

*ALASKA DEPARTMENT OF ENVIRONMENTAL  
CONSERVATION V. E.P.A.\**

*Carrie Gombos\*\**

The Clean Air Act<sup>1</sup> (“CAA” or “the Act”) allocates regulatory authority over air pollution to both the federal government and the states, but finding the proper balance of power between the two has been a continuing source of tension. Last Term, in *Alaska Department of Environmental Conservation v. United States Environmental Protection Agency* (“ADEC”),<sup>2</sup> the Supreme Court narrowly held that the federal government—not the state—ultimately had the power to determine what pollution control technology was required for a zinc mine in rural Alaska. In doing so, the Court correctly affirmed the importance of the Environmental Protection Agency’s (“EPA”) limited but necessary oversight role within the cooperative federalism scheme created by the CAA. Because the Court rarely reviews CAA cases, *ADEC* could have serious implications for the future interpretation of the CAA and other environmental statutes that depend on principles of cooperative federalism.<sup>3</sup>

BACKGROUND

The Red Dog Mine (“Mine”)—the world’s largest source of zinc concentrate—is located in northwestern Alaska, in a pristine environment one hundred miles north of the Arctic Circle and about five miles from a national preserve.<sup>4</sup> In 1996, the Mine’s owner, Teck Cominco Alaska (“Cominco”), initiated an expansion project that involved increasing the power of its standby generator and adding a new generator to its plant.<sup>5</sup> Cominco submitted an application to the Alaska Department of Environmental Conservation (“ADEC”) for a permit that would allow the Mine to generate more electricity and increase its nitrogen oxide emissions into the air.<sup>6</sup>

Under the Act, clean air regions like Alaska are subject to the CAA’s Prevention of Significant Deterioration (“PSD”) provisions.<sup>7</sup> The Mine,

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\*\* J.D., Harvard Law School, 2004.

<sup>1</sup> 42 U.S.C. §§ 7401–7671q (2000).

<sup>2</sup> 124 S. Ct. 983 (2004).

<sup>3</sup> Many other statutes also require EPA to establish minimum national standards that can be implemented and administered by states subject to federal supervision. *See, e.g.*, Clean Water Act, 33 U.S.C. §§ 1251–1387 (2000); Resource Conservation Recovery Act, 42 U.S.C. §§ 6901–6992k (2000); Safe Drinking Water Act, 42 U.S.C. §§ 300f–325j (2000).

<sup>4</sup> *Alaska Dep’t of Env’tl. Conservation v. EPA*, 298 F.3d 814, 816 (9th Cir. 2002).

<sup>5</sup> *ADEC*, 124 S. Ct. at 994.

<sup>6</sup> *Id.*

<sup>7</sup> The 1977 CAA Amendments codified a complex Prevention of Significant Deterioration program that prescribes the allowable level of air quality degradation to be permitted in “clean air” areas—areas with air quality that is better than that required by the national ambient

like all new pollutant-emitting sources in PSD areas, was required to obtain a PSD permit before beginning construction or modification of the facility.<sup>8</sup> A PSD permit cannot be issued unless the proposed facility is subject to the Best Available Control Technology (“BACT”)<sup>9</sup> for each pollutant.<sup>10</sup> In its permit application, Cominco suggested that a technology known as Low NOx was BACT,<sup>11</sup> and proposed an emission-offset or bubbling plan<sup>12</sup> that involved fitting its six existing generators and the new generator with Low NOx technology.<sup>13</sup> ADEC determined that a more stringent technology known as selective catalytic reduction (“SCR”) was BACT<sup>14</sup> but granted Cominco a preliminary permit for use of Low NOx as BACT. ADEC’s rationale in granting the preliminary permit was its belief that Cominco’s plan of installing Low NOx on all of its generators would reduce the total emissions to a level that was comparable or lower than that obtainable by only installing SCR on the new generators.<sup>15</sup>

EPA did not object to Cominco’s bubbling plan during the notice and comment period, but the National Parks Service (“NPS”) submitted comments to ADEC, objecting to the projected offset of new emissions

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air quality standards. *See* 42 U.S.C. §§ 7470–7479 (2000).

<sup>8</sup> 42 U.S.C. § 7475 (2000). A permit is required for any “major emitting facility,” defined to include any source emitting more than 250 tons of nitrogen oxides per year. *See* § 7479(1). No facility may be constructed or modified unless a permit prescribing emission limitations has been issued for the facility. *See* § 7475(a)(1); *see also* § 7479(2)(C) (defining “construction” to include “modification”).

<sup>9</sup> BACT is defined as

[A]n emission limitation based on the maximum degree of reduction of each pollutant subject to regulation under this chapter emitted from or which results from any major emitting facility, which the permitting authority, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such facility through application of production processes and available methods, systems, and techniques, including fuel cleaning, clean fuels, or treatment or innovative fuel combustion techniques for control of each such pollutant.

42 U.S.C. § 7479(3) (2000).

<sup>10</sup> 42 U.S.C. § 7475(a)(4) (2000).

<sup>11</sup> *Alaska Dep’t of Env’tl. Conservation v. EPA*, 298 F.3d 814, 816 (9th Cir. 2002). Low NOx reduces emissions by using “high combustion air temperatures to better atomize toxic particles.” *Id.*

<sup>12</sup> Emissions netting or bubbling is a technique that allows polluters to offset increased emissions from one piece of equipment by reducing emissions elsewhere within the bubble. For detailed discussions of the uses of emissions netting strategies under the CAA, see generally Chad Butler, *New Source Netting in Nonattainment Areas Under the Clean Air Act*, 11 *ECOLOGICAL L.Q.* 343 (1984); Adam W. Glass, *The EPA’s Bubble Concept After Alabama Power*, 32 *STAN. L. REV.* 943, 962 (1980).

<sup>13</sup> *ADEC*, 124 S. Ct. at 995.

<sup>14</sup> *Id.* at 994. SCR reduces NOx emissions by injecting the exhaust with ammonia or urea and then combining it with a catalyst. *Alaska Dep’t of Env’tl. Conservation*, 298 F.3d at 817.

<sup>15</sup> *ADEC*, 124 S. Ct. at 995. *See also* *ADEC, PRELIMINARY TECHNICAL ANALYSIS REPORT FOR AIR QUALITY CONTROL CONSTRUCTION PERMIT NO. 9932-AC005*, at 42 (May 4, 1999) (on file with the Harvard Environmental Law Review).

against emissions from other existing generators.<sup>16</sup> NPS was concerned that the increased nitrogen oxide emissions would affect vegetation at nearby national parks and urged EPA to intervene.<sup>17</sup> EPA did not dispute that installing Low NOx on all seven generators would produce overall lower emissions, but agreed with NPS that a permitting authority could not offset new emissions by imposing new controls on other emissions units that were not subject to BACT authorization.<sup>18</sup> EPA told ADEC that it had to consider what was the best technology for each unit individually, rather than for the facility as a whole.<sup>19</sup>

Even though ADEC was forced to abandon its bubbling plan, ADEC continued to endorse Low NOx as BACT.<sup>20</sup> ADEC defended its choice of Low NOx as BACT by citing SCR's excessive economic costs.<sup>21</sup> However, ADEC lacked the critical information necessary for establishing whether SCR was economically feasible for the Mine, including any information on whether SCR would adversely affect the Mine's operation or profitability.<sup>22</sup> Cominco declined to provide ADEC with the relevant data, citing confidentiality concerns.<sup>23</sup>

In December 1999, EPA issued to ADEC a "Finding of Noncompliance Order," stating that Cominco's planned construction of the new generator was not in compliance with the Act.<sup>24</sup> EPA ordered ADEC to withhold issuance of Cominco's permit, but ADEC issued the permit to Cominco anyway.<sup>25</sup> On February 8, 2000, EPA issued a stop-construction order against Cominco, requiring Cominco to halt construction on the new generator until Cominco could demonstrate satisfactory compliance with the

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<sup>16</sup> *ADEC*, 124 S. Ct. at 995–96.

<sup>17</sup> Alaska Dep't of Env'tl. Conservation, 298 F.3d at 817.

<sup>18</sup> *ADEC*, 124 S. Ct. at 996. One question *ADEC* leaves open is whether ADEC should have been allowed to go ahead using Cominco's original bubbling rationale. Bubbling techniques have been used before in relation to the PSD program. In *Alabama Power Co. v. Costle*, the D.C. Circuit held that when polluters in an attainment area modify existing components so that their emissions increase, but reduce emissions elsewhere in their plants, they could avoid triggering PSD new source review requirements including BACT. 636 F.2d 323 (D.C. Cir. 1979). In its support of this holding, the D.C. Circuit stated that the bubble concept was "precisely suited to preserve air quality within a framework that allows cost-efficient, flexible planning for industrial expansion and improvement." *Id.* at 402. The use of the bubble concept in PSD areas, as opposed to nonattainment areas, is also more consistent with the purpose and intent of the CAA. See Glass, *supra* note 12, at 962 (arguing that the bubble concept is justified as applied under the PSD provisions because the current air quality in clean regions does not cause adverse health effects and therefore polluters can take advantage of the bubble concept's flexibility without compromising the Act's purpose of protecting health). In its objections to ADEC's plan, it appears that EPA never pointed ADEC to a case, statute or regulation that confirmed the correctness of EPA's view.

<sup>19</sup> See *ADEC*, 124 S. Ct. at 996.

<sup>20</sup> *Id.* at 997.

<sup>21</sup> *Id.* at 996–97.

<sup>22</sup> *Id.* at 1007.

<sup>23</sup> *Id.*

<sup>24</sup> Alaska Dep't of Env'tl. Conservation v. EPA, 298 F.3d 814, 817 (9th Cir. 2002).

<sup>25</sup> *ADEC*, 124 S. Ct. at 997.

CAA.<sup>26</sup> ADEC and Cominco petitioned the Court of Appeals for the Ninth Circuit for review of EPA's orders.<sup>27</sup>

The Ninth Circuit, after determining that it had jurisdiction to review the orders,<sup>28</sup> denied ADEC's petition for review.<sup>29</sup> The Ninth Circuit held that the "plain text, structure, and history of the [Clean Air] Act" gave EPA the statutory authority to issue the contested orders.<sup>30</sup> The court emphasized that although state permitting authorities have discretion to make BACT determinations, the CAA gives EPA enforcement power when the state issues a permit based on an improper determination.<sup>31</sup> Responding to ADEC's claim that even if EPA had authority to issue the orders, it erred in finding that ADEC was not in compliance because ADEC's BACT determination fulfilled all requirements of the CAA, the court said ADEC's purely economic motivation for the elimination of SCR as BACT was an unacceptable approach under the CAA.<sup>32</sup> The court described the situation as "uncomfortably reminiscent" of one of the reasons Congress granted EPA oversight authority: "to protect states from industry pressure to issue ill-advised permits."<sup>33</sup>

The Supreme Court affirmed in a 5-4 decision.<sup>34</sup> Writing for the Court, Justice Ginsburg<sup>35</sup> held that EPA has "supervisory authority" over the reasonableness of state permitting authorities' BACT determinations.<sup>36</sup> The Court agreed with EPA's construction of the relevant statutory language,<sup>37</sup> concluding that the CAA vests EPA with a "broad oversight role."<sup>38</sup> The Court rejected ADEC's argument that EPA's enforcement role is limited to ensuring that the permit contained any BACT limitation.<sup>39</sup> The Court rea-

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<sup>26</sup> *Id.* A third order was issued by EPA on March 7, 2000, prohibiting Cominco from acting on ADEC's December 1999 permit, but allowing limited summer construction. *Id.*

<sup>27</sup> *ADEC*, 124 S. Ct. at 998.

<sup>28</sup> EPA initially challenged the Ninth Circuit's subject matter jurisdiction. In an order dated March 27, 2001, the court concluded it had jurisdiction because EPA's Administrative Orders to ADEC and Cominco constituted final agency action. *See Alaska v. United States EPA*, 244 F.3d 748 (9th Cir. 2001).

<sup>29</sup> *Alaska Dep't of Env'tl. Conservation v. EPA*, 298 F.3d 814, 823 (9th Cir. 2002).

<sup>30</sup> *Id.* at 818.

<sup>31</sup> *Id.* at 820.

<sup>32</sup> *Id.* at 823.

<sup>33</sup> *Id.*

<sup>34</sup> *ADEC*, 124 S. Ct. at 1009.

<sup>35</sup> Justices Breyer, O'Connor, Souter, and Stevens joined Justice Ginsburg's opinion.

<sup>36</sup> *ADEC*, 124 S. Ct. at 1009.

<sup>37</sup> Two provisions of the CAA were particularly relevant in the Court's analysis. The first provides that "whenever, on the basis of any available information, [EPA] finds that a State is not acting in compliance with any requirement or prohibition of the chapter relating to the construction of new sources or the modification of existing sources," EPA may "issue an order prohibiting the construction or modification of any major stationary source in any area to which such requirement applies." 42 U.S.C. § 7413(a)(5)(A) (2000). The second provision requires EPA to "take such measures, including issuance of an order, or seeking injunctive relief, as necessary to prevent the construction or modification of a major emitting facility which does not conform to the [PSD] requirements." *Id.* § 7477.

<sup>38</sup> *ADEC*, 124 S. Ct. at 1000.

<sup>39</sup> *Id.*

soned that it did not make sense for Congress to endorse a broad surveillance role for EPA in two independent CAA provisions and then preclude EPA from verifying substantive compliance with the BACT provisions. “Congress,” Justice Ginsburg said, “vested EPA with explicit and sweeping authority to enforce CAA ‘requirements’ relating to the construction and modification of sources under the PSD program, including BACT.”<sup>40</sup> Justice Ginsburg stressed that EPA’s role is limited, explaining that only when a state agency’s BACT determination is not based on a reasoned analysis may EPA step in to ensure that the statutory requirements of the program are met.<sup>41</sup> The Court felt that EPA adhered to its limited role in this case.<sup>42</sup>

In the final part of the opinion, Justice Ginsburg elaborated on why EPA properly exercised its statutory authority in this instance.<sup>43</sup> Applying the default standard of the Administrative Procedure Act, the Court asked whether EPA’s action was arbitrary, capricious or an abuse of discretion.<sup>44</sup> The Court acknowledged that EPA’s orders to ADEC and Cominco were not composed with “ideal clarity”<sup>45</sup> but stated that they adequately explained why ADEC’s acceptance of Low NOx was unreasonable.<sup>46</sup> The Court was troubled by the fact that ADEC was never able to make any judgments on the impact of SCR on the operation, profitability and competitiveness of the Mine, especially because “ADEC rested its selection of Low NOx squarely and solely on SRC’s disproportionate cost.”<sup>47</sup> After a discussion of the gaps in ADEC’s factual record, the Court concluded that EPA did not act arbitrarily or capriciously in finding that ADEC’s BACT decision lacked evidentiary support.<sup>48</sup> Justice Ginsburg made it clear, however, that ADEC could revisit the BACT determination, and justify its choice of Low NOx using an appropriate record.<sup>49</sup>

Justice Kennedy dissented.<sup>50</sup> He accused the majority of resting its holding on “mistaken premises” because its reasoning conflicted with the language of the CAA, with rules of administrative law, and with “principles that preserve the integrity of States in our federal system.”<sup>51</sup> The dissent argued that EPA exceeded its powers in setting aside Alaska’s BACT determination based on nothing more than its substantive disagreement

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<sup>40</sup> *Id.* at 1002.

<sup>41</sup> *Id.* at 1003.

<sup>42</sup> *Id.*

<sup>43</sup> *Id.* at 1006.

<sup>44</sup> *ADEC*, 124 S. Ct. at 1006.

<sup>45</sup> *Id.*

<sup>46</sup> *Id.* at 1006–07.

<sup>47</sup> *Id.* at 1007.

<sup>48</sup> *Id.* at 1009.

<sup>49</sup> *Id.*

<sup>50</sup> Chief Justice Rehnquist and Justices Scalia and Thomas joined Justice Kennedy’s opinion.

<sup>51</sup> *ADEC*, 124 S. Ct. at 1010 (Kennedy, J., dissenting).

with the State's judgment.<sup>52</sup> The dissent recognized that the CAA authorizes EPA to enforce requirements of the Act, but argued that the provisions do not limit the states' latitude in balancing all the statutory factors in making their discretionary judgments.<sup>53</sup> Noting that the CAA directs a permitting authority to "determine" BACT, Justice Kennedy argued that "to determine" means to "settle conclusively and authoritatively."<sup>54</sup> If cooperative federalism is going to work, Justice Kennedy concluded, "federal agencies cannot consign States to the ministerial tasks of information gathering and making initial recommendations, while reserving to themselves authority to make final judgments under the guise of surveillance and oversight."<sup>55</sup>

#### ANALYSIS

The competing viewpoints in *ADEC* illustrate the struggle to find the proper balance of federal and state power under the Act's structure of cooperative federalism. The majority correctly states that EPA must play a "limited" but "vital" role in the cooperative scheme.<sup>56</sup> Although there has been a recent push to return primary authority over environmental regulation to the states,<sup>57</sup> the system of checks and balances between the states and federal government that *ADEC* affirms is necessary to ensure proper enforcement of the CAA.

Cooperative federalism involves the sharing of authority between state and federal agencies. There are several conceptions of cooperative federalism, but the Supreme Court has suggested that cooperative federalism best describes those instances in which a federal statute provides for state regulation or implementation of plans to achieve federally prescribed policy goals,<sup>58</sup> a conception exemplified by the CAA. Under the Act, EPA defines nationally uniform air quality standards for common pollutants and each state is expected to attain these standards by the statutory deadlines.<sup>59</sup> EPA must review state air pollution programs to determine whether the states are qualified to implement and enforce the federal standards.<sup>60</sup> After EPA approves a state program, the state is in charge of implementation and enforcement of the standards in order to achieve the federal

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<sup>52</sup> *Id.*

<sup>53</sup> *Id.* at 1011.

<sup>54</sup> *Id.* at 1010.

<sup>55</sup> *Id.* at 1018.

<sup>56</sup> *ADEC*, 124 S. Ct. at 1003.

<sup>57</sup> See Douglas R. Williams, *Cooperative Federalism and the Clean Air Act: A Defense of Minimum Standards*, 20 ST. LOUIS U. PUB. L. REV. 67, 71 (2001); Daniel C. Esty, *Revitalizing Environmental Federalism*, 95 MICH. L. REV. 570, 570 (1996). See also Ann E. Carlson, *Federalism, Preemption, and Greenhouse Gas Emissions*, 37 U.C. DAVIS L. REV. 281, 311-12 (2003) (noting the vigorous federalism debates within environmental scholarship).

<sup>58</sup> See *New York v. United States*, 505 U.S. 144, 167 (1992).

<sup>59</sup> 42 U.S.C. §§ 7409-7410 (2000). These health-based standards are formally referred to as National Ambient Air Quality Standards ("NAAQS"). *Id.*

<sup>60</sup> 42 U.S.C. § 7410 (2000).

goal.<sup>61</sup> In creating their plans, states have discretion to choose the methods of controlling air pollution best suited to their particular needs.<sup>62</sup>

The current trend in environmental law, and air pollution regulation particularly, is the devolution of more power to the states.<sup>63</sup> Proponents of increased state autonomy argue that federal standards are problematic because states vary with respect to natural resource endowments, degrees of development, human attitudes, and the size and nature of their populations.<sup>64</sup> Advocates of increased state autonomy also argue that it is inevitable that the costs of pollution and pollution control will differ from place to place.<sup>65</sup> Moreover, because states are more sensitive to local concerns, advocates of state autonomy argue states will make more efficient and effective choices in regulating pollution. Eleven—mostly western—states siding with Alaska (“Alaska Amici”) in the dispute argued that “environmental quality involves too many intricate, geographically variegated physical and institutional relations to be dictated from Washington.”<sup>66</sup> Alaska Amici stressed that “a meaningful state role” is “imperative” for successful implementation of the Act.<sup>67</sup>

Ironically, for most of the country’s history, environmental protection was considered the exclusive responsibility of state or local governments.<sup>68</sup> The states’ lack of ability adequately to control pollution was why the federal government became involved in the first place. After World War II, increased industrial production exacerbated pollution problems,<sup>69</sup> but during the 1950s and 1960s multiple efforts to get states to enforce air pollution standards proved unsuccessful.<sup>70</sup> In 1963, Congress adopted

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<sup>61</sup> See 42 U.S.C. § 7410(a)(1) (2000). Each state must submit for approval “a plan which provides for implementation, maintenance, and enforcement of [NAAQS].” *Id.* To gain EPA approval, a state implementation plan must “include enforceable emission limitations and other control measures, means, or techniques . . . as may be necessary or appropriate to meet the applicable requirements.” *Id.* § 7410(a)(2)(A).

<sup>62</sup> See 42 U.S.C. § 7407(a) (2000) (granting each state “primary responsibility for assuring air quality within the entire geographic region comprising such State by submitting an implementation plan for such State which will specify the manner in which [NAAQS] will be achieved and maintained within each air quality control region in such State.”). See also *Union Elec. Co. v. EPA*, 427 U.S. 246, 250 (1976) (noting that states have “wide discretion” in forming their implementation plans).

<sup>63</sup> See Esty, *supra* note 57, at 570; Williams, *supra* note 57, at 71.

<sup>64</sup> James E. Krier, *On the Topology of Uniform Environmental Standards in a Federal System—and Why It Matters*, 54 MD. L. REV. 1226, 1228 (1995).

<sup>65</sup> *Id.*

<sup>66</sup> Brief of Amici Curiae States of North Dakota, Wyoming, Alabama, Delaware, Iowa, Nebraska, Nevada, Oklahoma, South Dakota, Utah, and Virginia in Support of Petitioner at 11, *ADEC* (No. 02-658), available at 2003 WL 2010653 [hereinafter Brief of Alaska Amici States] (quoting Richard B. Stewart, *Pyramids of Sacrifice: Problems of Federalism in Mandating State Implementation of National Environmental Policy*, 86 YALE L. J. 1196, 1266 (1977)).

<sup>67</sup> Brief of Alaska Amici States, *supra* note 66, at 13.

<sup>68</sup> Robert V. Percival, *Environmental Federalism: Historical Roots and Contemporary Models*, 54 MD. L. REV. 1141, 1147 (1995).

<sup>69</sup> *Id.* at 1155.

<sup>70</sup> Esty, *supra* note 57, at 601.

the first Clean Air Act, authorizing the Secretary of the Department of Health, Education, and Welfare to establish “advisory” air quality criteria and to convene conferences when interstate pollution endangered public health and welfare.<sup>71</sup> This federal effort to prod state-level environmental regulation produced unsatisfactory results and air quality continued to deteriorate.<sup>72</sup> There were two primary theories as to why state environmental regulation was inadequate: (1) States engaged in a “race to the bottom,” relaxing their environmental standards to make their state more attractive to industry;<sup>73</sup> and (2) state political processes were more likely to be captured or possibly corrupted by industrial interests.<sup>74</sup> The result was a strong centralization of power in the federal government under the 1970 CAA.<sup>75</sup> EPA was given the power to define national air quality standards, and states had to figure out the most effective and efficient ways to meet them.

The story of the Red Dog Mine illustrates why EPA’s supervisory role is so important in effectuating the goals of the CAA. While Alaska Amici are correct that states must play an integral role in air pollution control, there are several reasons why EPA must exercise oversight authority within the cooperative scheme. Federal oversight is necessary to accomplish the technology-forcing goals of the CAA because it acts as a catalyst, spurring states to install more advanced pollution controls.<sup>76</sup> Federal participation is also necessary to prevent states from being co-opted by industry, because state legislatures can be unduly influenced by powerful economic interests.<sup>77</sup> In addition, federal involvement is needed to address the problem of interstate air pollution.<sup>78</sup>

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<sup>71</sup> *Id.*

<sup>72</sup> *Id.*

<sup>73</sup> John P. Dwyer, *The Role of State Law in an Era of Federal Preemption: Lessons From Environmental Regulation*, 60 *LAW & CONTEMP. PROBS.* 203, 224 (1997). In 1992, Richard Revesz published an article arguing that the race to the bottom justification for federal regulation was theoretically unsupported. See Richard Revesz, *Rehabilitating Interstate Competition: Rethinking the “Race to the Bottom” Rationale for Environmental Regulation*, 67 *N.Y.U. L. REV.* 1210 (1992). This sparked vigorous debate within environmental scholarship regarding the merits of Revesz’s theory. For critiques and defenses of Revesz’s article, see generally Kirsten H. Engel & Scott R. Saleska, “*Facts are Stubborn Things*”: *An Empirical Reality Check in the Theoretical Debate Over the Race-to-the-Bottom in State Environmental Standard-Setting*, 8 *CORNELL J.L. & PUB. POL’Y* 55 (1998); Henry N. Butler & Jonathan R. Macey, *Externalities and the Matching Principle: The Case for Reallocating Environmental Regulatory Authority*, 14 *YALE L. & POL’Y REV.* 23 (1996); Kirsten H. Engel, *State Environmental Standard-Setting: Is There a “Race” and Is It “to the Bottom?”* 48 *HASTINGS L.J.* 271 (1997); Esty, *supra* note 57. Regardless of whether states actually engage in a “race to the bottom,” the fact that states failed to control air pollution until the federal government assumed a principal role in air pollution regulation is indicative of a tendency to set lenient standards in the absence of federal policy.

<sup>74</sup> Dwyer, *supra* note 73, at 224.

<sup>75</sup> See Esty, *supra* note 57, at 601–03.

<sup>76</sup> See Williams, *supra* note 57, at 118–19.

<sup>77</sup> Dwyer, *supra* note 73, at 228.

<sup>78</sup> *Id.* at 223.

The CAA clearly had technology-forcing as a principal goal. The architects of the Act believed that, when pressed, polluters would find effective ways to control pollutant emissions at reasonable costs.<sup>79</sup> Recent Court decisions have acknowledged the success of this strategy. Justice Breyer, in *Whitman v. American Trucking*, stated that “[t]echnology-forcing hopes can prove realistic. Those persons, for example, who opposed the 1970 Act’s insistence on a 90% reduction in auto emission pollutants, saw the development of catalytic converter technology that helped achieve substantial reductions without the economic catastrophe that some had feared . . . .”<sup>80</sup>

The cooperative federalism structure of the CAA can be viewed as an exercise in technology-forcing. If given unreviewable discretion, states may avoid making permitting decisions that require and promote technological innovation.<sup>81</sup> For example, if ADEC had sole discretion to decide on BACT, the Mine would have never installed SCR technology. After EPA issued its stop-construction order and EPA and ADEC entered into litigation, Cominco decided it would install the SCR technology instead of waiting for the Supreme Court’s decision. The Mine was able to add the more stringent technology for only a fraction of the price Cominco had estimated previously.<sup>82</sup> Because EPA was able to exercise oversight authority and issue the stop construction order, the Mine was motivated to install the more effective equipment.

EPA oversight is also needed to protect states from especially powerful economic and political influences. Environmental decision-making is particularly susceptible to distortion by special interest groups, especially industry groups,<sup>83</sup> and state and local officials are generally more vulnerable to local economic and political pressures favoring development.<sup>84</sup> ADEC’s selection of Low NOx technology for the Mine demonstrates how

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<sup>79</sup> Williams, *supra* note 57, at 117.

<sup>80</sup> 531 U.S. 457, 492 (2001) (Breyer, J., concurring).

<sup>81</sup> See Brief of Amici Curiae Vermont, California, Connecticut, Maine, Massachusetts, Michigan, New Hampshire, New Jersey, New York, Oregon, Rhode Island, Wisconsin and the Pennsylvania Department of Environmental Protection in Support of Respondents at 14, ADEC (No. 02-658), available at 2003 WL 21692826 [hereinafter Brief of EPA Amici States].

<sup>82</sup> The company spent \$2 million to add the control system to the generator, which will cost about \$500,000 extra a year to operate. Liz Ruskin, *Justices rule against state, mine; Decision means feds can demand tighter clean-air standards than states can*, ANCHORAGE DAILY NEWS, Jan. 22, 2004, at A1. Cominco had previously estimated that the technology would cost up to \$10 million with \$1.5 million in yearly operation costs. Paula Dobbyn, *Knowles Leads Red Dog Fight: State will ask Supreme Court to overturn ruling on pollution controls*, ANCHORAGE DAILY NEWS, Aug. 14, 2002, at E1. ADEC had estimated the costs at approximately \$2.9 million for the installation and \$635,000 for yearly operation. *Id.*

<sup>83</sup> Esty, *supra* note 57, at 650 n.299; Dwyer, *supra* note 73, at 228.

<sup>84</sup> See Dwyer, *supra* note 73, at 227–28 (noting that the benefits of environmental protection are diffuse and long-term whereas the economic benefits of development are immediate, leading to an asymmetry that frequently distorts state and local decision-making in favor of lenient standards).

state agencies can succumb to industry pressure. The Court correctly criticized ADEC for selecting Low NO<sub>x</sub> as BACT because of “a readiness to support Cominco’s Red Dog Mine Production Rate Increase Project, and its contributions to the region.”<sup>85</sup> ADEC supported the Mine’s choice of the less stringent and less costly technology because of Cominco’s economic clout, even though ADEC was aware that it did not have an adequate justification for its choice. In ADEC’s final Technical Analysis Report, the agency endorsed Low NO<sub>x</sub> because of Cominco’s “contributions to the local economy” but admitted that “perhaps [a] better way to determine if the cost of BACT is excessive, is for the applicant to present detailed financial information showing its effect on the operation” but because “the applicant did not present this information . . . no judgment can be made as to the impact . . . on the operation, profitability, and competitiveness of the Red Dog Mine.”<sup>86</sup>

ADEC’s choice of Low NO<sub>x</sub> as BACT made sense under the emission-netting rationale it originally proposed. After EPA forced ADEC to abandon that rationale, ADEC’s rejection of SCR because of economic concerns was contrary to the purposes of the CAA and the PSD program. ADEC’s unwavering support of Cominco’s choice of Low NO<sub>x</sub> as BACT illustrates how states can succumb to industry pressure and shows why it was important for EPA to exercise its oversight role here.

A third reason for EPA oversight is to address the problem of interstate externalities. Absent federal regulation, upwind states will lack an incentive to strictly enforce pollution standards and downwind states will have little leverage against pollution from upwind states.<sup>87</sup> In *ADEC*, thirteen states—drawn from multiple regions of the country—filed a brief siding with the federal government (“EPA Amici”). EPA Amici argued that the BACT requirement acts as an “equalizer” that enables “all areas of the country to join the fight for clean air without fighting each other.”<sup>88</sup> They concluded that “every state can feel more confident about maintaining stringent standards . . . [i]f EPA has authority to ensure a reasonable level of consistency among BACT determinations nationwide.”<sup>89</sup> Federal regulation can help balance the conflicting needs of states in different regions of the country. The argument that national standards, and federal oversight of these standards, are necessary to prevent states from fighting one another may be particularly relevant because of the recent tensions among states arising out of air pollution disputes.<sup>90</sup>

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<sup>85</sup> *ADEC*, 124 S. Ct. at 1008.

<sup>86</sup> ADEC, FINAL TECHNICAL ANALYSIS REPORT FOR AIR QUALITY CONTROL CONSTRUCTION PERMIT NO. 9932-AC005, at 48 (Dec. 10, 1999) (on file with the Harvard Environmental Law Review).

<sup>87</sup> Dwyer, *supra* note 73, at 223.

<sup>88</sup> Brief of EPA Amici States, *supra* note 81, at 11.

<sup>89</sup> *Id.* at 12.

<sup>90</sup> For example, Bush administration officials recently announced that EPA was pulling back on enforcement of strict anti-pollution controls on power plants in the Midwest, and it

The Court was right that the CAA demands that EPA have an oversight role, and also correct to note that this role should be “limited.”<sup>91</sup> Although some states occasionally make sub-optimal regulatory decisions, many states want strict pollution standards and conscientiously implement and enforce them.<sup>92</sup> State agencies have grown in size and sophistication, and some state agencies have surpassed EPA in resources and expertise.<sup>93</sup> Some states have proven to be effective regulators, and do not need EPA watching them like a hawk. In addition, EPA has neither the resources nor the political capital to intervene widely or frequently.<sup>94</sup> Contrary to the dissent’s criticism that the Court’s decision “relegat[ed] states to the role of mere provinces or political corporations, instead of coequal sovereigns,”<sup>95</sup> the cooperative federalism scheme affirmed by the Court reserves a great deal of power for the states. It allows the states to maintain their role as the primary decision-makers under the CAA. The fact that thirteen states filed a brief siding with EPA, claiming that federal oversight is “a necessary part of the cooperative federalism embodied in the CAA,”<sup>96</sup> reveals the pro-state nature of the Court’s decision. The states’ divergent economic and political agendas necessarily entail varying positions on the appropriate role for EPA. In the push towards devolving more control to the states, the fact that the states do not share common expectations regarding EPA’s involvement under the cooperative federalism scheme is often overlooked.

By stressing that EPA’s oversight role must be limited, the *ADEC* Court appropriately recognized that states must remain the primary decision-makers under the cooperative federalism regime. The Court emphasized that it was not mandating which technology ADEC must select as BACT, and made it clear that ADEC could reconsider the matter and attempt to justify its choice of Low NO<sub>x</sub> using an appropriate record.<sup>97</sup> The Court stressed that EPA must have the ability to enforce the requirements a state must meet in implementing its BACT decisions, but that EPA lacks the power to dictate what technology a state must ultimately choose.<sup>98</sup> The Court said, “[o]nly when a state agency’s BACT determination is not based on a reasoned analysis may EPA step in to ensure that the statutory requirements are honored.”<sup>99</sup>

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is being sued by regulators in the Eastern states who favor enforcement. David G. Savage, *Justices Give EPA Clout to Enforce Clean Air Rules*, L.A. TIMES, Jan. 22, 2004, at A8.

<sup>91</sup> *ADEC*, 124 S. Ct. at 1003.

<sup>92</sup> For a detailed discussion of progressive pollution control efforts at the state level, see generally Richard L. Revesz, *Federalism and Environmental Regulation: A Public Choice Analysis*, 115 HARV. L. REV. 553 (2001).

<sup>93</sup> Dwyer, *supra* note 73, at 226.

<sup>94</sup> *Id.* at 217.

<sup>95</sup> *ADEC*, 124 S. Ct. at 1018 (Kennedy, J., dissenting).

<sup>96</sup> Brief of EPA Amici States, *supra* note 81, at 2.

<sup>97</sup> *ADEC*, 124 S. Ct. at 1009.

<sup>98</sup> *See id.* at 1002.

<sup>99</sup> *Id.* at 1003.

EPA's ability to exercise "supervisory authority"<sup>100</sup> over the states is necessary to ensure that state decision-making does not violate the statutory requirements or the purposes of the CAA. The Court's holding affirms an important system of checks and balances between the states and the national government in regulating air pollution. Only subsequent cases will define the breadth of the Court's holding, but *ADEC* may signal a desirable swing away from wholesale delegation of environmental policy to the states and towards a sensible equilibrium of state and federal power.

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<sup>100</sup> *Id.* at 1009.