposure to high levels of fine particles that are 2.5 microns in diameter or less (PM_{2.5}). The rules lowered the 24-hour allowable average from 65 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) to 35 $\mu\text{g}/\text{m}^3$. The annual average, 15 $\mu\text{g}/\text{m}^3$, would remain constant. EPA also proposed a standard for reducing “inhalable coarse” particles, those between 2.5 and 10 microns in diameter (PM₁₀).¹⁸ In September 2006, EPA promulgated a final rule on particulates, implementing only the proposed changes for fine particles and leaving the coarse particle standard unchanged. After receiving input from states, EPA will designate counties as attainment or nonattainment areas by November 2009. These designations will become effective in April 2010. State implementation plans (SIPs) are due in April 2013, and states will be required to meet the new PM standards by April 2015, with a possible five-year extension.¹⁹

EPA estimates that several eastern and western states will need to develop additional controls to attain the new standards. The greatest reductions will be needed in western states, particularly in California, and businesses operating in these areas may be among those most affected by new state controls aiming to reduce emissions in order to comply with the new rules.²⁰

Environmental and health groups have opposed the new standards, criticizing them as inadequate to protect public health.²¹ The Clean Air Scientific Advisory Committee (CASAC), chartered by Congress to provide scientific evidence to EPA regarding the setting of air quality standards, also objected. The CASAC had recommended reducing the annual fine particle standard to between 13 $\mu\text{g}/\text{m}^3$ and 14 $\mu\text{g}/\text{m}^3$. It filed a formal letter of complaint with EPA in Sep-

tember 2006.²² Meanwhile, industry groups have cautioned the Agency that the new rules will impose heavy financial burdens on businesses without adequate scientific evidence on the benefits of the new standards.²³ On December 18, 2006, the revised standard for PM was challenged in the D.C. Circuit by numerous petitioners filing separate lawsuits. Among the petitioners were a coalition of 13 states, the electric utility industry, and an alliance of 9 industry groups. The states are seeking stricter standards for PM, arguing that the new standard is insufficient to protect public health.²⁴ Asserting an opposing viewpoint is a coalition of industry groups, including the Utility Air Regulatory Group (UARG), which is suing EPA for imposing a more rigorous standard without adequate scientific evidence.²⁵

B. State NAAQS Implementation

1. Ozone Standards

□ *Phase 1 Ozone Standard.* Various parties, including states, industry, and environmental groups, have joined a debate over the appropriateness of EPA’s latest ozone standard. By way of background, EPA issued a new Phase 1 ozone standard of 0.08 parts per million (ppm) averaged over an eight-hour period in April 2004. The new standard took effect in July 2005, updating the previous, less-stringent, 0.12 ppm one-hour standard.²⁶ In consolidated challenges brought by Ohio and several environmental groups, the D.C. Circuit ruled that EPA had improperly granted areas that were only slightly out of ozone attainment status too much time to reduce emissions. EPA had claimed that it had the option to follow CAA §181 subpart 1, which gives it broad discretion, rather than subpart 2, which provides structured guidelines for more severe nonattainment areas. The D.C. Circuit disagreed, holding that the tight deadlines imposed by subpart 2 were required.²⁷

Separately, EPA is currently reviewing the Phase 1 eight-hour ozone standard to determine whether the standard should be tightened. In accordance with a consent decree, EPA must issue a proposal detailing the results of its review of the Phase 1 eight-hour ozone standard by March 28, 2007, and must issue a final notice by December 19, 2007.²⁸ In October 2006, EPA was granted a two-month extension for both the proposal and the final rule. The new deadlines for EPA’s review are May 30, 2007, for a proposed decision and February 20, 2008, for the final rule. The Agency requested this extension to allow it to complete a review of the ozone standard recommended by the CASAC Review Panel

16. Memorandum from Marcus Peacock, *supra* note 7.

17. Steven D. Cook, *Boxer Denounces EPA Move to Heighten Management Role in Air Quality Reviews*, *Env’t Rep.* (BNA) 2527 (Dec. 15, 2006).

18. 71 Fed. Reg. 2620 (Jan. 17, 2006).

19. 71 Fed. Reg. at 61144.

20. U.S. EPA, Fact Sheet: Final Revisions to the National Ambient Air Quality Standards for Particle Pollution (Particulate Matter), *available at* http://epa.gov/pm/pdfs/20060921_factsheet.pdf.

21. Steven D. Cook, *EPA Tightens Part of the Particulate Standard, But Leaves Most Existing Limits Unchanged*, *Env’t Rep.* (BNA) 1945 (Sept. 22, 2006).

22. Letter from the Clean Air Scientific Advisory Committee, to Hon. Stephen L. Johnson, EPA Administrator (Sept. 29, 2006), *available at* <http://www.epa.gov/sab/pdf/casac-ltr-06-003.pdf>.

23. Cook, *supra* note 17, at 1946.

24. *New York v. EPA*, No. 06-1410 (D.C. Cir. filed Dec. 18, 2006).

25. *Utility Air Regulatory Group v. EPA*, No. 06-1418 (D.C. Cir. filed Dec. 18, 2006).

26. *Air Quality Designations and Classifications for the 8-Hour Ozone National Ambient Air Quality Standards; Early Action Compact Areas With Deferred Effective Dates*, 69 Fed. Reg. 23858 (Apr. 30, 2004) (to be codified at 40 C.F.R. pt. 81).

27. *South Coast Air Quality Mgmt. Dist. v. EPA*, 472 F.3d 882 (D.C. Cir. 2006).

28. *See American Lung Ass’n v. Whitman*, C.A. 03-778 (ESH) (D.D.C. July 31, 2003) (consent decree issued).

for Ozone.²⁹ In a letter to EPA dated October 25, 2006, the CASAC recommended lowering NAAQS for ozone from the current standard of 0.08 ppm to between 0.060 ppm and 0.070 ppm. The CASAC contended that the current standard does not sufficiently protect human health.³⁰ Meanwhile, industry groups are urging EPA to retain the current ozone standard, arguing that reducing the standard would impose significant and unnecessary new costs on industry.³¹ Based on *South Coast Air Quality Management District v. U.S. Environmental Protection Agency*³² and the *American Lung Ass'n v. Whitman*³³ consent decree, we may see a change to the Phase 1 ozone standard. Changes in the Phase 2 ozone standard may also be promulgated, as discussed below.

□ *Phase 2 Ozone Standard—Natural Resources Defense Council v. U.S. Environmental Protection Agency*.³⁴ EPA followed the Phase 1 standards with Phase 2 ozone standards in late 2005. The rule was almost immediately challenged in court.³⁵ The Phase 2 rule requires, among other things, that sources in nonattainment areas continue using reformulated gasoline until attainment is achieved. It also establishes requirements for states to implement NSR for large industrial plants in nonattainment areas. The rule allows 28 states and the District of Columbia, however, to exclude electric power plants from source-specific pollution control requirements known as reasonably available control technology (RACT). The states were given this exclusion due to their participation in CAIR, which EPA has said will be more effective at reducing power plant emissions than RACT.³⁶ The Natural Resources Defense Council, Inc. (NRDC) filed a challenge to the Phase 2 rule, arguing that the rule lacks specificity and does not provide for adequately stringent pollution control requirements in areas not in attainment with the eight-hour standard. At issue in this case is whether EPA has discretion to refuse to enforce certain CAA requirements on the grounds that other programs are a more effective means of addressing the problem at hand.³⁷ The issue of agency discretion is also considered in *Massachusetts v. EPA*,³⁸ discussed in Part VI, below. On December 18, 2006, EPA stated that it will reconsider the RACT exemption for states participating in CAIR. The Agency will also reconsider two provisions relating to NSR requirements in ozone nonattainment areas.³⁹

2. Monitoring of Criteria Pollutants

In 2006, EPA also changed its technical monitoring system for pollutants impacting the ozone and particulate programs, as well as the other four criteria pollutant programs. On September 28, 2006, EPA issued a final rule updating the 30-year-old criteria pollutant monitoring system. Since the 1970s, EPA has operated a monitoring system that tracks the six criteria pollutants, using over 5,000 monitors at approximately 3,000 sites. The monitors are used to determine whether a certain area is in attainment of federal air quality standards for these pollutants. Under EPA's new system, most of the monitoring sites for CO, lead, SO₂, and NO_x will be shut down, with monitors for these pollutants concentrated in areas with the greatest air quality problems. In addition, states will be permitted to shut down monitors for coarse PM in areas with concentrations well below the air quality standard of 150 µg/m³.⁴⁰ EPA has said that the new monitoring system will help it improve air quality management by providing data useful in formulating advanced air pollution models. Public health advocates and state air quality regulators have criticized the new monitoring system, arguing that the smaller network of monitoring sites will not provide adequate data regarding pollution levels in many areas of the country.⁴¹

III. Clean Air Interstate Rule

Like the new NAAQS, EPA's 2005 CAIR is a source of debate among states and industry groups. EPA decided in March 2006, to leave the rule mostly intact, after considering several petitions for reconsideration.⁴² Several dissatisfied petitioners are seeking recourse in the D.C. Circuit. States in particular, concerned with the migration of air pollution from other states, have challenged EPA's denial to impose stricter emissions limits on power plants in neighboring states.⁴³ In addition, a coalition of Northeast states proposed plans to create a system that curtails power plant pollution beyond the limits set by the CAIR, despite the Agency's opposition.⁴⁴ These developments are considered below.

A. CAIR Developments

EPA issued the CAIR on March 10, 2005, with the goal of reducing air pollution by promoting large-scale cuts in the movement of SO₂ and NO_x across state borders. The rule requires 28 eastern states, plus the District of Columbia, to revise their SIPs to include cap-and-trade or alternative measures that will reduce emissions of SO₂ and/or NO_x. These 28 eastern states were targeted because they contribute sig-

29. *American Lung Ass'n v. Johnson*, No. 03-778 (Oct. 18, 2006) (joint stipulation to modify consent decree).

30. Letter from the Clean Air Scientific Committee, to Hon. Stephen L. Johnson, EPA Administrator (Oct. 25, 2006), available at <http://www.epa.gov/sab/pdf/casac-07-001.pdf>.

31. Industry Criticizes EPA Staff Paper Calling for Tighter Ozone Standards, *Env't Rep.* (BNA) 2296 (Nov. 10, 2006).

32. 472 F.3d 882 (D.C. Cir. 2006).

33. C.A. 03-778 (ESH) (D.D.C. July 31, 2003) (consent order entered).

34. No. 06-1045 (D.C. Cir. filed Jan. 27, 2006). Final Rule to Implement the 8-Hour Ozone National Ambient Air Quality Standard-Phase 2, 70 Fed. Reg. 71612 (Nov. 29, 2005) (to be codified at 40 C.F.R. pts. 51, 52 & 80).

35. *NRDC*, No. 06-1045.

36. 70 Fed. Reg. at 71612.

37. *NRDC*, No. 06-1045.

38. No. 05-1120.

39. 71 Fed. Reg. at 75902.

40. 71 Fed. Reg. at 61236.

41. Steven D. Cook, *EPA Rule Establishes Network to Monitor Concentrations of Six Common Pollutants*, *Env't Rep.* (BNA) 2032, 2033 (Oct. 6, 2006).

42. Steven D. Cook, *EPA Upholds Clean Air Interstate Rule, Rejecting Petitions From States, Industry*, *Env't Rep.* (BNA) 541 (Mar. 17, 2006).

43. *Sierra Club v. EPA*, No. 06-1221 (D.C. Cir. filed June 23, 2006).

44. Anthony Lacey, *Despite EPA Objections, Northeast Continues Push for "CAIR Plus,"* *INSIDE EPA* (Sept. 22, 2006), available at http://insideepa.com/secure/docnum.asp?f=epa_2001.ask&docnum=9222006_objections.

nificantly to the nonattainment of NAAQS for fine particles and ozone in downwind states.⁴⁵

1. March 16, 2006, Rulemaking Notices

After reviewing petitions for reconsideration, EPA announced its intention to leave the CAIR largely unchanged in three rulemaking notices issued March 16, 2006.⁴⁶ Several petitioners, dissatisfied with EPA's response, challenged the Agency's decisions in the D.C. Circuit.⁴⁷

In the March 16 rulemaking notices, EPA stated its position on the following issues:

- **North Carolina's Petition:** EPA denied a 2004 petition by North Carolina to impose stricter emissions limits on power plants in 13 states that North Carolina said were preventing it from complying with CAA standards for ozone and PM.⁴⁸ The Agency stated that the issues raised in North Carolina's petition, which was submitted prior to the CAIR's passage, would be resolved by EPA's federal implementation plans (FIPs) under the CAIR, rendering any further action unnecessary.⁴⁹ In response, North Carolina, among others, asked the D.C. Circuit to review EPA's decision.⁵⁰
- **Fuel Adjustment Factors:** EPA defended its use of fuel adjustment factors (1.0 for coal, 0.6 for oil, and 0.4 for gas) in establishing state NO_x budgets. The fuel adjustment factors allow the Agency to award states using primarily coal-based generation a greater number of NO_x emissions allowances than they allot to states using natural gas. EPA rejected an argument put forth by a number of natural gas utilities that the fuel adjustment factors would permit continued pollution from high-emitting coal plants but prevent the growth of low-emitting natural gas facilities.⁵¹ Entergy Corporation and Florida Power and Light Company, two of the utilities that had opposed the fuel adjustment factors, stated their intent to challenge EPA's decision in the D.C. Circuit.⁵²
- **SO₂ Emissions Allowances:** EPA also rejected a petition to reconsider its method for allocating SO₂ emissions allowances, affirming its decision to include waste coal generation plants within the scope of the CAIR.⁵³ These plants had sought to be ex-

cluded from the CAIR as they emit little SO₂ and are exempt from the existing SO₂ trading provision under EPA's Acid Rain Program.⁵⁴

- **State Inclusion:** EPA upheld its decision to include certain states within the scope of the CAIR. Utilities in Florida had questioned the inclusion of their state under the ozone portion of the CAIR, and a utility in Minnesota had argued that the modeling used to determine Minnesota's inclusion under the fine particle control portion of the CAIR was flawed.⁵⁵

- **Extension of SO₂ Restrictions:** The only aspect of the CAIR altered by EPA's March 16 notices was the extension of SO₂ restrictions to Delaware and New Jersey, a move the Agency had proposed when the CAIR was initially passed. EPA said that this change would assist neighboring states in achieving attainment of EPA's air quality standard for fine particles.⁵⁶

2. NO_x Emissions Allocations Published

On August 4, 2006, EPA published allocations for NO_x emissions that will take effect in the absence of SIPs under the CAIR. These allocations will apply to the 28 states and the District of Columbia covered by the CAIR. SO₂ emissions allocations were promulgated when EPA initially issued the CAIR.⁵⁷

B. Northeast States' "CAIR Plus"

A coalition of 12 Northeast and mid-Atlantic states and the District of Columbia, known as the Ozone Transport Commission (OTC), proposed emissions controls more rigorous than those imposed by the CAIR. At a meeting held September 19, 2006, the OTC discussed a draft rule for implementing CAIR Plus, which would require the retirement of a greater number of CAIR emissions credits for NO_x and SO₂ than currently mandated by EPA's rule. Some EPA officials oppose CAIR Plus, casting doubts on its legality and stating that they believe the emissions limits set under the CAIR are sufficient to bring most of the Northeast into attainment. The OTC intends to conduct additional modeling to determine if states can attain the eight-hour ozone standard without the additional limits set by CAIR Plus.⁵⁸

IV. National Emissions Standards for Hazardous Air Pollutants

In addition to the CAIR efforts, states were also active in proposing additional regulation of air toxics. CAA §112 charges EPA with the responsibility of establishing national emissions standards for hazardous air pollutants

45. Rule to Reduce Interstate Transport of Fine Particulate Matter and Ozone (Clean Air Interstate Rule), 70 Fed. Reg. 25162 (May 12, 2005) (to be codified at 40 C.F.R. pts. 51, 72, 73, 74, 77, 78 & 96).

46. Cook, *supra* note 42.

47. Andrew M. Ballard, *North Carolina Seeks Judicial Review of EPA Decisions of Migrating Pollution*, Env't Rep. (BNA) 1409 (July 7, 2006).

48. Rulemaking on Section 126 Petition From North Carolina to Reduce Interstate Transport of Fine Particulate Matter and Ozone, 71 Fed. Reg. 25328 (Apr. 28, 2006) (to be codified at 40 C.F.R. pts. 51, 52, 72, 73, 74, 78, 96 & 97).

49. Ballard, *supra* note 47, at 1410.

50. *Sierra Club v. EPA*, No. 06-1221 (D.C. Cir. filed June 23, 2006).

51. Rule to Reduce Interstate Transport of Fine Particulate Matter and Ozone (Clean Air Interstate Rule), 71 Fed. Reg. 25304 (Apr. 28, 2006) (to be codified at 40 C.F.R. pts. 51, 96).

52. Cook, *supra* note 42.

53. 71 Fed. Reg. at 25304.

54. Cook, *supra* note 42, at 542.

55. 71 Fed. Reg. at 25304.

56. Inclusion of Delaware and New Jersey in the Clean Air Interstate Rule, 71 Fed. Reg. 25288 (Apr. 28, 2006) (to be codified at 40 C.F.R. pts. 51, 96).

57. 71 Fed. Reg. 44283 (Aug. 4, 2006).

58. Lacey, *supra* note 44.

(NESHAPs) to protect public health. Standards for mercury compounds are among NESHAPs established by EPA.⁵⁹ In 2006, a number of states adopted mercury emissions plans more rigorous than EPA's CAMR. As with the CAIR, some states view the CAMR as lacking the stringency needed to significantly improve air quality.⁶⁰ On the issue of small-quantity emitters of air toxics, known as "area sources," EPA is considering new rules to lessen the burden of compliance with strict emissions limits.

A. CAMR Developments

1. States Adopt More Rigorous Mercury Emissions Plans

With EPA's approval, numerous states have adopted mercury emissions plans more stringent than those imposed by the CAMR. States wishing to put in place state-specific mercury controls were required to submit plans to EPA by November 17, 2006; 21 states submitted plans by this deadline. Many of these states estimate reductions of 80 to 90% of mercury emissions from current levels, a steeper reduction than the CAMR's mandate of 70% below 1999 levels. Additionally, interstate emissions trading is largely prohibited under most of these state plans, and many states, including Illinois and New York, have banned emissions trading *within* their states as well.⁶¹ On December 8, 2006, EPA published a proposed rule laying out FIP that will govern states that did not submit their own plans.⁶² Although the deadline to submit plans has passed, EPA announced that it will not implement the federal plan for at least a year after the deadline in order to provide additional time to states to submit their proposals.⁶³

By way of background, EPA published the final version of the CAMR on May 18, 2005, with the goal of reducing mercury emissions from coal-fired power plants. The Final Rule adopted a market-based mercury emissions trading program that will set caps at about 500 power plants, with a total of approximately 1,300 generating units. The cap for these power plants will be 38 tons in 2010 and 15 tons in 2018. Power plants will also have the option of using any early reductions in emissions to generate allowances which they would then be able to either "bank" or hold for later use.⁶⁴

2. Legal Challenge to the CAMR

EPA considered several states' requests for reconsideration of the CAMR, but in May 2006, the Agency decided to leave the CAMR mostly intact. In response, 16 states revived a lawsuit challenging the CAMR's cap-and-trade program.⁶⁵

The original suit was filed by 12 states, challenging EPA's decision to withdraw mercury from CAA §112's maximum achievable control technology (MACT) regime in March 2005. The states maintained that EPA acted improperly in delisting coal-fired power plants as sources of mercury emissions under §112. Such mercury emissions, the states argued, must be regulated under §112's MACT standards.⁶⁶ Eleven states also filed a lawsuit challenging EPA's cap-and-trade program in May 2005, arguing that the plan would reduce mercury emissions by smaller intervals and at a slower pace than required by the CAA.⁶⁷

B. "Performance-Based" Rule for Air Toxics

EPA is considering a "performance-based" rule to reduce air toxics emissions from small "area sources" of air pollution through work practice standards rather than by requiring the sources to meet emissions limits. The CAA applies less-rigorous generally available control technology (GACT) requirements to area sources. The performance-based rule would substitute for GACT requirements at these sources.

The Agency intends to issue an advance notice of proposed rulemaking to solicit comments on the concept. EPA is planning to propose a performance-based rule in June 2007, that could cover as many as 50 area source categories, and plans to finalize the rule by December 2007.⁶⁸ EPA is under a court order to issue hazardous air pollution emissions standards for 50 categories of area sources. The first set of standards is due December 15, 2007, and the final set of standards is due June 15, 2009.⁶⁹

V. Clean Air Visibility Rule

EPA issued the Clean Air Visibility Rule (Visibility Rule) in July 2005, as a final amendment to the 1999 regional haze rule, instituting special controls for industrial facilities emitting air pollutants that reduce visibility in national parks and wilderness areas.⁷⁰ While the Visibility Rule drew legal challenges from both industry and environmental groups, the D.C. Circuit decided in December 2006, to uphold it.⁷¹

The Visibility Rule requires best available retrofit technology (BART) emission controls for industrial facilities emitting air pollutants that reduce visibility in Class 1 federal areas (including national parks and wilderness areas).

59. 42 U.S.C. §7412, ELR STAT. CAA §112.

60. *21 States File Plans for EPA Mercury Rule; Agency Proposes Backstop Plan for Others*, Env't Rep. (BNA) 2566 (Dec. 22, 2006).

61. *States Move to Finalize Strict Mercury Rules as EPA Deadline Looms*, INSIDE EPA (Oct. 4, 2006), available at http://insideepa.com/secure/docnum.asp?f=epa_2001.ask&docnum=1042006_looms.

62. U.S. EPA, Proposed Rule, Revisions of Standards of Performance of New and Existing Stationary Sources; Electric Utility Steam Generating Units; Federal Plan Requirements for Clean Air Mercury Rule; and Revisions of Acid Rain Program Rules, available at http://www.epa.gov/camr/pdfs/fr20061208_fedplan.pdf.

63. Notice of Finding That Certain States Did Not Submit Clean Air Mercury Rule (CAMR) State Plans for New and Existing Electric Utility Steam Generating Units and Status of Submission of Such Plans, EPA, available at http://www.epa.gov/camr/pdfs/fr20061208_stateplan.pdf.

64. Standards of Performance for New and Existing Stationary Sources: Electric Utility Steam Generating Units, 70 Fed. Reg. 28606 (May 18, 2005) (to be codified at 40 C.F.R. pts. 60, 72 & 75).

65. *New Jersey v. EPA*, No. 05-1162 (D.C. Cir. filed June 19, 2006).

66. *New Jersey v. EPA*, No. 05-1097 (D.C. Cir. filed Mar. 29, 2005).

67. *New Jersey*, No. 05-1162.

68. Steven D. Cook, *EPA Considers "Performance-Based" Rule to Reduce Emissions From "Area Sources,"* Env't Rep. (BNA) 1990 (Sept. 29, 2006).

69. *Sierra Club v. Johnson*, No. 01-1537 (D.D.C. filed July 16, 2001).

70. Regional Haze Regulations and Guidelines for Best Available Retrofit Technology (BART) Determinations, 70 Fed. Reg. 39104 (July 6, 2005) (to be codified at 40 C.F.R. pt. 51).

71. *Utility Air Regulatory Group v. EPA*, 417 F.3d 1333, 36 ELR 20246 (D.C. Cir. Dec. 12, 2006).

The Visibility Rule includes the “BART guidelines,” which states will use to identify facilities needing controls, as well as the specific type of controls required. Under the guidelines, states must develop regional haze implementation plans by December 2007.⁷²

BART limits are to be set on a case-by-case basis while considering, among other things, any pollution-control equipment in use at the source, available retrofit control options, and the cost of retrofit controls. Similar to the ozone standards, the rule exempts power plants in the 28 states covered by the CAIR from further requirements to reduce haze-forming emissions. According to EPA, the CAIR achieves greater reductions in haze deriving from power plants than the Visibility Rule would achieve. Consequently, states that adopt the CAIR cap-and-trade program for SO₂ and NO_x are allowed to apply CAIR controls instead of following BART requirements.⁷³

Both the UARG and the National Parks Conservation Association filed challenges to the Visibility Rule, which were consolidated as *Utility Air Regulatory Group v. U.S. Environmental Protection Agency*.⁷⁴ The UARG contended that EPA’s authority to issue guidelines on BART is limited to guidelines for individual sources, not guidelines that apply to all large power plants. In addition, the UARG asserted that the CAA requires that EPA prove a facility’s individual contribution to impairment of visibility before imposing controls.⁷⁵ The National Parks Conservation Association argued that the rule illegally exempted the 28 states regulated by the CAIR from instituting emissions controls to reduce haze.⁷⁶

The government contended that the CAA gives EPA broad authority to regulate emissions that cause haze without demonstrating that a source is specifically contributing to impaired visibility at a certain Class 1 area. EPA also defended the rule by noting that its limited resources, combined with a lack of knowledge as to the causes and methods of controlling haze, make it difficult to target specific sources. On December 12, 2006, the D.C. Circuit upheld the rule, agreeing with EPA’s reasoning.⁷⁷ The court’s decision means that businesses wishing to be exempted from the Visibility Rule must demonstrate to EPA that their facilities do not contribute to impaired visibility in any Class 1 areas.

VI. NSR Program

During 2006, EPA worked on multiple fronts related to NSR, which governs “modifications” that increase emissions from major sources such as power plants in both attainment and nonattainment regions.⁷⁸ EPA proposed revisions to the rule to clarify its applicability triggers—and some said, to deemphasize its role in enforcement—but at the same time defended court challenges to the current NSR interpretation in pending enforcement cases.

EPA began making reforms to NSR with the 2002 NSR Reform Rule, which among other things attempted to imple-

ment an hourly rather than yearly emissions rate test so that fewer plant modifications would require pre-construction permits.⁷⁹ Because routine maintenance can allow a plant to run longer and thereby trigger NSR under the yearly emissions test, the hourly test is seen as more favorable to industry. While upholding much of the rule, the D.C. Circuit struck down the provision on the hourly test, in a challenge based on a lack of public notice.⁸⁰ EPA’s ongoing efforts to implement the hourly test fueled much of the developments in NSR law in 2006.

Meanwhile, in a number of enforcement cases, EPA continued to defend the yearly standard. EPA bases its argument in part on the history of NSR in the context of earlier CAA regulations. When technical amendments in 1977 added the concept of “modification” to the PSD program, the new source performance standards (NSPS) were already in place. They defined emissions increases on an hourly rather than a yearly basis.⁸¹ A number of the cases below demonstrate the disagreement among the courts as to whether EPA had the discretion to create a different test for a “modification” for the PSD portions of the NSR rule, or was required to follow the same definition as for the NSPS program. EPA currently maintains that it did indeed have discretion to define the concept of modification differently in the two programs, even if it has since adopted a new policy for the future that would align the two.

A highlight of the year was the Supreme Court’s consideration of a wide range of NSR-related issues in *Environmental Defense v. Duke Energy Corp.*⁸² in November. The discussion below thus begins with this case, the most recent in a line of prominent NSR cases, several of which are described following the *Duke Energy* discussion. The section concludes with a discussion of EPA’s new initiative intended to streamline and simplify compliance with NSR, focusing on “debottlenecking,” “aggregation,” and “project netting.”⁸³

A. The Debate Over Emissions Tests Reaches the Supreme Court—Duke Energy

Potentially addressing many of the issues raised in NSR litigation in recent years, the Supreme Court agreed to review the U.S. Court of Appeals for the Fourth Circuit’s ruling in *Duke Energy*.⁸⁴ The case originated as a challenge to the prevention of significant deterioration (PSD) rule, the companion to NSR that applies in regions of the country that are not exceeding air pollutant standards. PSD serves to prevent such areas from falling into nonattainment status by requiring power plants to obtain permits before making any modifications. In a 2005 decision that garnered a great deal of at-

72. 70 Fed. Reg. at 39104.

73. *Id.*

74. 471 F.3d 1333, 36 ELR 20246 (D.C. Cir. Dec. 12, 2006).

75. *Id.* at 1337.

76. *Id.* at 1339.

77. *Id.* at 1335.

78. 42 U.S.C. §§7501-7515.

79. Prevention of Significant Deterioration (PSD) and Non-Attainment New Source Review (NSR): Baseline Emissions Determination, Actual-to-Future-Actual Methodology, Plantwide Applicability Limitations, Clean Units, Pollution Control Projects, 67 Fed. Reg. 80186 (Dec. 31, 2002) (codified at 40 C.F.R. §52.21).

80. *New York v. EPA (New York I)*, 413 F.3d 3, 35 ELR 20135 (D.C. Cir. June 24, 2005).

81. 40 C.F.R. pt. 60 (2007). For a brief history of EPA’s changing NSR interpretations, see E. Donald Elliott, *NSR: An Industry Lawyer’s Perspective on the Ongoing Battle Over Who Speaks for EPA*, EM, Jan. 2004, at 27.

82. No. 05-0848 (*cert. granted* May 15, 2006).

83. 71 Fed. Reg. 54235 (Sept. 14, 2006).

84. 411 F.3d at 539, *cert. granted*, 126 S. Ct. at 2019.

tion, from both critics and the courts, the Fourth Circuit struck down EPA's regulatory definition of "modification," holding that the Agency could not apply inconsistent definitions of the same term in different provisions of the same statute.⁸⁵ Specifically, the court reasoned that the definition of modification used in the original 1970 NSPS rule must be applied, defining "modification" as a change that results in an increase in a plant's hourly emissions rate, rather than the annual emissions rate test promulgated in 1978 for the PSD program.⁸⁶ Because EPA decided on October 13, 2005, to adopt the industry-favored hourly emissions rate test,⁸⁷ it declined to petition for certiorari. Instead, the nonprofit organization Environmental Defense took over as intervenor, and the Supreme Court granted certiorari to allow the organization to argue that the yearly emissions test was the correct standard to apply.⁸⁸

Once the Court granted certiorari, however, EPA stepped back into the case to defend its discretion to adopt the annual emissions tests. While it had since adopted the hourly rate test in its new proposed NSR rule, the government argued that the Fourth Circuit's opinion had been wrong on several fronts and should be overturned.⁸⁹ At oral argument, heard on November 1, 2006, both Environmental Defense and the government presented arguments supporting EPA's yearly emissions test, noting that EPA had discretion to apply different definitions of "modification" in separate programs under the same statute. EPA also pointed to the exclusive jurisdiction provision of CAA §307(b), which according to the government barred the Fourth Circuit from reviewing the case. Duke Energy Corporation argued in part that EPA had originally applied an hourly emissions test and later arbitrarily switched to the annual test in enforcement cases, rather than through rulemaking. It also noted that the Fourth Circuit had jurisdiction because the rule could not have been challenged at an earlier point in the D.C. Circuit, since EPA had not yet begun using the annual test. The Court downplayed the jurisdictional issues, instead focusing on the substantive arguments. Several Justices noted the complexity of the regulations. In particular, Chief Justice John G. Roberts remarked that it was an "audacious statement" for Environmental Defense to claim that EPA's rules were clear.⁹⁰ The Supreme Court's ruling is expected in mid-2007.

B. EPA's 2003 NSR Equipment Replacement Provision and the Definition of "Maintenance"—New York v. U.S. Environmental Protection Agency⁹¹ (New York II)

EPA petitioned for a writ of certiorari in a challenge to its 2003 NSR Equipment Replacement Provision (ERP) regulation.⁹² The D.C. Circuit ruled against EPA in the case,

85. *Id.*

86. *Id.*

87. 70 Fed. Reg. 61081 (Oct. 20, 2005).

88. Environmental Defense v. Duke Energy Corp., 126 S. Ct. 2019 (cert. granted May 15, 2006) (No. 05-0848).

89. Brief for United States as Respondent in Support of Petitioners at 20, *Duke Energy* (No. 05-0848).

90. Transcript of Oral Argument at 7, *Duke Energy* (No. 05-0848).

91. No. 06-736 (U.S. cert. petition filed Nov. 27, 2006).

92. Prevention of Significant Deterioration (PSD) and Non-Attainment New Source Review (NSR): Equipment Replacement Provision of the Routine Maintenance, Repair, and Replacement Exclusion,

holding that the regulation violated the CAA's requirement that NSR rules be applied if any physical change increased emissions, based on the plain meaning of "modification" in the Act.⁹³ The ERP rule stated that certain replacement projects would be considered routine maintenance rather than modification and thus be excluded from NSR if the replacement of components did not exceed 20% of the replacement value of the unit and did not change basic design parameters. The D.C. Circuit was particularly critical of EPA's approach, saying that only in a "Humpty Dumpty world" could an agency ignore the inherently expansive term "modification" as used by Congress.⁹⁴

C. The Definition of "Emissions" and "Routine Maintenance"—United States v. Cinergy Corp.⁹⁵

The U.S. Court of Appeals for the Seventh Circuit ruled that EPA was justified in applying the annual rather than the hourly test for emissions in its case against Cinergy Corporation. Judge Richard A. Posner, writing for the court, noted that in the 1977 Amendments to the CAA,

the statutory definition of "modifications" to which Congress was referring says nothing about hourly versus annual emissions. The hourly-emission standard under New Source Performance Standards is a creature of regulation, and the "same meaning" statutory amendment does not purport to incorporate the agency's definition of modifications under [NSPS] into . . . the [other] program[s] . . . the same word might well be used in one sense in one part of a statute and another sense in another.⁹⁶

The Seventh Circuit also noted that in the *Duke Energy*⁹⁷ decision with which the *Cinergy* ruling conflicts, "the Fourth Circuit stepped out of bounds."⁹⁸ As the Seventh Circuit considered the question of the appropriate standard in this case, the lower court proceeded to rule on ancillary matters.⁹⁹ Note the different ruling here as compared to the court's view on "routine maintenance" in the case, *United States v. Alabama Power Co.*¹⁰⁰

Duke Energy Corporation, which merged with Cinergy Corporation in April 2006, petitioned the Supreme Court on December 15, 2006, to review the Seventh Circuit's decision in *Cinergy Corp.* Duke Energy Corporation has asked the Supreme Court to determine whether EPA may use enforcement litigation to reinterpret the NSR program.¹⁰¹

68 Fed. Reg. 61247 (Oct. 27, 2003) (to be codified at 40 C.F.R. pts. 51, 52).

93. New York v. EPA, 443 F.3d 880, 883, 36 ELR 20056 (D.C. Cir. Mar. 17, 2006).

94. *Id.* at 887.

95. 458 F.3d 705, 36 ELR 20167 (7th Cir. Aug. 17, 2006).

96. *Id.* at 710.

97. Environmental Defense v. Duke Energy Corp., No. 05-0848 (cert. granted May 15, 2006).

98. *Cinergy Corp.*, 458 F.3d at 710.

99. United States v. Cinergy Corp., No. 99-CV-1693, 2006 WL 372726 (S.D. Ind. Feb. 16, 2006) (holding that the definition of "routine maintenance" depends on both the frequency of such action at a particular site and within the industry).

100. No. 01-152 (N.D. Ala. Aug. 28, 2006) (order on motion for clarification).

101. *Cinergy Corp. v. United States*, No. 06-850 (U.S. cert. petition filed Dec. 15, 2006).

D. The Definitions of “Emissions” and “Routine Maintenance”—Alabama Power Co.

The U.S. Court of Appeals for the Eleventh Circuit has stayed its review of a district court ruling that went against EPA, pending a determination of its jurisdiction in the matter. On August 28, 2006, a federal judge reaffirmed her decision to grant summary judgment against the federal government in an NSR enforcement case.¹⁰² Judge Virginia E. Hopkins criticized the Seventh Circuit’s opinion in *Cinergy Corp.*,¹⁰³ which ruled that EPA has authority to devise a new definition of emissions for NSR.¹⁰⁴ The government appealed the decision to the Eleventh Circuit on October 16, 2006. The Eleventh Circuit has thus far declined to make a substantive ruling, instead inquiring with the parties whether the D.C. Circuit has exclusive jurisdiction to review the case under CAA §307(b).¹⁰⁵

*E. The Proper Penalties for NSR Violations—United States v. American Electric Power Co.*¹⁰⁶

In a case examining the proper EPA remedy for violations of NSR, an Ohio district court ruled that the federal government may not seek civil penalties for alleged air pollution violations by power plants that occurred more than five years in the past, but that it may seek corrective action under such circumstances. The government had argued that the violations were ongoing during the litigation process and thus warranted civil penalties, but the judge rejected this interpretation in applying the five-year statute of limitations.¹⁰⁷ The U.S. Court of Appeals for the Sixth Circuit is currently reviewing a similar decision turning on the statute of limitations in *National Parks Conservation Ass’n v. Tennessee Valley Authority*.¹⁰⁸ Separate litigation involving American Electric Power in the Ohio district court, which will determine the extent of the company’s violations, is stayed pending the outcome of *Duke Energy*¹⁰⁹ in the Supreme Court.¹¹⁰

F. EPA’s Proposed Rule on Debottlenecking, Aggregation, and Project Netting

As EPA awaits the outcome of the *Duke Energy*¹¹¹ line of cases, it has taken on a separate initiative to simplify and clarify the NSR rule so as to better define its application in

certain circumstances.¹¹² The proposed rule highlights three areas for amendment, as described below:

- Debottlenecking: when a modification in one portion of a facility increases throughput at other unchanged portions of the facility, only emissions from the modified portion would be analyzed under the NSR applicability test;
- Aggregation: when two or more projects at a facility are related, they should be treated as a single project for NSR purposes, but otherwise they should be treated as separate and independent; and
- Project Netting: when project emissions increases are not significant, a sourcewide analysis of emissions increases and decreases over a five-year period would no longer be required.¹¹³

VII. Climate Change

A significant development in climate change law in 2006 was the Supreme Court’s consideration of *Massachusetts v. EPA*.¹¹⁴ If decided on the merits rather than on standing, the main issue will likely be the extent to which the Agency has discretion to decline to regulate carbon dioxide (CO₂) as an air pollutant. EPA has thus far refused to interpret the CAA as requiring it to do so. The outcome of this case may prompt major changes in climate change law, depending on how the Justices rule. Separately, states sought to regulate CO₂ emissions by targeting companies directly. Connecticut filed a nuisance suit against power plants in *Connecticut v. American Electric Power Co. (AEP)*,¹¹⁵ and California filed a similar nuisance suit in *California v. General Motors Corp.*,¹¹⁶ while also promulgating its own CO₂ regulations targeting automobiles.¹¹⁷ The California rule was immediately challenged by industry as preempted by federal fuel economy standards in *Central Valley Chrysler-Jeep Inc. v. Witherspoon*.¹¹⁸

Taking a leading role in climate change regulation, a group of northeastern states created the Regional Greenhouse Gas Initiative (RGGI), with the goal of putting into place its own set of climate change provisions. California independently passed similar legislation, which it then tied in with the RGGI.¹¹⁹ The federal government, meanwhile, was cautious regarding additional climate change legislation. With the new Congress of 2007, however, major bills may be proposed soon. Many in industry have expressed a preference for Congress to step in, as the disparate state initiatives will make compliance significantly more difficult.

A. EPA Authority to Regulate CO₂—Massachusetts v. EPA

In a major development in administrative and environmental law, the Supreme Court agreed to review the D.C. Cir-

102. *Alabama Power*, No. 01-152 (holding that “when Congress says the word [emissions] is to be defined in the new part of the statute as it was defined in the existing part of the statute, that’s not vague,” and that “routine” is defined by reviewing patterns in the industry, not at a particular site).

103. *Cinergy Corp.*, No. 06-850.

104. *United States v. Cinergy Corp.*, 458 F.3d 705, 36 ELR 20167 (7th Cir. Aug. 17, 2006).

105. *Alabama Power*, No. 06-15456 (11th Cir. Oct. 24, 2006) (memo issued requesting further briefing by the parties).

106. No. 2:04 CV 1098, 2:05 CV 360 (S.D. Ohio filed Nov. 18, 2004).

107. *Id.*

108. No. 01-0071 (E.D. Tenn. 2005) (dismissing the suit based on the five-year statute of limitations).

109. *Duke Energy*, No. 05-0848.

110. *United States v. American Elec. Power Co.*, No. C2-99-1182 (S.D. Ohio June 6, 2006) (stay issued).

111. *Duke Energy*, No. 05-0848.

112. 71 Fed. Reg. 54235 (Sept. 14, 2006).

113. *Id.*

114. *Massachusetts v. EPA*, No. 05-1120.

115. No. 05-5104-cv (2d Cir. filed Sept. 20, 2005).

116. No. C06-05755 (N.D. Cal. filed Sept. 20, 2006).

117. A.B. 1492, 2002 Assemb., Reg. Sess. (Cal. 2002).

118. No. CV-04-06663 (E.D. Cal. filed Dec. 7, 2004).

119. California Global Warming Solutions Act of 2006, A.B. 32, 2006 Assemb., Reg. Sess. (Cal. 2006).

cuit's 2005 decision finding in favor of EPA on the issue of the Agency's discretion to regulate carbon emissions. The petitioner group currently includes 18 states, 10 environmental groups, and 2 electric utility companies.¹²⁰

Oral argument in the case was heard on November 29, 2006. Several Justices were concerned about the three elements of standing: (1) injury-in-fact; (2) causation; and (3) redressability. For instance, the question arose as to whether the injury to coastlines alleged by Massachusetts is actually "imminent," as required to pass the standing hurdle.¹²¹ Justices also questioned whether U.S. automobiles, which account for 6% of all emissions sources worldwide, can be considered a "cause" for purposes of the standing analysis.¹²² Redressability was also a concern, in that even with regulations on automobiles, total carbon emissions would drop only a few percentage points at most.¹²³ One inconvenient fact that seemed to get lost in the argument was EPA's position that there is no known technology to reduce CO₂ emissions from motor vehicles, but questions from the Justices seemed to assume that somehow all 6% of CO₂ emissions from motor vehicles in the United States could somehow be eliminated. In fact, there was some discussion as to how the Court could even assess this last issue without usurping EPA's role as interpreter of environmental science.¹²⁴

In a possible indication of its leanings, the Court spent little time on the issue of whether CO₂ is an air pollutant—a threshold question in the analysis of EPA's scope of authority. Petitioners pointed to §202(a)(1) of the CAA: the EPA administrator "shall by regulation" prescribe "standards applicable to the emission of any air pollutant from any class or classes of new motor vehicles or new motor vehicle engines, which in his judgment cause, or contribute to, air pollution which may reasonably be anticipated to endanger public health or welfare."¹²⁵ Section 302(g) states that an "air pollutant" includes any "chemical . . . substance" which is "emitted into . . . the ambient air."¹²⁶ At oral argument, the Court appeared unlikely to adopt respondents' contention that the CAA dictates that EPA's responses to climate change be nonregulatory.¹²⁷ Thus, if it reaches the merits, it seems likely that a majority of the Court will find that EPA has some existing statutory authority to address climate change. The difficult issue, however, is whether that authority is discretionary, or mandatory.

A critical issue before the Court in this case involves agency discretion, specifically the question of whether EPA had to make any endangerment determination as to CO₂ or can decline to act based on a variety of policy factors such as the absence of existing technology to regulate emissions from motor vehicles and international negotiations. EPA argued, among other things, that it did not have to make an endangerment determination because capping automobile

emissions was not a policy it wished to pursue at this time.¹²⁸ Petitioners asserted that EPA's decision to act was based on a variety of impermissible policy factors not enumerated in the statutory language.¹²⁹ Even if the Court holds that EPA should not have considered policy issues outside of the statute, however, the remedy will likely be a remand, and EPA could then try to come to the same conclusion based solely on the factors that the Court holds are permissible to consider, such as the state of the science. A decision is expected in spring 2007.

*B. Greenhouse Gases as Public Nuisance—Connecticut v. American Electric Power Co. (AEP)*¹³⁰

Another approach to combating greenhouse gases (GHGs) has been introduced in a case brought by Connecticut and seven other states. These states filed suit against five large electric utility companies, claiming that the power companies' GHG emissions constituted a public nuisance. The states demanded new regulatory controls to reduce pollution. On September 15, 2005, the U.S. District Court for the Southern District of New York dismissed the lawsuit, holding that the question of whether regulatory controls are needed for GHGs is a "political question" rather than a judicial issue. The case is currently on appeal in the U.S. Court of Appeals for the Second Circuit.¹³¹ It may be affected by the ruling in *Massachusetts v. EPA* in regard to standing.

C. Federal Government Initiatives

The various suits against EPA and other agencies involved in setting CAA policy may be partially motivated by concerns among states and nonprofits regarding the effectiveness of the Bush Administration's programs on climate change. Since 2002, the Administration has focused on voluntary measures, with the goal of reducing GHG "intensity" by 18% by 2012.¹³² Carbon intensity is a measure of GHG emissions per unit of gross domestic product. Thus, even as intensity drops, overall emissions may still rise as the economy expands. While the Administration continues to support this program, the initiatives taken by various states, detailed below, have led many experts to suggest that a federal cap on emissions should be adopted in the near future. Such a cap would preclude conflicting state programs from spreading throughout the country. Members of Congress have introduced bills that would create a national cap-and-trade system.¹³³ With the new Congress taking shape under Democratic leadership in 2007, it is possible that such bills will lead to new laws.

One major initiative currently receiving federal funding is research on the use of carbon sequestration to remove CO₂ from the atmosphere and lock it in underground wells. The

120. *Massachusetts v. EPA*, No. 05-1120.

121. Transcript of Oral Argument at 4, *Massachusetts v. EPA* (No. 05-1120).

122. *Id.* at 5.

123. *Id.* at 11.

124. *Id.* at 23.

125. Brief for Petitioners Massachusetts et al. at 44, *Massachusetts v. EPA* (No. 05-1120).

126. 42 U.S.C. §7602.

127. Brief for the Federal Respondent at 27, *Massachusetts v. EPA* (No. 05-1120).

128. *Id.* at 35.

129. Transcript of Oral Argument at 4, *Massachusetts v. EPA* (No. 05-1120).

130. 406 F. Supp. 2d 265, 35 ELR 20186 (S.D.N.Y. 2005), *appeal docketed*, No. 05-5104-cv (2d Cir. Sept. 20, 2005).

131. Connecticut v. American Elec. Power Co. (AEP), No. 05-5104-cv (2d Cir. filed Sept. 20, 2005).

132. White House Council on Environmental Quality, *Ambitious National Goal to Reduce Emissions Intensity*, <http://www.whitehouse.gov/ceq/global-change.html#2> (last visited Feb. 1, 2007).

133. See H.R. 5049, as well as more general GHG reduction programs, see S. 3698, S. 2724, S. 843, H.R. 5642.

U.S. Department of Energy has allocated \$24 million to nine carbon sequestration projects at coal-fired power plants.¹³⁴ As part of a broader program, EPA released draft guidance on experimental technologies that the Agency will begin piloting in 2007.¹³⁵

D. Corporate Average Fuel Economy

One small revision to federal climate-related policy came on March 29, 2006, when the U.S. Department of Transportation promulgated a new rule raising corporate average fuel economy (CAFE) standards for light trucks, including pickups and sport utility vehicles. The standards were raised from 21.6 to 24 miles per gallon (mpg) by 2011.¹³⁶ A controversial aspect of this rule is that it sets varying standards based on a manufacturer's vehicle production, such that automakers that focus on large trucks, like General Motors Corporation, will need to meet a lower standard, while automakers that produce smaller trucks, such as Suzuki Motor Corporation, will have to meet a higher standard.¹³⁷ In response, 10 states, New York City, and the District of Columbia filed suit against the federal government, asserting that the new standards fail to reduce GHG emissions. They argue that the standards in fact create incentives for manufacturers to build larger, less fuel-efficient vehicles. The plaintiffs also contend that the new rule should not have been promulgated without an accompanying environmental impact statement as required by the National Environmental Policy Act.¹³⁸

Separately, EPA has instituted a new fuel economy testing method, to take effect in the 2008 model year. It is anticipated to more accurately reflect actual driving conditions to better inform the public about MPG estimates. The new method will result in MPG ratings 10 to 20% below the current published ratings. Hybrid gas-electric vehicles may be most affected, as they are more susceptible to variations in driving conditions. The rule will also for the first time require fuel economy testing and labeling for medium-duty vehicles, which are defined as vehicles weighing between 8,500 and 10,000 pounds.¹³⁹

E. Regional Greenhouse Gas Initiative and Other State Initiatives

With the Bush Administration taking a measured approach to climate change policy, a number of states have decided to promulgate their own rules on GHG emissions. On December 20, 2005, seven northeastern states released a memorandum of understanding (MOU) creating the RGGI, which es-

tablishes a cap-and-trade program for power plant emissions. The states included Connecticut, Delaware, Maine, New Hampshire, New Jersey, New York, and Vermont. Beginning on January 1, 2009, participating states must stabilize emissions at a baseline level provided in the MOU, with the goal of reducing emissions to 10% below the baseline by 2019.¹⁴⁰ Massachusetts and Rhode Island did not sign the MOU but may join the agreement at any time up to January 1, 2008, without changing the terms of the agreement. Maryland has pledged to join by spring 2007.

Each member state must adopt its own laws and regulations implementing the emissions trading program. The consortium's final model rule, released on August 15, 2006, will serve as a template. It calls for states to issue one allowance for each ton of CO₂ emissions. Each power plant will need enough allowances to cover its emissions, but operators can offset up to 3.3% of each plant's emissions output with other projects, such as end-use efficiency initiatives and landfill gas capture. As a "safety valve," the model rule allows for additional offsetting if the cost of allowances increases beyond certain thresholds for a sustained period—at \$7 per allowance, offsets can total 5%, and at \$10, offsets can total 10%.¹⁴¹ It still remains to be decided whether states will sell, auction, or freely distribute the emissions allowances. States have agreed to hold at least 25% for sale, in order to provide funding for innovative projects.¹⁴² The plan also includes exemptions for power plants that use a certain percentage of biomass fuel, or that produce energy to be used off the electricity grid.¹⁴³

Separately, Massachusetts¹⁴⁴ and Vermont¹⁴⁵ have passed rules and regulations that implement their own independent GHG reduction initiatives, and Illinois¹⁴⁶ is considering taking similar action.

F. California Legislation and Litigation

The state of California has worked independently of the federal government and other states in developing GHG reduction plans. On September 27, 2006, Gov. Arnold A. Schwarzenegger (R-Cal.) signed into law the Global Warming Solutions Act of 2006, originally referred to as A.B. 32. The Act establishes a framework to use market-based incentives to reduce carbon emissions to 1990 levels by the year 2020. The details of the plan are left to the California Air Resources Board (CARB) to promulgate.¹⁴⁷ To expand the

134. See U.S. Dep't of Energy, *Carbon Sequestration*, <http://www.energy.gov/sciencetech/carbonsequestration.htm> (last visited Feb. 1, 2007).

135. See U.S. EPA, *Geologic Sequestration of Carbon Dioxide*, http://www.epa.gov/safewater/tuic/wells_sequestration.html (last visited Feb. 1, 2007).

136. Average Fuel Economy Standards for Light Trucks Model Years 2008-2011, 71 Fed. Reg. 17566 (Apr. 6, 2006) (to be codified at 49 C.F.R. pts. 523, 533, & 537).

137. *Id.*

138. *California v. National Highway Traffic Safety Admin.*, No. 06-72317 (9th Cir. filed May 2, 2006).

139. Fuel Economy Labeling of Motor Vehicles: Revisions to Improve Calculation of Fuel Economy Estimates, 71 Fed. Reg. 77871 (Dec. 27, 2006) (to be codified at 40 C.F.R. pts. 86, 600).

140. Regional Greenhouse Gas Initiative, Memorandum of Understanding, available at http://www.rggi.org/docs/mou_12_20_05.pdf.

141. See RGGI Model Rule, available at <http://www.rggi.org/modelrule.htm#documents>.

142. Dean Scott, *Northeast States Start Regional Organization to Administer Regional Carbon Emissions Cap*, Env't Rep. (BNA) 1709, 1710 (Aug. 18, 2006).

143. See RGGI Model Rule, *supra* note 141.

144. Martha Kessler, *Massachusetts Plans Rules in October to Establish Emissions Trading Under Power Plant Law*, Env't Rep. (BNA) 1972 (Sept. 22, 2006).

145. Jake Brown, *Vermont Governor to Sign Legislation to Reduce Greenhouse Gas Emissions*, Env't Rep. (BNA) 1032 (May 12, 2006).

146. Michael Bologna, *Illinois Advisory Panel to Study Options for Cutting Greenhouse Gas Emissions*, Env't Rep. (BNA) 2105 (Oct. 13, 2006).

147. California Global Warming Solutions Act of 2006, A.B. 32, 2006 Assemb., Reg. Sess. (Cal. 2006)

reach of the new legislation, on October 17, 2006, Governor Schwarzenegger signed an executive order linking California's program to the RGGI in the Northeast and similar efforts in Europe.¹⁴⁸

California also took steps to alter climate change policy through litigation. In September 2006, California filed a lawsuit against six U.S. and Japanese automobile makers seeking monetary damages for the effects of global warming. The suit sounds in public nuisance, with California claiming that it has been injured by the automobiles sold within the state.¹⁴⁹ This suit is similar to the one filed by California and Connecticut, among several other states, against coal-fired power plants in *AEP*,¹⁵⁰ currently in the Second Circuit. Unlike the power plant suit, however, the suit against the automakers demands damages, not simply a reduction in emissions.¹⁵¹

California also found itself defending recently passed climate change legislation, as its novel law aimed at reducing automobile carbon emissions drew a lawsuit from automakers.¹⁵² Under CAA §209, California is the only state that may adopt vehicle emission standards more stringent than the federal rules, which other states may in turn adopt.¹⁵³ In September 2004, CARB promulgated regulations requiring carbon emissions limits on passenger vehicles and light-duty trucks beginning in model year 2009.¹⁵⁴ A federal judge has allowed the automobile industry to proceed with its challenge to this alleged attempt to regulate fuel economy via GHG standards. At issue is whether the state's regulations are de facto fuel economy standards. If so, they are preempted by the Energy Policy and Conservation Act of 1975, which sets federal fuel economy standards. California's legislation may instead fall within the carve-out provided by §209 of the CAA, allowing California to regulate air pollutants.¹⁵⁵ The judge recently issued a stay,¹⁵⁶ however, pending the result in *Massachusetts v. EPA*.¹⁵⁷ For the rule to take effect, the state must first obtain a waiver of preemption from EPA under §209. On October 30, 2006, Governor Schwarzenegger submitted to President George W. Bush a second request for a waiver of federal preemption of the California emissions rule, after having received no reply to his first request.¹⁵⁸

In a related matter, California has filed a lawsuit demanding information from the Bush Administration regarding

the degree to which the automobile industry has played a role in writing CAFE standards.¹⁵⁹ New CAFE standards for light-duty trucks published in 2006 contain language stating that the rule overrides an attempt by California to impose its own limits on GHGs. This has led California officials to believe that automakers exerted undue influence during the drafting process.¹⁶⁰

VIII. Miscellaneous

A. Ozone Depletion

Opposition to EPA's exemptions for certain ozone-depleting substances was unsuccessful in 2006. While many ozone-depleting substances are banned in the United States, EPA has instituted critical use exemptions for certain ozone-depleting products, including the ozone-depleting pesticide methyl bromide.¹⁶¹ In a case challenging the methyl bromide exemption, the D.C. Circuit originally held that members of NRDC lacked standing to sue, based on a failure to show an injury-in-fact.¹⁶² Upon reconsideration, the D.C. Circuit reversed itself on standing, but still dismissed the case after reviewing the merits. NRDC argued that post-ratification decisions by international governing bodies under the Montreal Protocol on Substances That Deplete the Ozone Layer dictate that exempted uses must first draw on existing stocks before new supplies are manufactured. The court held that these annual decisions on critical use exemptions do not carry the force of law in the United States, and thus are not judicially enforceable under CAA §604(d)(6).¹⁶³ A response to NRDC's second petition for rehearing is pending.

B. Operating Permits

The CAA requires all facilities with Title V permits to conduct monitoring in order to demonstrate compliance with the Act. On December 15, 2006, EPA took final action on a proposal to reinstate a monitoring rule overturned by the D.C. Circuit. The proposal would limit monitoring requirements under CAA operating permits to those requirements already in place. Existing monitoring programs include SIPs, EPA periodic monitoring requirements, and the EPA compliance monitoring rule. In the preamble to the proposed rule, EPA notes that the rule will "better balance the responsibilities of States and other permitting authorities and EPA to improve monitoring where necessary to ensure that the Act's monitoring requirements are met."¹⁶⁴

The D.C. Circuit had vacated and remanded EPA's interpretation of the rule, previously known as the "umbrella

148. Dean Scott, *Schwarzenegger Issues Executive Order Linking California With Other Trading Schemes*, Env't Rep. (BNA) 2146 (Oct. 20, 2006).

149. *California v. General Motors Corp.*, No. C06-05755 (N.D. Cal. filed Sept. 20, 2006).

150. *AEP*, No. 05-5104-cv.

151. *General Motors*, No. C06-05755.

152. *Central Valley Chrysler-Jeep, Inc. v. Witherspoon*, No. CV-04-06663 (E.D. Cal. filed Dec. 7, 2004).

153. 42 U.S.C. §7543.

154. A.B. 1492, 2002 Assemb., Reg. Sess. (Cal. 2002).

155. *Central Valley Chrysler-Jeep, Inc.*, No. CV-04-06663 (E.D. Cal. Sept. 25, 2006) (motion to dismiss denied).

156. *Central Valley Chrysler-Jeep, Inc.*, No. CV-04-06663 (E.D. Cal. Jan. 16, 2007) (stay issued).

157. *Massachusetts v. EPA*, No. 05-1120.

158. Stephen Siciliano, *Schwarzenegger Again Asks Bush to Waive Federal Preemption on Greenhouse Gases*, Env't Rep. (BNA) 2251 (Nov. 3, 2006).

159. *California v. Office of Mgmt. & Budget*, No. C06-02654 (N.D. Cal. filed Apr. 19, 2006).

160. Steven D. Cook, *California Attorney General Files Lawsuit Seeking Documents on Federal CAFE Rule*, Env't Rep. (BNA) (Apr. 21, 2006).

161. See U.S. EPA, *The Phaseout of Methyl Bromide*, <http://www.epa.gov/ozone/mbr> (last visited Feb. 1, 2007).

162. *Natural Resources Defense Council v. EPA*, 440 F.3d 476, 36 ELR 20051 (D.C. Cir. Mar. 7, 2006).

163. *Natural Resources Defense Council v. EPA*, 464 F.3d 1, 36 ELR 20181 (D.C. Cir. Aug. 29, 2006).

164. 71 Fed. Reg. 32006, 32012 (June 2, 2006).

monitoring” rule, in October 2005. The court held that EPA reversed its position after issuing a proposed rule, and therefore had not properly gone through the notice-and-comment process.¹⁶⁵ EPA had tried to clarify in the proposed rule that the monitoring rules require Title V permits to contain monitoring sufficient to assure compliance with the CAA.¹⁶⁶ EPA later explained that the correct interpretation was that the rule did “not establish a separate regulatory basis for reviewing or authorizing review and enhancement of existing monitoring independent of any review and enhancement that may be required under separate provisions of the operating permit rules.” EPA’s interpretation prohibited states from supplementing inadequate monitoring in permits un-

der the umbrella rule if there were any periodic reporting requirements already in the permit.¹⁶⁷

IX. Conclusion

As demonstrated by the preceding review of CAA law during 2006, the protection of the atmosphere is a complicated and often contentious process. Perhaps because there are so many interests at stake, Congress has moved slowly in addressing the changing economic, technological, and scientific landscape. This approach has left the states, and in many cases the judiciary, to take on increasingly central roles as national policymakers. Whether the shifting winds in Congress will reverse or accelerate this process remains to be seen.

165. *Environmental Integrity Project v. EPA*, 425 F.3d 992, 35 ELR 20204 (D.C. Cir. 2005).

166. 67 Fed. Reg. 58561 (Sept. 17, 2002).

167. *Revisions to Clarify the Scope of Certain Monitoring Requirements for Federal and State Operating Permits Programs*, 69 Fed. Reg. 3202 (Jan. 22, 2004) (to be codified at 40 C.F.R. pts. 70, 71).