

## INTRODUCTION

### CLIMATE CHANGE AT EPA

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With the demise of climate legislation in Congress, and the Supreme Court's rejection of climate-related lawsuits brought under federal common law,<sup>1</sup> rapt attention has turned to the Environmental Protection Agency's (EPA) efforts to bring greenhouse gases into the regulatory fold. Certainly, as the works in this special issue of the *Florida Law Review* demonstrate, EPA is not the only important player in the climate arena; indeed, as I will reluctantly suggest, the Agency's efforts here appear to be waning rather than waxing. Even so, before turning to other aspects of the problem of climate change, discussed in other works in this issue, it is worth taking stock of where EPA is now, how it came to this point, and how it might proceed from here.

The basic storyline of EPA's posture toward greenhouse gas regulation is familiar to many, and I will sketch only the broad outlines here. In brief, I see three stages to EPA's actions and attitudes: denial, acceptance, and bargaining. The correspondence of these stages to several of the famous stages of grief is intended to highlight the regression in EPA's development, rather than to suggest that trying to address climate change is a form of grief (though grief it must necessarily entail, if one is clear-eyed about the science on the matter).

#### I. DENIAL

In 1999, the International Center for Technology Assessment and other groups filed a petition asking EPA to regulate greenhouse gases from motor vehicles under the Clean Air Act.<sup>2</sup> The petitioners asserted that EPA had the authority to regulate these emissions under the Clean Air Act and that EPA's public statements linking greenhouse gases to climate change

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\* Professor of Law, Georgetown University Law Center. I had the great and unusual privilege of both serving as lead author of the winning briefs in *Massachusetts v. EPA*, 549 U.S. 497 (2007), in which the Supreme Court held that the Clean Air Act gives the EPA the authority to regulate greenhouse gases, and going to work at EPA to implement that authority, first as Senior Climate Policy Counsel to EPA Administrator Lisa Jackson (January to July 2009), and then as Associate Administrator of EPA's Office of Policy (July 2009 to December 2010).

1. *Am. Elec. Power Co. v. Connecticut*, 131 S. Ct. 2527 (2011). For an overview of this case and a discussion of the significance of the Court's refusal to decide whether the Clean Air Act also preempts climate-related lawsuits brought under state common law, see Allison Fischman, Comment, *Preserving Legal Avenues for Climate Justice in Florida Post-American Electric Power*, 64 FLA. L. REV. 295 (2011).

2. Petition for Rulemaking and Collateral Relief Seeking the Regulation of Greenhouse Gas Emissions from New Motor Vehicles Under § 202 of the Clean Air Act, Int'l Ctr. for Tech. Assessment v. Browner, No. A-2000-04 (EPA Oct. 20, 1999), available at <http://www.regulations.gov/#!documentDetail;D=EPA-HQ-OAR-2001-0002-0001>.

satisfied the regulatory trigger of a judgment that greenhouse gases endanger public health or welfare.<sup>3</sup>

In 2003, EPA finally answered the petition, with a firm “no.”<sup>4</sup> EPA stated that it did not have the authority to regulate greenhouse gases under the Clean Air Act; essentially, the Agency said, greenhouse gases were such a poor fit with the Act’s regulatory structure that they could not be understood to be “air pollutants” subject to regulation under the Act.<sup>5</sup> EPA also said that even if it had the power to regulate these gases, it would not do so.<sup>6</sup> The Agency maintained that the Act’s regulatory structure would result in an “inefficient” and “piecemeal” response to a global issue, that “unilateral” action by the United States was unwise in the context of a global matter, and that the science of climate change was uncertain and left many important issues unaddressed.<sup>7</sup>

In *Massachusetts v. EPA*,<sup>8</sup> the Supreme Court rejected all of EPA’s grounds for inaction under the Clean Air Act, holding that EPA did indeed have the authority to regulate greenhouse gases under this law<sup>9</sup> and that it must ground any refusal to exercise this authority in the statute itself.<sup>10</sup> Free-floating policy concerns and vague gestures toward scientific uncertainty did not, the Court concluded, justify inaction by the Agency.<sup>11</sup>

Just weeks after the Supreme Court’s decision, in a moment often forgotten in light of subsequent events, President George W. Bush presided over a Rose Garden ceremony marking his Administration’s new direction after the Court’s ruling.<sup>12</sup> President Bush gathered around him, among others, the Administrator of EPA and the Secretary of the Department of Transportation (DOT), and he announced that these agencies would work together to develop standards for motor vehicles that would conform to the Supreme Court’s decision.<sup>13</sup>

Less publicly, these agencies then went to work to develop these standards and, in EPA’s case, to develop a finding on endangerment under the Clean Air Act.<sup>14</sup> They worked quickly. By December of that year—barely eight months after the Supreme Court’s decision—they had

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3. *Id.* at 13–24.

4. Control of Emissions from New Highway Vehicles and Engines, 68 Fed. Reg. 52,922 (Sept. 8, 2003) (denying petition for rulemaking).

5. *Id.* at 52,928.

6. *Id.* at 52,929–30.

7. *Id.* at 52,931.

8. *Massachusetts v. EPA*, 549 U.S. 497 (2007).

9. *Id.* at 528–32.

10. *Id.* at 535.

11. *Id.* at 533–34.

12. Jim Rutenberg & Edmund L. Andrews, *Bush Calls for Work for Higher Fuel Efficiency*, N.Y. TIMES, May 15, 2007, <http://www.nytimes.com/2007/05/15/us/15bush.html>.

13. *Id.*

14. Felicity Barringer, *White House Refused to Open Pollutants E-Mail*, N.Y. TIMES, June 25, 2008, <http://www.nytimes.com/2008/06/25/washington/25epa.html>.

forwarded a regulatory package to the White House Office of Management and Budget (OMB) for its review.<sup>15</sup> (Under a Clinton-era Executive Order in force both then and now, all major rules were required to undergo OMB review before being issued.<sup>16</sup>) Then the unthinkable happened: OMB refused to upload the agencies' materials.<sup>17</sup> Without OMB review and its attendant White House clearance, there would be no endangerment finding and no rule on motor vehicles.

With what became known as the episode of the "unopened email,"<sup>18</sup> the Bush Administration's progress toward regulating greenhouse gases came to a halt. Not only did federal regulation stall, but EPA also saw to it that state regulation would meet the same fate: on December 19, 2007, the same day that President Bush signed the Energy Independence and Security Act into law, EPA announced that it would deny California a waiver of preemption for its standards on greenhouse gases from mobile sources.<sup>19</sup>

In the summer of 2008, EPA did manage to publish an Advance Notice of Proposed Rulemaking (ANPRM), an exhaustive disquisition on the possibilities and pitfalls of regulating greenhouse gases under the Clean Air Act.<sup>20</sup> In an unprecedented move, the ANPRM came accompanied by statements of denunciation by all of the members of the Cabinet whose work touched on the ANPRM and by White House offices with interests in the matter.<sup>21</sup> The EPA Administrator himself prefaced the document with a statement of grave misgivings about starting down this path.<sup>22</sup>

Even in the midst of this public stasis, however, EPA was quietly busy. It wrote a rule to require the reporting of greenhouse gas emissions,<sup>23</sup> in

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15. *Id.*

16. Exec. Order No. 12,866, 58 Fed. Reg. 51,735 (Oct. 4, 1993).

17. Barringer, *supra* note 14.

18. It was even discussed on *The Daily Show* (Comedy Central television broadcast June 25, 2008), available at <http://www.thedailyshow.com/watch/wed-june-25-2008/be-patient-this-gets-amazing---epa-e-mail>.

19. Micheline Maynard, *E.P.A. Denies California Emission's Waiver*, N.Y. TIMES (Dec. 19, 2007), <http://www.nytimes.com/2007/12/19/washington/20epa-web.html>; see also Letter from Stephen L. Johnson, Adm'r, Env'tl. Prot. Agency, to Arnold Schwarzenegger, Governor, State of Cal. (Dec. 19, 2007), available at <http://www.epa.gov/otaq/climate/20071219-slj.pdf>.

20. Regulating Greenhouse Gas Emissions Under the Clean Air Act, 73 Fed. Reg. 44,354 (July 30, 2008) (to be codified at 40 C.F.R. ch. I).

21. *Id.* at 44,356–61, 44,379–96 (statements of Secretaries of Departments of Agriculture, Commerce, Energy, and Transportation, and heads of the Executive Office of Information and Regulatory Affairs, Office of Science and Technology Policy, Council of Economic Advisors, Council on Environmental Quality, and the Office of Advocacy of the U.S. Small Business Administration).

22. *Id.* at 44,354–55 ("I believe the ANPR demonstrates the Clean Air Act, an outdated law originally enacted to control regional pollutants that cause direct health effects, is ill-suited for the task of regulating global greenhouse gases. Based on the analysis to date, pursuing this course of action would inevitably result in a very complicated, time-consuming and, likely, convoluted set of regulations.").

23. *Amid State Efforts, EPA Sends GHG Registry Rule for White House Review*, INSIDE EPA,

response to an appropriations bill mandating such a rule.<sup>24</sup> It also developed a rule on renewable fuels,<sup>25</sup> aimed at implementing a provision of the Energy Independence and Security Act of 2007, which required EPA, among other things, to take into account the international land use impacts of biofuels.<sup>26</sup> And EPA's Office of Transportation and Air Quality (OTAQ)—the office whose months of hard work had been shunted to the side when OMB refused to even look at the end product—was preparing for the time when perhaps a different frame of mind would take hold and regulation of greenhouse gases could proceed at EPA. To prepare the ground for that moment, OTAQ developed a new model for assessing possible greenhouse gas regulations in light of costs and cost-effectiveness (to counter DOT's own antique model on the same topic),<sup>27</sup> sponsored a cutting-edge study of the costs of vehicle technology,<sup>28</sup> and undertook research on automobile manufacturers' indirect costs associated with new regulations.<sup>29</sup> The fruits of all of these labors are indeed visible in the rule EPA did eventually adopt—the Obama Administration's first-ever rule regulating greenhouse gas emissions from automobile tailpipes.<sup>30</sup>

Given the Bush White House's demonstrated antipathy to regulating greenhouse gas emissions from motor vehicles under the CAA, it is not surprising that OTAQ's work did not see the light of day during the Bush

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Oct. 31, 2008, available at 2008 WLNR 20694018.

24. Consolidated Appropriations Act of 2008, Pub. L. No. 110-161, div. F, tit. II, 121 Stat. 1844, 2128 (2007).

25. *Bush to Leave Office with Key EPA Proposals in White House Review Limbo*, INSIDE EPA (Jan. 16, 2009), available at 2009 WLNR 790570.

26. Energy Independence and Security Act of 2007, Pub. L. No. 110-140, § 201, 121 Stat. 1492, 1519–20 (codified at 42 U.S.C. § 7545(o) (Supp. II 2008)) (defining “lifecycle greenhouse gas emissions”).

27. Light-Duty Vehicle Greenhouse Gas Emission Standards and Corporate Average Fuel Economy Standards; Final Rule, 75 Fed. Reg. 25,324, 25,446 (May 7, 2010) (to be codified at 40 C.F.R. pts. 85, 86, 600 and 49 C.F.R. pts. 531, 533, 536, 537, 538); ENVTL. PROT. AGENCY, EPA-420-B-09-035, EPA OPTIMIZATION MODEL FOR REDUCING EMISSIONS OF GREENHOUSE GASES FROM AUTOMOBILES (OMEGA): MODEL DOCUMENTATION 1.0 (2009), available at <http://www.epa.gov/oms/climate/models/420b09035.pdf>. See generally *Optimization Model for Reducing Emissions of Greenhouse Gases from Automobiles (OMEGA)*, EPA.GOV, <http://www.epa.gov/otaq/climate/models.htm> (last updated Jan. 6, 2011) (containing downloadable file of OMEGA application).

28. FEV, INC., EPA-420-R-09-020, LIGHT-DUTY TECHNOLOGY COST ANALYSIS PILOT STUDY (2009) (study prepared for EPA by FEV, Inc.), available at <http://www.epa.gov/otaq/climate/420r09020.pdf>.

29. ALEX ROGOZHIN ET AL., EPA-420-R-09-003, AUTOMOBILE INDUSTRY RETAIL PRICES EQUIVALENT AND INDIRECT COST MULTIPLIERS (2009) (study prepared for EPA by RTI International and Transportation Research Institute), available at <http://www.epa.gov/oms/ld-hwy/420r09003.pdf>.

30. Light-Duty Vehicle Greenhouse Gas Emission Standards and Corporate Average Fuel Economy Standards; Final Rule, 75 Fed. Reg. at 25,451–52 (discussing OMEGA model), 25,514 (citing indirect cost study), 25,568–69 (citing technology cost study (“FEV teardown study”)).

Administration. But other matters fell into limbo, too. EPA sent its reporting rule to OMB in October 2008,<sup>31</sup> but the rule languished there (despite a statutory deadline), waiting for the next Administration.<sup>32</sup> A seemingly sensible and uncontroversial rule to allow a carbon dioxide-based mobile source refrigerant to substitute, with conditions, for refrigerants containing ozone-depleting substances waited indefinitely for OMB clearance.<sup>33</sup>

To explain why the Bush Administration might have adopted the posture of stopping all work relating to greenhouse gasses, one needs to look at the case-by-case permitting provisions of the Clean Air Act. In thinking through the implications of regulating greenhouse gases under the Clean Air Act, EPA faced a dilemma: if it regulated these emissions under the Act, that regulation would likely trigger the permitting requirements of the Act's "Prevention of Significant Deterioration" (PSD) program. This program requires that covered sources use the "best available control technology for each pollutant *subject to regulation* under this chapter."<sup>34</sup> "Subject to regulation" means that regulation under a separate provision of the Act can trigger the PSD provisions. Moreover, sources covered under the PSD program are those emitting the relevant pollutants in amounts over a specified threshold.<sup>35</sup> The tonnage thresholds for the PSD requirements, designed with conventional pollutants in mind, are very low in the context of greenhouse gases; therefore, a great many sources emit greenhouse gases in amounts that would exceed that threshold, thus sweeping many new (and quite small) sources into the permitting system.<sup>36</sup> These anxieties were stoked when, in November 2008, the EPA's Environmental Appeals Board held that the Agency had not adequately justified its conclusion that the permitting requirements had not been triggered by EPA's longstanding

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31. *Amid State Efforts, EPA Sends GHG Registry Rule for White House Review*, *supra* note 23.

32. *Bush to Leave Office with Key EPA Proposals in White House Review Limbo*, *supra* note 25. The rule was pulled back from OMB for review by the new Administration (along with all other rules, pursuant to a memorandum from White House Chief of Staff Rahm Emanuel), and a new package sent back shortly thereafter. Matthew Madia, *Climate Change Rules Among Obama's First*, OMB WATCH (Feb. 13, 2009), <http://www.ombwatch.org/node/9709?page=0%2C7>.

33. EPA first proposed the rule in 2006. Protection of Stratospheric Ozone: Listing of Substitutes in the Motor Vehicle Air Conditioning Sector Under the Significant New Alternatives Policy (SNAP) Program, 71 Fed. Reg. 55,140 (proposed Sept. 14, 2006) (to be codified at 40 C.F.R. pt. 82). By 2009, the rule still had not cleared OMB. Protection of Stratospheric Ozone: Alternatives for the Motor Vehicle Air Conditioning Sector Under the Significant New Alternatives Policy (SNAP) Program, 74 Fed. Reg. 47,774 (proposed Sept. 17, 2009) (to be codified at 40 C.F.R. pt. 82) (announcing that EPA would consider new data in formulating the proposed rule and inviting public comment).

34. 42 U.S.C. § 7475(a)(4) (2006) (emphasis added); *id.* § 7479(3).

35. *Id.* § 7479(1).

36. The thresholds are 100 tons for certain specified sources and 250 tons for all others. *Id.*

carbon dioxide reporting requirements for power plants.<sup>37</sup>

The fear of triggering the Clean Air Act's permitting requirements appears to have deranged even programs not directly tied to climate change. The enforced inaction on mobile sources grew to include inaction on other matters and carried with it a censorious posture toward anything remotely connected to climate and greenhouse gases. Yet, at the same time, the Agency was sitting on a trove of materials—a proposed endangerment finding, a proposal to regulate greenhouse gas emissions from motor vehicles, a proposed reporting rule for greenhouse gases, a proposal on renewable fuel standards—that awaited scarcely more than the word “Go.”

## II. ACCEPTANCE

Climate change was an important topic during Barack Obama's campaign for the presidency, with the candidate pledging to take action if he were elected.<sup>38</sup> He began to make good on this promise within days of his inauguration, issuing a Presidential Memorandum requesting EPA to reconsider its Bush-era denial of permission to California to enforce its own greenhouse gas rules for motor vehicles.<sup>39</sup> He appointed ardent proponents of action on climate change to head agencies and departments, and these officials in turn appointed like-minded individuals to help them in their tasks.<sup>40</sup> Interagency meetings early in the Administration were crowded with people whose chief, if not sole, job was to imbue their agencies with an action-oriented perspective on climate change.

For its part, EPA quickly went to work to dust off and strengthen the climate-related materials it had prepared during the Bush Administration. First came the proposed rule on reporting greenhouse gas emissions.<sup>41</sup> Especially in light of subsequent attacks on the Agency's alleged overweening regulatory zeal, the rule is notable for its modesty. The appropriations bill requiring the rule had simply required that EPA “use its existing authority under the Clean Air Act”<sup>42</sup> to “require mandatory

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37. Deseret Power Elec. Coop. 14 E.A.D No. 07-03, slip op. at 26 (EAB Nov. 13, 2008), available at [http://ag.ca.gov/globalwarming/pdf/Deseret\\_decision.pdf](http://ag.ca.gov/globalwarming/pdf/Deseret_decision.pdf).

38. Byron W. Daynes & Glen Sussman, *Economic Hard Times and Environmental Policy: President Barack Obama and Global Climate Change 7* (2010) (unpublished conference paper), available at [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1641729](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1641729).

39. Memorandum, State of California Request for Waiver Under 42 U.S.C. 7543(b), the Clean Air Act, 74 Fed. Reg. 4,905 (Jan. 26, 2009).

40. Anne E. Kornblut, *Obama Rolls out Energy and Climate Team*, 44 BLOG, WASH. POST (Dec. 15, 2008, 6:10 PM), <http://voices.washingtonpost.com/44/2008/12/obama-rolls-out-energy-and-cli.html>.

41. Mandatory Reporting of Greenhouse Gases, 74 Fed. Reg. 16,448 (proposed Apr. 10, 2009) (to be codified at scattered sections of 40 C.F.R.).

42. 153 CONG. REC. H16131 (daily ed. Dec. 17, 2007) (explanatory statement of Rep. David Obey); see also Consolidated Appropriations Act of 2008, Pub. L. No. 110-161, § 4, 121 Stat. 1844, 1846 (2007) (stating that the explanatory statement “shall have the same effect . . . as if it

reporting of greenhouse gas emissions above appropriate thresholds.”<sup>43</sup> EPA took this very broad grant of authority and turned it into a well-targeted, sensible plan for disclosure of greenhouse gas emissions. The Agency required reporting from only the very largest sources (those emitting 25,000 metric tons or more of carbon dioxide equivalent).<sup>44</sup> In doing so, moreover, the Agency managed to capture the vast majority of the country’s emissions in its reporting program.<sup>45</sup> The reporting rule is thus a powerful counter to the claim that EPA has taken the bit between its teeth and run wild in regulating greenhouse gases.

Next up, in April 2009, was a proposed finding that greenhouse gases endangered public health and welfare.<sup>46</sup> Determining that it was unnecessary to make a conclusion about public health for purposes of triggering a requirement to regulate mobile sources, and noting that greenhouse gases did not cause “any direct adverse health effects, such as respiratory or toxic effects,” the Bush EPA had, in its unopened proposal, stated only that greenhouse gases endangered public welfare.<sup>47</sup> The Obama EPA proposed to find that greenhouse gases endangered public health, as well.<sup>48</sup> EPA’s endangerment finding—pertaining to both public health and welfare—was finalized in December 2009.<sup>49</sup>

In May 2009, in a happy contrast to the results of the Rose Garden ceremony President Bush had convened two years before, President Barack Obama stood before an audience in the Rose Garden and announced that all interested parties—EPA, DOT, California and other states, automobile manufacturers, unions, environmentalists, and others—had forged a deal on a proposal to regulate greenhouse gas emissions from motor vehicles.<sup>50</sup> The product of weeks of secret meetings among the interested parties,<sup>51</sup> the

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were a joint explanatory statement of a committee of conference”).

43. Consolidated Appropriations Act of 2008, div. F, tit. II, 121 Stat. at 2128.

44. Mandatory Reporting of Greenhouse Gases, 74 Fed. Reg. at 16,461.

45. *Id.* at 16,467.

46. Proposed Endangerment and Cause or Contribute Findings for Greenhouse Gases Under Section 202(a) of the Clean Air Act, 74 Fed. Reg. 18,886 (proposed Apr. 24, 2009) (to be codified at 40 C.F.R. ch. 1).

47. Draft Outline of Summary of Proposed Endangerment Finding in Preamble at 10, 13–14, 15 (Dec. 5, 2007), [http://www.epa.gov/epafoia1/docs/2007\\_Draft\\_Proposed\\_Endangerment\\_Finding.pdf](http://www.epa.gov/epafoia1/docs/2007_Draft_Proposed_Endangerment_Finding.pdf).

48. Proposed Endangerment and Cause or Contribute Findings for Greenhouse Gases Under Section 202(a) of the Clean Air Act, 74 Fed. Reg. at 18,886.

49. Endangerment and Cause or Contribute Findings for Greenhouse Gases Under Section 202(a) of the Clean Air Act, 74 Fed. Reg. 66,496 (Dec. 15, 2009) (to be codified at 40 C.F.R. ch. 1).

50. John M. Broder, *Obama to Toughen Rules on Emissions and Mileage*, N.Y. TIMES, May 18, 2009, <http://www.nytimes.com/2009/05/19/business/19emissions.html>; David A. Fahrenthold & Juliet Eilperin, *White House Proposes First National Limits on Greenhouse Gases*, WASH. POST, Sept. 16, 2009, <http://www.washingtonpost.com/wp-dyn/content/article/2009/09/15/AR2009091503146.html>.

51. Colin Sullivan, *Vow of Silence Key to White House-Calif. CAFE Talks*, GREENWIRE, May

deal unwound a legal and political tangle created by the overlapping jurisdiction of EPA, DOT, and California over the same substantive terrain.<sup>52</sup>

Even while this auto deal was being hammered out, EPA was already working with the truck industry on the beginnings of a similar deal.<sup>53</sup> At the same time, EPA also issued its long-awaited proposed standard for renewable fuels, containing a much-debated analysis of the impacts of biofuels on international land use and accompanying effects on greenhouse gas emissions.<sup>54</sup> That standard, with significant refinements to the international land use analysis, was finalized in 2010.<sup>55</sup>

Meanwhile, EPA still needed to grapple with the challenges posed by applying the PSD permitting program to greenhouse gases. In late 2009, EPA unveiled its answer to these challenges: The proposed “tailoring rule,” which would phase in PSD requirements for greenhouse gases over time (a long time), in order to avoid the administrative impossibility of bringing in many thousands of sources into the program for the first time all at once.<sup>56</sup> In the final tailoring rule, EPA announced that it would apply the PSD requirements in several steps. First, starting on January 2, 2011, sources already in the PSD permitting program would be required to meet new requirements for greenhouse gases.<sup>57</sup> Then, beginning July 1, 2011, EPA would apply the program to new facilities emitting more than 100,000 tons of carbon dioxide equivalent emission per year, and to existing facilities if they were undergoing modifications that would increase their carbon dioxide equivalent emissions by more than 75,000 tons per year.<sup>58</sup> Further stages of implementation would await further action by the Agency, several years down the line.<sup>59</sup> Under a related rule known as the “timing rule,” EPA concluded that this permitting program would be activated when the rule for motor vehicles took effect—on January 2, 2011.<sup>60</sup> On that day, the Agency concluded, greenhouse gases would

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20, 2009, <http://www.eenews.net/public/Greenwire/2009/05/20/1>.

52. On the tangle, see, for example, Robert V. Percival, *Massachusetts v. EPA: Escaping the Common Law's Growing Shadow*, 2007 SUP. CT. REV. 111, 151–57.

53. Oliver B. Patton, *Industry Applauds Fuel Economy Policy*, TRUCKINGINFO (May 26, 2010), [http://www.truckinginfo.com/news/news-detail.asp?news\\_id=70533](http://www.truckinginfo.com/news/news-detail.asp?news_id=70533) (noting that truck and engine manufacturers had been working on a regulatory program with EPA for 1.5 years).

54. Regulation of Fuels and Fuel Additives: Changes to Renewable Fuel Standard Program, 74 Fed. Reg. 24,904, 25,020–58 (proposed May 26, 2009) (to be codified at 40 C.F.R. pt. 80).

55. Regulation of Fuels and Fuel Additives: Changes to Renewable Fuel Standard Program, 75 Fed. Reg. 14,670 (Mar. 26, 2010) (to be codified at 40 C.F.R. pt. 80).

56. Prevention of Significant Deterioration and Title V Greenhouse Gas Tailoring Rule, 74 Fed. Reg. 55,292, 55,304 (proposed Oct. 27, 2009) (to be codified at 40 C.F.R. pts. 51, 52, 70, 71).

57. Prevention of Significant Deterioration and Title V Greenhouse Gas Tailoring Rule, 75 Fed. Reg. 31,514, 31,516 (June 3, 2010) (to be codified at 40 C.F.R. pts. 51, 52, 70, 71).

58. *Id.*

59. *Id.*

60. Reconsideration of Interpretation of Regulations that Determine Pollutants Covered by

indeed become “subject to regulation” within the meaning of the Clean Air Act.

In 2011, EPA followed its first auto rule with a plan (with DOT) to regulate greenhouse gas emissions in the model years 2017–25.<sup>61</sup> EPA and DOT also issued a final rule on heavy trucks.<sup>62</sup>

And that, sorry to say, may well be it for EPA’s regulatory program on greenhouse gases. As I next discuss, recent signs have not been encouraging for those hoping for more to come.

### III. BARGAINING

From the beginning, despite—or because of—appreciable steps forward in addressing greenhouse gases, EPA has been under severe attack for starting down this road.<sup>63</sup> It probably did not help the Agency that one of the White House’s tactics for trying to nudge climate change legislation toward enactment in Congress was to warn that the big, bad EPA would act if Congress did not.<sup>64</sup> When Congress did not act, it was hard to shake off the image of a scary agency run amok.

With crucial backing from the President, EPA gamely proceeded with its initiatives on cars and trucks in the face of harsh, even hysterical, criticisms. Other programs for reducing greenhouse gases, however, have not fared so well. Within days of triggering the requirements of the PSD permitting program for greenhouse gas emissions from certain sources, EPA announced that it would delay any new requirements for biomass facilities for three years.<sup>65</sup> Shortly thereafter, EPA decided that the new requirements would not apply to a gas-fired power plant proposed for Avenal, California.<sup>66</sup> The Agency’s reasoning—relying primarily on a Supreme Court case from 1880<sup>67</sup>—seemed to stretch beyond the four

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Clean Air Act Permitting Programs, 75 Fed. Reg. 17,004, 17,004 (Apr. 2, 2010) (to be codified at 40 C.F.R. pts. 50, 51, 70, 71).

61. 2017–2025 Model Year Light-Duty Vehicle GHG Emissions and CAFE Standards: Supplemental Notice of Intent, 76 Fed. Reg. 48,758 (Aug. 9, 2011) (to be codified at 40 C.F.R. pts. 85, 86, 600 and 49 C.F.R. 531, 533).

62. Greenhouse Gas Emissions Standards and Fuel Efficiency Standards for Medium- and Heavy-Duty Engines and Vehicles, 76 Fed. Reg. 57,106 (Sept. 15, 2011) (to be codified at scattered sections of 40 C.F.R. and 49 C.F.R. pts. 523, 534, 535).

63. Daniel Malloy, *Series of Votes Show Desire to Curb EPA Power to Regulate*, PITTSBURGH POST-GAZETTE, Apr. 7, 2011, <http://www.post-gazette.com/pg/11097/1137646-84.stm>.

64. John M. Broder, *Obama, Who Vowed Rapid Action on Climate Change, Turns More Cautious*, N.Y. TIMES, Apr. 10, 2009, <http://www.nytimes.com/2009/04/11/us/politics/11climate.html>.

65. Juliet Eilperin, *EPA Delays Climate Rules for Biomass Industry*, POST CARBON BLOG, WASH. POST (Jan. 12, 2011, 5:07 PM), [http://voices.washingtonpost.com/post-carbon/2011/01/epa\\_delays\\_climate\\_rules\\_for\\_b.html](http://voices.washingtonpost.com/post-carbon/2011/01/epa_delays_climate_rules_for_b.html).

66. Supplemental Statement of Basis, PSD Permit Application for Avenal Energy Project at 9–11 (Mar. 2011), <http://www.epa.gov/region9/air/permit/avenal/Avenal-SuppStatemtBasisEjAnalysisApxFinal-Eng3-2-11.pdf>.

67. *Id.* at 9–10 (citing *Mitchell v. Overman*, 103 U.S. 62 (1880)).

corners of the Avenal permit, and indeed the Agency has suggested as much.<sup>68</sup> At about the same time, Louisiana granted the first permit since the new requirements were triggered.<sup>69</sup> Despite critical comments from EPA,<sup>70</sup> Louisiana stuck to its initial decision.<sup>71</sup> It is not clear that the new requirements for greenhouse gases made a whit of a difference in the actual emissions profile of the new facility.<sup>72</sup> The same is true for other facilities that have since been permitted.<sup>73</sup>

EPA did create a flurry of excitement by announcing that it had settled lawsuits over its prior refusal to include requirements for greenhouse gas controls in its New Source Performance Standards (NSPS) under Section 111 of the CAA. EPA announced that it would begin its work under Section 111 by issuing standards for power plants and oil refineries, the two biggest stationary-source emitters of greenhouse gases in the U.S.<sup>74</sup> EPA promised a proposed rule addressing new and existing power plants by July 2011<sup>75</sup> and a proposed rule for new and existing oil refineries by December 2011.<sup>76</sup>

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68. Declaration of Regina McCarthy, *Avenal Power Ctr., LLC v. U.S. EPA*, No. 10-cv-00383-RJL, at 2 (D.D.C. Jan. 31, 2011), available at [http://www.eenews.net/assets/2011/02/02/document\\_gw\\_01.pdf](http://www.eenews.net/assets/2011/02/02/document_gw_01.pdf) (noting that the Avenal facility “is among those PDF permit applications that EPA believes it is appropriate to grandfather from” greenhouse gas and other new requirements).

69. Gabriel Nelson, *Enviros Challenge First Greenhouse Gas Permit Under EPA Rules*, GREENWIRE, May 4, 2011, <http://www.eenews.net/eenewspm/2011/05/04/archive/1?terms=enviros+challenge+first+greenhouse+gas+permit+under+epa+rules>; see also Alan Sayre, *Nucor to Start Construction of Metals Plant in La.*, ABC NEWS (Jan. 27, 2011), <http://abcnews.go.com/Business/wireStory?id=12780426>.

70. Letter from Jeffrey Robinson, Chief, Region 6 Air Permits Section, to Tegan Treadaway, La. Dep’t of Env’tl. Quality, Comments on Louisiana Department of Environmental Quality’s Proposed Permits (Jan. 7, 2011), <http://www.epa.gov/Region7/air/nsr/nsrmemos/nucor.pdf>.

71. La. Dep’t of Env’tl. Quality, Public Comments Response Summary, Agency Interest No. 157847 (Jan. 27, 2011), [http://www.deq.state.la.us/portal/portals/0/news/pdf/nucorresponse\\_tocomments.pdf](http://www.deq.state.la.us/portal/portals/0/news/pdf/nucorresponse_tocomments.pdf).

72. Gregory E. Wannier, *Early Clean Air Act Greenhouse Gas Permitting Decisions Offer a Preview of EPA’s Implementation Strategy*, CLIMATE LAW BLOG, <http://blogs.law.columbia.edu/climatechange/2011/04/05/early-clean-air-act-greenhouse-gas-permitting-decisions-offer-a-preview-of-epa’s-implementation-strategy>.

73. See, e.g., RTP ENVTL. ASSOCS., BEST AVAILABLE TECHNOLOGY REVIEW FOR GREENHOUSE GAS EMISSIONS 15, 26, 40, 42 (Oct. 2010), available at <http://denr.sd.gov/Hyperion/Air/20101019/HECResponseToIncompleteLtr.pdf> (reviewing, in a report submitted to the South Dakota Department of Environment and Natural Resources, best available control technology (BACT) for greenhouse gas emissions from the Hyperion Energy Center).

74. Juliet Eilperin, *White House Presses for New Climate, Wilderness Protections*, WASH. POST, Dec. 24, 2010, <http://www.washingtonpost.com/wp-dyn/content/article/2010/12/23/AR2010122305643.html>.

75. EPA Fossil Fuel-Fired Power Plants Settlement Agreement 3 (Dec. 2010), <http://www.epa.gov/airquality/pdfs/boilerghgsettlement.pdf>.

76. EPA Petroleum Refineries Settlement Agreement 4 (Dec. 2010), available at <http://www.epa.gov/airquality/pdfs/refineryghgsettlement.pdf>.

After announcing a delay until September 2011 of the proposal for power plants,<sup>77</sup> EPA announced a further, indefinite delay of these standards.<sup>78</sup> The announcement came amid further rumors that EPA was mulling whether to deal only with new power plants in the initial proposal.<sup>79</sup> Because addressing emissions from existing power plants had been the real prize offered by the settlement, these rumors faced a chilly reception in the environmental community.<sup>80</sup> Around the same time, EPA defended its refusal to make an endangerment finding for aircraft, in part by explaining that it had “more urgent priorities” to attend to first.<sup>81</sup> And, in proposing revised NSPS for nitric acid plants, the Agency declined to include limits on nitrous oxide, a potent greenhouse gas. EPA stated that nitrous oxide “is considered a greenhouse gas,”<sup>82</sup> and that nitric acid plants should consider using technologies that limit nitrous oxide emissions. The Agency provided no legal analysis—none—of why it was appropriate to exclude these emissions from the revised limits.<sup>83</sup>

Here is where we stand, then, on additional regulatory programs for greenhouse gases, beyond those already finalized. New standards for cars and *some* standards for power plants and refineries may well be the last regulatory initiatives EPA undertakes on greenhouse gases during this Administration. Almost certainly, we will still see standards for mobile sources for model years 2017–25. These have been delayed, but they have strong commitment from the President and will follow the successful path laid out in the initial auto program. It will be surprising, moreover, if *no* action happens on NSPS for power plants and refineries, given the settlement agreements and the lack of any legal argument for inaction. But it remains to be seen whether the standards will add any appreciable emission reductions not already offered by the PSD program, especially if EPA does indeed peel off the guidance for existing sources and leave that for another time.

It is hard to escape the conclusion that EPA is winding down its regulatory initiatives on greenhouse gases. The Agency cut back on the

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77. John M. Broder, *E.P.A. Plans Delay of Rule on Emissions*, N.Y. TIMES, June 13, 2011, <http://www.nytimes.com/2011/06/14/science/earth/14epa.html>.

78. Amy Harder, *EPA to Delay Climate-Change Rules*, NAT'L J., Sept. 15, 2011, <http://www.nationaljournal.com/domesticpolicy/epa-to-delay-climate-change-rules-20110915>.

79. *EPA May Limit Power Plant GHG Performance Standards to New Facilities*, INSIDE EPA, Sept. 16, 2011, available at 2011 WLNR 18287339.

80. *Id.*

81. Combined Memorandum in Opposition to Plaintiffs' Motion for Summary Judgment and in Support of EPA's Cross-Motion for Summary Judgment at 16, Ctr. for Biological Diversity v. U.S. EPA, No. 10-985-FJS (D.D.C. July 27, 2011).

82. A strangely ambivalent formulation, since nitrous oxide is one of the six pollutants covered by EPA's endangerment finding for greenhouse gases. 74 Fed. Reg. 66,496, 66,497.

83. New Source Performance Standards for Nitric Acid Plants, 76 Fed. Reg. 63,877, 63,880 (Oct. 14, 2011).

PSD program's reach almost in the same breath as it announced the program was triggered. The Agency has repeatedly delayed additional requirements for greenhouse gases. No new initiatives have been announced since the NSPS settlements in December 2010.

Thus the Agency has moved backwards, from an accepting embrace of its duties under the Clean Air Act to bargaining with itself just to keep what it has. Perhaps the Agency hopes that by cutting back on its regulatory program, and not reaching for more, it can stave off political threats to the scope of its legal authority. Perhaps the Agency truly is consumed by other priorities. Perhaps the Agency wants to confirm the legality of its existing programs in the cases that have already been brought against them before turning to new initiatives. Perhaps all of the above. None of this means, however, that the Agency must stand completely still.

#### IV. MOVING ON

I have four suggestions to keep EPA moving on climate change even while it retrenches. I harbor no illusions about whether these actions are sufficient to address the climate problem (they are not even close).<sup>84</sup> But they are better than moving all the way back to complete denial.

First, learn from OTAQ. The lesson from OTAQ is that even in periods of apparent stasis, the Agency can be preparing for the next stage. Even now, EPA can be undertaking research and analysis to support existing and future actions on climate. Just as OTAQ saw weaknesses in existing models for predicting the consequences of regulatory action, in methods of estimating technology costs, and in estimates of indirect costs, *and then set out to correct them*, so other offices within EPA (and even OTAQ itself) can be undertaking the same kind of critical scrutiny of existing models and methods, and then working to improve them.

Second, make the most of the mandatory reporting rule. The first reports on greenhouse gas emissions were due on September 30, 2011.<sup>85</sup> EPA should make this information as accessible and understandable to the general public as it can. Outside parties should take this information and compile corporate-level emissions profiles. Just as the Toxics Release Inventory and associated publicity led to voluntary reductions in the relevant emissions, so too might the mandatory reporting rule be a lever for reductions in greenhouse gas emissions.<sup>86</sup>

Third, attend to the climate-related impacts of non-climate rules. EPA should always include foreseeable effects—in either direction—on

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84. Some of the other works in this collection address different aspects of the problem.

85. Mandatory Reporting of Greenhouse Gases, 75 Fed. Reg. 47,392, 47,407 (proposed Aug. 4, 2011) (to be codified at 40 C.F.R. pt. 98).

86. EPA should resist current requests that it extend the deadline for all of the reporting requirements, as it has proposed to do for certain categories of sources. Mandatory Reporting of Greenhouse Gases, 76 Fed. Reg. at 47,396.

greenhouse gas emissions in its analyses of rules, even when those rules are not directly related to climate. This will be painful sometimes, especially if a rule that is beneficial along one environmental dimension poses risks along the dimension of climate; the temptation may well be to downplay or even ignore the climate-related risks of a non-climate rule. But EPA should resist this temptation. At the least, it should be trying not to do harm, climate-wise, even if it cannot now do as much good as we need. EPA should also be pressing for updated values for climate-related consequences or, in other words, for the “social cost of carbon.” All of the integrated assessment models on which the Administration relied two years ago in estimating the social cost of carbon have since been updated. These updates should be incorporated into Agency analyses of climate-related consequences.

Finally, prepare for a warming world. EPA should attend to the effects of climate change on its work and mission. In the analyses and design of its rules, the Agency should take into account the changing climate and, where possible, it should choose the options that best meet the needs and uncertainties of a changing world. This is one of the places where climate adaptation meets climate mitigation: in describing how its mission is altered—and some options foreclosed—by a changing climate, EPA cannot help but make a renewed case for direct action on greenhouse gases.

