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Polarization and Dialogue in Clean Air Law

by Jonathan S. Martel

Editors' Summary: What leads to effective resolution of environmental policy disputes? When is conversation about a topic constructive, and when is it pointless? Can people with diametrically opposed interests dialogue constructively in today's highly partisan environmental policy arena? At the November 2007 ALI-ABA course, "Clean Air: Law, Policy, and Practice," the key players in several recent and highly controversial air policy issues discussed these questions and identified the elements necessary to help encourage dialogue on pressing environmental policies. Moderator Jonathan Martel offers opening and concluding comments to this transcript to help contextualize the issues.

I. Introduction

In the transcribed panel discussion below, we bring together, with the assistance of a professional mediator, long-standing advocates from government, the environmental public interest bar, the organization of state and local air pollution officials, and a major electric power company, to discuss what makes for effective dialogue and clean air policymaking. At the outset, our mediator explored elements of effective communication and negotiation—trust, transparency, disclosure, and accountability. Then, in a wide-ranging discussion dissecting what went right or wrong in a handful of recent examples of consensus and acrimony in clean air policy, the panelists effectively demonstrate where they had or lacked trust, thought they were heard or thought they were shut out. Finally, the panelists examine whether any different approach would have led to different results. Does the subject of disagreement—about legal requirements, policy preferences, the time to implement technology or facts regarding health impacts—matter? Are some views so fervently held that they cannot be compromised?

Ultimately, the question is whether attention to process and the mode of dialogue makes a difference in the outcome for the stakeholders and the public. Does strident debate serve the ultimate interests of those who practice it, either by gaining and maintaining the public's attention or fundraising or other objectives? Can personal attacks in public be repaired in private discussion and negotiation? Can building personal bridges among advocates for sharply different points of view help to humanize and resolve differences? What is the impact of making regulatory decisions over strong objections or despite legal risks? Indeed, might a policy decision prove successful over the long run or in Congress even if it is almost a sure loser in court? Is there always room and

a need for some compromise settlement strategy? And how do these dynamics among those who interact repeatedly on clean air policy issues serve the broader environmental, economic, and welfare interests of the public at large?

If we take a step back to think about how these questions have played out over the last 40 years, the history of environmental law is one of lurching evolution based on a dynamic of shifting power with the ebb and flow of public attention, control of Congress and the presidency, landmark court rulings, and the inertia of federal and state regulatory and enforcement initiatives. Nowhere is this more apparent than in the history of clean air law and policy. From its genesis in the political mobilization that led to the 1970 Clean Air Act (CAA), there has been a pattern of broad and aspirational legislation; agency rulemaking shaping policy based on a blend of technical information and expertise, shifting political pressures and priorities, and statutory gap-filling; litigation challenging agency action, inaction and interpretations; enforcement challenging industry conduct; and a new legislative codification, modification, and extension.

Throughout battles such as these, the major constituencies and, indeed, individuals in the federal and state bureaucracies, the environmental community and industry have been remarkably constant across a wide range of programs to control emissions contributing to ozone smog, particulate pollution, hazardous air pollutants [(HAPs)], acid rain and now greenhouse gases, from motor vehicles and fuels, electric power producers, and manufacturing of many types. In some cases, the stakeholders have achieved a measure of consensus—programs to reformulate gasoline in the early 1990s, to cap acid rain-causing emissions from power plants through an innovative trading program, and more recently to reduce sharply diesel exhaust through new technology mandates and coordinated reductions in fuel sulfur. Other programs have been plagued by acrimony and litigation—from [prevention of significant deterioration (PSD) and new source review (NSR)] to setting national ambient air quality standards (NAAQS) for ozone and particulates, to recent decisions about what regulation of mercury as a HAP from power plants and the latest fight over whether [the U.S. Environmental Protection Agency (EPA)] should allow California to regulate greenhouse gases from automobiles. Similar battles are also emerging regarding whether and how EPA should proceed with greenhouse gas regulation for motor vehicles and engines as part of new source performance standards for oil refineries and other source categories, and in permitting power plants under the PSD program. The discussion that follows examines the differences among these matters, and what contributed to relative consensus versus dispute.

II. Transcript

Jonathan Martel: I've been looking forward to this panel for a long time. For as long as I've worked in this field I've been struck by the stridency and intensity of some CAA controversies, from the battles in the early 1990s over the initial promulgation of the Title V program, ethanol and reformulated gasoline, and the initial set up of the HAP program to the PSD program, the mercury rules and climate change debates that continue today.

Perhaps such stridency and intensity are endemic to Washington in general. I've long sought to bring together a group of thought leaders like we have here today as a contact group to discuss not so much the substance but the mode of our dialogue on clean air policy.

I'm going to quickly introduce the panel and then turn it over to our professional environmental mediator from the Keystone Center.

Jeff Holmstead is currently a partner in the law firm of Bracewell and Giuliani. Prior to that, Jeff served longer than anyone else as the Assistant Administrator for the Office of Air and Radiation at EPA, where he was responsible for shaping the direction of clean air policy from the outset of the George W. Bush presidency.

Bill Becker serves as the executive director of the National Association of Clean Air Agencies, which was previously known as STAPPA/ALAPCO. And in that position Bill has long been a leader in marshalling state air agencies' views on air policy.

Karl Moor is Vice President and Associate General Counsel at The Southern Company in Atlanta, Georgia, one of the largest electric utilities in the United States. In that role, Karl has been a leading advocate with respect to industry's concerns in clean air policymaking.

John Walke is the director of the Clean Air Program at the Natural Resources Defense Council [(NRDC)] in Washington. He previously served in the Air Division of the Office of General Counsel at EPA and is one of the most outspoken advocates on clean air policy for the public interest community.

And finally, Jeremy Kranowitz is a senior associate at the Keystone Center in Washington. The Keystone Center is dedicated to mediating public policy and environmental debates and has played an instrumental role in seeking to forge consensus in these areas.

Jeremy Kranowitz: I have a few observations that I'd like to make first and then we'll guide this esteemed panel through some discussion.

One of my key observations that I suggest we keep in mind in discussing debates that exhibit strong rhetoric is that—to use the phrase from Cool Hand Luke: "What we've got here is a failure to communicate." A lovely cartoon captures this problem. It has these two guys wearing the sandwich boards and the caption "the irresistible force meets the immovable object." One board says "the facts as they are," and the other says, "the truth as I see it." Often we find in conflicts that there are a number of issues that hinge on miscommunication or lack of communication. In understanding the psychological basis of disputes it is important to recognize where there is much more than perhaps just the substance of the issue. There also can be value systems and emotion that often play just as important a role.

Often in such debates you'll find that conversations aren't really conversations at all and they're not dialogues. They are lectures. You might have two people or multiple parties that are interacting and one is lecturing to the other without really listening. Other times the participants in the conversation might really try to focus on the facts when the facts may be uncertain or not all the facts may be known. So, one of the things that I'd like to flag and have you keep in the back of your mind is this aspect of communication or lack thereof.

My colleagues Larry Suskind and Pat Field at the Consensus Building Institute wrote a book called *Dealing With an Angry Public* in which they addressed the elements of successful communication. They described a triangle of satisfaction, in which there are two very important legs in addition to substance.

The second leg is procedure or process. How are the groups going to get together? Who is going to be the ultimate decider? What is ultimately going to happen? What is important is making that process very clear and transparent. Are there agreements on the process or mutual understanding on how the process will unfold?

And the third leg is the psychological interest, the emotion, the value systems, the fact that well-intentioned people can come to the table or come to a dialogue with different perspectives on how things should go and each of them in their own mind might be rational and completely valid. People that come to the table with an interest and really feel they have a right to interact and to be mutually acknowledged and heard.

Another element in a highly contentious policy debate that often seems to be lacking is the element of trust. When we talk about building trust, when we have multi-stake-holder dialogues, we talk about four different pillars. One pillar is commitment. By this I mean that the parties are committed actually to working on this together. They are creating verifiable behaviors that they can check each other on, and that they are sharing responsibility for really working through these issues.

The second pillar is accountability—doing what you say you will. That is another way of building trust.

A third pillar is disclosure. Again, there seems to be a great lack of transparency with many of these debates and it is important to be able to disclose the process and the consequences of actions. Drawing on our last panel discussion, if California's greenhouse gas rule is going to force Chrysler to sell only trucks, well, that is a consequence that should be transparent and should be out there.

And the last pillar is acknowledgment. This means ensuring that the parties know they are truly being heard, that they

are being acknowledged, that it is not a one-way lecture. Acknowledgement also means recognizing that there are power imbalances; that there are politics at work and that plays a role. Acknowledging those realities explicitly is really a key piece of building trust.

With that as background, we turn then to a series of examples of major recent clean air policy matters, comparing those in which the stakeholders reached consensus successfully and those that have been more acrimonious. In the left column, we list three examples in which stakeholders have been able to agree: (1) the Clean Air Interstate Rule [(CAIR)]; (2) the diesel engines and fuel rule; and (3) the early action compacts for the eight-hour ozone standards.

In the right column, we list examples in which there has been more polarized debate: new source review [(NSR)], the mercury rules for electric utilities and climate change regulation. So, on the left we have issues that have been resolved with fairly low levels of contention, higher levels of agreement and on the right, issues that have been much more contentious and litigious.

What I would like to do now is to turn it over to the panel and ask an opening question to each of the four folks sitting to my right on what, from your perspective, distinguishes these cases.

Bill Becker: Well first, I have a nit to pick for being invited for this panel because while this is a polarization panel, it is clear that I don't represent a polarized view. Jeremy is correct that communication is really important and if you indulge me, since it is the last panel of the day, I want to tell you about my brother's recent experience, which reinforces the need for good communication.

My brother bought a brand-new Volvo convertible when he moved to Colorado and one day, he decided to take it in the mountains and just go around the country roads. He was going around a sharp turn when he encountered this woman who was driving out of control and almost drove him off the road. Adding insult to industry, she had the audacity to yell at him and shouted out "pig." Of course he was just so offended he would do what any of us in this room would do. He yelled something back and screamed "cow." Well wouldn't you know, about a hundred yards around the curve, he ran right into a pig. And for the next 10 miles, she was looking for a cow. This is why communication is so important.

I want to tell you three more serious, but short stories about communication and trust.

Jeff Holmstead: I hope they're all better than that one.

[Laughter]

Bill Becker: You can be the judge because they involve you, Jeff. The first is [NSR]. The state and local air pollution control agencies supported reform of [NSR], and we made that known to Administrator [Christine Todd] Whitman at the time we provided our recommendations. We asked to sit down with EPA throughout the process, explaining our views and why we supported the reforms we were seeking. Unfortunately, we were totally closed out.

Subsequently, EPA came out with its reform package, and by and large, the state and local agencies really disliked it. Many states sued. This issue has been contentious, it has been litigious, and it forced our association to develop a model rule. Many of the states and local agencies used the model rule that provided an alternative to EPA's flawed rule. And that is why we have inconsistency around the country and some distrust with EPA's NSR program.

The second example is mercury. To EPA's credit, the Agency started out with a Federal Advisory Committee Act [(FACA)] process. They brought in state representatives, including our association. In fact, they anointed the head of our association's mercury program as a co-chair of this federal advisory committee process. It also included environmental groups and industry representatives. The FACA group met for a year. While the group didn't reach consensus—that wasn't the objective—it was able to narrow the differences to a place where we could have some meaningful analysis conducted. And then EPA abruptly halted the process.

Six months later, a week or two before the court-ordered deadline for the Agency to come out with a rule, the Agency did something that was totally different from the year-anda-half discussion that we had. They came out, as many of you know, with the mercury rule based on §111 of the Act, which has never been done before, rather than under §112, which had been the principal way to control air toxics.

The third example is on non-road engines. This is a success story. EPA, same office, worked very, very well with stakeholders, kind of shuttle diplomacy with state and local agencies, with industry, and with the environmental groups. Each group understood each other's needs, and worked hard to address problems. The stakeholders spent a lot of time with EPA, and each felt like they were true partners with the Agency. At the very end of the process, there was not only a very excellent rule, but each of us participated in a press event with the Administrator of EPA, offering effusive praise. And there was not one lawsuit on this rule.

I can only conclude that the process of EPA working and communicating with stakeholders is so very important, not just states, but other stakeholders as well, working together in a transparent process and coming out with compromises so that each entity's objectives are met. We have a tremendous success story and we have two failures. To me, that difference in communication is probably the most important issue that accounted for whether views were polarized on these issues.

John Walke: I'm going to take up the topic from Jeremy's presentation, the frustration of dialogue in this environmental policy phase and probably there are any number of reasons or elements contributing to that, but I'm going to focus on two right now. I'll lead each off with a quote and then an anecdote. This first quote is by Paul O'Neill and is taken from an October 2004 article that appeared in the *New York Times* magazine called "Without a Doubt." "If you operate in a certain way by saying this is how I want to justify what I've already decided to do and I don't care how you pull it off, I guarantee that you will get faulty one-sided information."

In the spring of 2001, President George W. Bush sent a letter to Sen. [Chuck] Hagel [R-Neb.] renouncing the president's campaign pledge to regulate carbon dioxide [CO₂] from power plants and overturning a formal legal opinion issued by EPA's General Counsel Jonathan Cannon, deeming

 CO_2 to be a pollutant under the CAA. I got a copy of that letter about 8 or 8:30 in the morning.

About 8:45 or 9:00 a.m. I received a phone call at my desk. It was from a very high-level official in the General Counsel's office, sheepishly asking me if I had a copy of the letter. And I said: "Yes, I do, don't you?" "Well, no, could you fax it to me?" That's how the General Counsel's office got the Hagel letter—from me. Clearly, they had not been involved in or informed of the overturning by the president of the Jon Cannon legal opinion. Last time I checked, the president was not the chief lawyer of EPA, but this represented classic result-oriented decisionmaking.

In her book, *It's My Party, Too*, Christie Whitman confirms that she learned about this decision after the letter was already over on Capitol Hill when she walked into the White House and Vice President [Richard] Cheney brushed passed her with a piece of paper in his hand, and he asked an aide [if] it had already been signed and the aide said yes; and that was the letter. So, I submit that that is not a good way to go about environmental policy even if it is the president's prerogative as the top politician of this country.

The second quote is also, incidentally, from the same article. The reporter is talking to a White House aide who is not named but who just practically oozes Karl Rove throughout the lines of the article. The aide said that "guys like me," meaning the reporter, were "what we call the reality-based community"—which he defined as people who "believe these solutions emerged from your judicious study of the discernible reality."

The reporter nodded and murmured something about enlightened principles and empiricism. The aide cuts him off. "That is not the way the world really works anymore," the aide continued. "We're an empire now and when we act, we create our own reality and while you're studying that reality, judiciously as you will, we'll act again, creating other new realities, which you can study too and that's how things will sort out. We're a history of actors, and you, all of you will be left to just study what we do."

Now, I use this as an example of what I will call linguistic relativism, where words mean what we want them to mean. This shows up in a series of high profile rulings in the [U.S. Court of Appeals for the] D.C. Circuit, 3-0 opinions, involving EPA rules. I'll name a couple. One of my favorites is where EPA argued that in the statutory phrase "total maximum daily load," the word "daily" did not mean daily, but "yearly" in determining how much pollution concentrations can be added to a water body. Thankfully, we have a 3-0 decision to overturn that.

Another occasion in which I won in the D.C. Circuit involved the expression "any physical change," where EPA argued that "any" did not mean "any." In fact, EPA loved the word "any."

There have been something like four decisions in the D.C. Circuit in which EPA consistently argued that "any" does not mean "any," and thankfully they lost in each case. There were a series of [maximum available control technology (MACT)] decisions, air toxic decisions, under §112 of the Act, in which the judges by the time the third or fourth or fifth one came around, were actually forced to remind EPA that in this country, in our system of the courts, there is a process whereby a litigant that is dissatisfied with an outcome should appeal a decision, petition for re-hearing, or file for certiorari to appeal to the Supreme Court.

EPA was so consistently defying the previous decisions that the judges had just handed down, that the judges actually went out of their way to say: "You know, EPA, the proper thing to do in a case like this is to petition for re-hearing en banc," and EPA had not done so in any of the other two or three cases. So, said the judges, we're kind of befuddled as to why you're not getting it by now.

Judge [David S.] Tatel actually turned on the bench to the—I think it was Judge [Stephen F.] Williams in the oral argument in one of the cases, and he asked: "Haven't we decided this before?" Well, they had, three times. So, I will leave the examples at that.

There clearly are instances when the Administration was not working in a result-oriented capacity, was not resorting to linguistic relativism. But when they made up their mind that led to some really crazy bad legal outcomes, from our perspective, it creates the frustration of dialogue. Unsurprisingly, what we do in such a case is that we turn to the reality-based community. We turn to the courts, we turn to public opinion, we turn to the media and guess what, at that point, we got what the panel is calling polarization. I think that is healthy, because I think it is a rebuke of some pretty insidious tendencies—in fact, lawlessness—which the courts have been correcting. I am a fan of it.

Jeff Holmstead: I am not surprised to hear that you're a fan of those cases, John. One of the things that I realized at EPA that makes the job so hard is that when activists like John raise concerns about an environmental issue, there are 49% of the people in Congress who are inclined to completely dismiss it as being just silly and there are 49% of the people who are inclined to believe that it is a crisis of incredible importance. My percentages may be slightly off, but there are very few people who are willing to say: "Some environmental issues really matter and other environmental issues aren't as significant." I look at the list of consensus and contentious issues and I think I was involved in all of them. I tried to see if there were common lessons to be learned from these issues and I think I do have a few.

Just as a matter of good science and environmental policy analysis, I think, all of us in my former office at EPA and in the Administration believed that diesel emissions are a big deal, a significant health issue. We knew about the technology that had been recently developed—in large part because of actions taken under the [William J.] Clinton Administration—to control diesel emissions and remove sulfur from diesel fuel and we went about this process that was essentially an engineering discussion about how quickly the fuel industry and in particular, the engine manufacturers, could go about adopting those technologies.

And the result of this process was really an enormously successful outcome that Bill and John and I think all of us up here played a part in. Karl, you guys didn't have as much at stake in that one, but our diesel rule was an enormous success. From a public health perspective, it was actually the third most important rule in EPA's history, measured by public health benefits. It was relatively easy to do, primarily because everyone believed it was a significant public health issue that could be solved through proper regulation.

Let me contrast that with mercury, where the environmental community attacked us for what we did, and John accosted me several times to complain about our mercury rule. But based on the analysis that we had done, all the research we had looked at, mercury emissions from power plants was nearly a trivial issue in terms of public health. And I don't want to say that about mercury overall. John is going to whack me here if I talk too much. But we believed that the contribution of U.S. power plants to mercury exposure is trivial.

We did some analysis showing that if you are to completely eliminate mercury emissions from U.S. coal-fired powered plants, there is essentially no appreciable improvement in public health. The effects that we saw that were measurable were very, very subtle effects that were even questionable—in children whose mothers had eaten a lot of fish, almost all of it seafood. Anyway, there was just a fundamental disconnect about whether mercury emissions from U.S. power plants were a big deal or not and that led, I think, to very different views as to how much we ought to be spending to control those emissions and how we should go about doing it.

I will tell you, and some folks up here have heard the story before, that figuring out how to address mercury under §111 really led to what was, in my view, the most important thing that we did when I was at the Air Office—and that was CAIR. Based strictly on public health benefits, CAIR is the second most important thing that EPA has ever done—second only to the phase-out of lead from gasoline back in the late 1970s. As I said before, our diesel rule was number three.

We were able to get CAIR out only because we were able to integrate and to stage the timing of [nitrogen oxide (NO_x) , sulfur dioxide (SO_2)], and mercury controls so that we would not force the industry to spend a lot of money on mercury-only controls, but rather allow them to plan for all three pollutants together. And that kind of planning was the key to getting CAIR done.

But the fundamental problem with the mercury rule was that there was just disagreement about what mattered and what didn't. Neither Bill nor John talked about CAIR, and I think they would put CAIR in a middle category. They don't want to call it a huge success because it didn't go as far as they would have liked, but it was clearly an important step in the right direction.

I have two other lessons from all of these experiences if I can just point them out briefly. First, it is easier when you're dealing with new sources rather than existing sources. I think that is clearly the case. You can go across the board and see that it is just a fundamentally different world when you're talking about putting a standard out there for new sources, that people can plan for and know ahead of time they have to meet. That's always going to be the case.

Second, at least in my experience, even with these polarized issues, the private debate and discussions are always more productive than the public debates are. These issues are extraordinarily complicated. But when you're trying to address them in the public debate, each side, especially if you're dealing with the popular press rather than the trade press, is forced to come up with short soundbites that really don't do justice to the underlying issues.

My friend John Walke has come up with some real zingers, very clever but not really very helpful to the underlying debate. I could probably be accused of the same thing, although my soundbites probably aren't as creative as John's. These issues are just really hard to discuss in the kind of coverage you get in the *Washington Post* or the *New York*

Times. I think the trade press does a slightly better job. But if you want to get your story out there in a way that the press will cover, you start telling your side of the story in a way that, I think, drives polarization.

Again, I am not the first to make this observation, but I do think that direct mail fundraising plays a part in the polarization. John's group and other like-minded groups are going to find it very hard to raise money if they say: "Well, this is a really complicated issue. We think EPA should be going slightly further and we're trying to work with them to push them a little bit along." That is not nearly as appealing for fundraising as a cry that "they're gutting the CAA." I think John accused me of either gutting or eviscerating the CAA at least a dozen times. After about the third time, I said: "I thought you couldn't eviscerate something that's already been eviscerated before. How can I keep doing it over and over again?"

I think there are lessons to be learned, but they are not simple lessons. Again, I go through each of these examples and I've thought about them a lot over the years. Unfortunately, I think I agree with John that there will continue to be polarization, but that there will hopefully be more constructive conversations in private than there can be in public. I think we're likely to live in this kind of world for a while longer and I think climate change will just be a re-run of that all over again.

Karl Moor: I want to go on record that I would trust every-body more if they sued me less. Accusations of results-oriented decisionmaking are often what is said when the other guy wins and the result isn't what you wanted to see. I've argued with John on that one. I think if you looked at the right hand column of contentious issues and how they relate to where we find ourselves, the only sensible thing that you can do in theses circumstance is to blame Congress. If you look at this set of issues, you have a combination of two things—overriding ambition to effect change coupled with a lack of willingness to accept accountability for the political choices made.

I was involved in the mercury debate in 1990, had some small part in the "necessary and appropriate" language that appears in §112(n). That language was used to end a debate that seemingly went on forever. And frankly, Congress dodged the central issues. Congress didn't want to face up to the question of what the science showed, where things were and so they pushed it off to the Agency and said, "Here, you decide."

If you do that often enough and leave it to the interest groups within the Beltway to define the public interest without the politicians being present, bad things happen and rhetoric gets used. Look at the NSR debate. The NSR debate involves a series of words that have had a shifting set of meanings depending on who's in office. I do agree that reform could have helped it early, but the ambiguity was something Congress had two chances to correct, both in 1990 and then in 1992.

Again, they failed to act because it was difficult. It was complicated, it overwhelms the staff, and the members don't want to think about the long-range consequences. I think if they had realized how many thousands of ships that would be set afloat in the NSR and the mercury world, maybe they would have been a little more willing to invest in an effort to grasp the fine details. I would tell you NSR needed addressing from the legislative standpoint. It is a

murky body of laws to say the least and a number of us in this room have been around it for many years.

The final issue is climate change. I do worry about one aspect of the 1990 Amendments that taught a bad lesson. The lesson is, if we put the deadlines and the consequences far enough over the political horizon, then an elected official is not personally accountable for the decisions that he or she makes. Imposing upon a future generation an 80% reduction target or a 90% target or a 100% target, is something that a member can do with impunity and stand at the signing ceremony and say, "we've done great things." But the butcher bill comes later.

Ultimately, I think there are three political attitudes that contribute to the problem. I think the 1990 Amendments inculcated into the environmental debate an attitude that says that there are approaches that get immediate credit with no immediate political consequences. Another post-CAA trend is the combination of the aspirational willingness to overreach and the institutional unwillingness to deal with the really difficult things that need addressing, like NSR. And then there is the complete classic political dodge, such as the case with mercury—shift it off to the agency and be blamed for nothing.

Bill Becker: I want to respond to the reason that Congress "dodged mercury." I was there in the 1980s and I participated probably more than anyone on this panel on the 1990 Amendments. The reason that Congress dodged mercury in the 1990 Amendments was because the utility industry asked for it. The utility industry emits mercury, which is one of the 180 some pollutants regulated under the CAA. Every other source of pollution, every other source that emits a HAP is regulated under a section of the CAA that requires compliance within three years.

The utility industry was required to comply with a very important acid rain control program and it was the utility industry that went to Congress and said: "Please treat us differently. Please treat us specially, we are already being required to reduce sulfur oxide under an acid rain control program. We need more time and we need to postpone this decision into the future." So, it is really unfair to blame Congress on the additional postponement of mercury control and say it was their fault, not the industry's fault.

But I want to go back real quickly just to the point that Jeff made on mercury and the same thing on NSR. Let's put aside the difference of whether mercury is a terrible problem or whether NSR requires a kind of robust control program that many think it requires.

The issue with states and localities is, on mercury, you have a whole stakeholders' group that was involved in a process for a year and a half, and the entire discussion was focused on mercury being regulated under §112 of the CAA, not §111.

Did the Agency ever consider going back to the group after you halted the discussions and say, "We have a different idea. What do you think about regulating it under §111 since you've invested a year and a half of your time in the §112 process? We'd like your input. We reserve the right to object. We'd like your input." That was never done.

On NSR, unlike some groups, the states wanted reform. We wanted reform. We had a package of reforms that was somewhere between EPA and the environmental community, and we never were given an opportunity to sit down

with the folks at EPA and discuss our views. And even if EPA disagreed with the views, at least give them the opportunity, especially the state and local agencies that are implementing these rules, give them the opportunity to be heard.

And then one final point. Jeremy, you mentioned two areas in your opening: reformulated gas and HAPs as potentially contentious issues. In the CAA, as you know, the reformulated gas regulations were a product of a regulatory negotiation. And that negotiation was a total success story. And the HAP program under §112 was also the product of a successful negotiation that I believe Keystone put together with industry, states, and environmental groups.

So those two programs were successes in the CAA. Why? Because there was communication, there was discussion, and there was negotiation.

Jeremy Kranowitz: Are there substantive differences on these different issues that you've talked about that made the process different? In cases where different stakeholders were able to come to the table and come to some agreement—Jeff, you mentioned CAIR as an example—though perhaps not as strong as some of the environmentalists would have liked, there was an agreement that folks could live with. Are there substantive differences on some of these issues that allow stakeholders to participate in some and not in others?

Bill Becker: I think that the answer is yes, because in many instances it depends on what you're fighting over, whether it is the science, what the regulations mean, or what the statute could or should mean. I think that those differences drive the type of dialogue that you can have.

Karl Moor: I think the other thing that happens and it happened in the CAA arena, is frankly the emergence of the enforcement regime as a powerful tool in the EPA and state arsenal. Enforcement by definition sucks oxygen out of many rooms where it would otherwise be possible to talk about concepts for regulatory changes. It just puts everything on hold pending on the outcome of either litigation or individualized settlement discussions. The view of the enforcement folks that we have a legitimate role in seeking out nonstatutory emissions reductions through the use of the enforcement mechanisms has changed the dynamic.

Jeff Holmstead: I come back to the idea that it's much easier when everyone agrees on the basic scope of the issue—say, in the diesel world, where virtually everyone agreed that we needed to reduce diesel emissions, that we only had authority to deal with new engines, and the only real issue was an engineering question of how long it would take to get us to where we needed to be. In my mind, this is the classic example of a situation where this kind of give-and-take between the competing interests can be helpful. I think in other areas the focus of the discussion is different. When I was sitting in my office at EPA, I knew exactly what Bill Becker's views were on NSR reform.

Bill Becker: You mean state and local air pollution control agencies.

Jeff Holmstead: I have been involved in some of those discussions since the early 1990s and there didn't seem to be

any productive outcome on NSR that could be achieved through more discussion. Similarly on mercury, we did not go back to discuss the issues with the stakeholder groups because some groups had already made their views clear and quite well-known that for various reasons, a cap-and-trade program for mercury was something they simply could not support. And, by the way, we actually did have a judicial deadline to make a decision about how to regulate mercury. I suppose we could have gone back to try to change that deadline, but I didn't think that approach would have been fruitful. And as I mentioned earlier, at the time my major interest was putting together a package for all three pollutants—for SO₂, NO_x, and mercury—and we needed to figure out how to do that all together.

Bill, you seem to be of the view that if we had just involved all of the stakeholders more, we'd have come to a better outcome. As someone who was in charge of an office in the EPA, I can say that approach works in some cases, but it doesn't work in others. I think the Agency has learned that over time. And Bill, I think, you were involved in some successful regulatory negotiations and some very unsuccessful ones over the years. The outcome depends a little bit on the issues and on where the stakeholders are and what people are ultimately hoping for at the end.

I just don't think there is an easy answer. I think in some ways my very strong feelings about what the NSR program was designed to do are just very different from what John's are or Bill's and many of Bill's members' are.

I think Bill would agree with me that for many folks in state and local government, NSR triggers are useful to them as a way to get some leverage over a company that wants to move forward with a construction project. The way you can get them to do something is holding up the project and telling them that if they want to proceed with their project, they've got to make some concessions—usually, but not always, in terms of emissions reductions that have nothing to do with the project itself. That's been the way a lot of environmental programs have worked over the years and I don't think that is a fair, or terribly productive, approach. We tried to move away from that with the cap-and-trade approach—telling companies clearly: "We're not going to hold up any projects you want to do, but in exchange for this freedom, here are the emission reductions that you have to make and here's your schedule for making them.

I think that Bill and John and others in the environmental community would say about cap-and-trade approaches: "Well those are great as long as they are over-and-above and on top of all of these other programs that we have." Our original proposal, as embodied in "Clear Skies," was to replace a lot of things with a stringent cap-and-trade program that would clearly get more emission reductions than the less efficient regulations they would replace. Unfortunately, although Jim Connaughton and perhaps others are still out there talking as though Clear Skies might still be enacted, it was pretty clear almost from the start that the environmental community was not interested in this approach.

John Walke: I don't think the clean air debates are inherently polarizing. I don't think that the Bush Administration's environmental agenda was inherently polarizing. Instead, I think that there is a driving aspect of the Administration's agenda that was really poisoned by a relentless bias that could not be overcome or penetrated by dialogue and

reason and even the law. That was a bias in favor of coal and protection of coal-fired powered plants, and it has a political and economic dynamic to it. Early in the Administration, Jeff and Christie Whitman and reportedly even John Graham made a very strong push for what I think would have been genuinely protective legislation to regulate three pollutants from power plants after the president abandoned his carbon pledge. And they developed legislative specs and they put all of these together in what was known as a straw proposal. These later led to the proposed "Clear Skies" legislation. They were beaten back. They lost the debates within the Administration. That happens. Basically, the Edison Electric Institute rolled Whitman and EPA and instead they came up with—

Bill Becker: I think it was Karl Moor, actually.

John Walke: It probably was Southern Company.

Karl Moor: I am struggling hard to find the evidence for the bias.

John Walke: Karl can speak to that but from then on the Administration was driven by what I refer to as the "Clear Skies straitjacket." Every regulatory element of EPA's program that was contentious over the past seven years conformed nearly exactly to the Clear Skies legislation, and that included the elimination of NSR for modifications at existing plants.

The mercury rule—miraculously, coincidentally, existentially—looked exactly like the Clear Skies legislative specs. Imagine that, the statute was passed in 1990, and the rule that came out in 2005 looked exactly like a bill that was introduced in 2003. Now, all of these examples of contentious rules are rules that impacted coal fire-powered plants. I've thought about this a very, very long time. What would explain that? We know that a lot of these directives were coming from the vice president's office, from the Administration, from the White House itself, and let's think back to the states that George Bush barely won in the 2000 election.

Karl Moor: John, this is ridiculous—

John Walke: And that he won in 2004.

Karl Moor: John, these are my own views, they are not views—

John Walke: The states of West Virginia, Ohio, Pennsylvania, these are some of the largest coal-producing states in the country. When EPA did its spreadsheet analysis of Clear Skies legislation and their regulatory rules, they had state-by-state breakdowns of the impact on coal prices and the coal availability per state—by bituminous and by lignite coal—everything that they're analyzing was the impact on coal prices and coal availability.

Now, you don't have to believe this. You can chalk it up to crazy conspiracy theories but it makes sense to me and it explains everything that happened and it certainly explains the legal results—or the illegal results—that unfolded. Thankfully, we defeated the Clear Skies bill and we're going to be delayed by an untold number of years in controlling carbon and mercury from power plants as a result of this Adminis-

tration. I don't think we'll face this polarization in the next Administration to the same degree.

Because I don't think that either party in this country believes in linguistic relativism to the extent that it was practiced on certain matters that were deeply, deeply important to the coal industry in this country. That's my say.

Karl Moor: Where to begin? In 1999, we were sued by the Clinton Administration. That lawsuit is still pending today. In the Bush Administration, we've been subject to levels of control that resulted in our facilities being subject to 90% of all possible controls imaginable. CAIR was one of the most aggressive uses of EPA regulatory authority imaginable and, frankly, I've long objected to CAIR on the basis that it was legislation through regulations. The mercury rules for better or worse are moving ahead.

I looked the other day at a presentation that we did on what just one of our plants will look like in the relatively short term and we have moved quickly from being a generating facility to a chemical plant. I mean, the footprint that we're leaving behind on that plant is about twice again as large as the original facility as a result of the space needed for these controls. So, those things have been occurring.

I can see bias for coal as 50% of the nation's energy source and as the best source in terms of cost, availability, and national security concerns.

I would hope that any Administration would pay as close attention as possible to the cost and availability of coal as they would to gasoline or oil. There is simply no reason to declare a rational policy to be bias borne of a "conspiracy." I promise you there's no conspiracy. There is a simple fact that the economy of the country to a large extent depends upon a readily available low-cost source of energy, powered through or, in part, by coal. Without that, we can pretend that everything else will have happened and energy will be available in some form that we can't now imagine. But the truth is that these are aspirational goals. The war on combustion, the war on coal, the bias against coal, these are real. In the end, we have to decide to use or not use coal. If it is use, then you have a debate about how it is regulated. Whether or not mercury should have been regulated in the way that it was regulated as opposed to legislatively addressed is a perfectly proper discussion in a democracy.

An assumption that seeing an Administration consider the energy impacts of its policy as well as the environmental impacts on policy, to me doesn't seem like the stuff of "Aha! Surprise! We found the hidden source of all of the evil done in the universe." I just don't see it and I think that that kind of thinking, frankly, gets us to the place where rather than concentrating on our shared responsibilities to the environment and to energy production, we often get into unilateralism.

We have an obligation to look 30 years out as one recent newspaper article said, 30 years out in order to make sure there is reliable source of supply of electricity to power the United States. On the other hand, people who say that coal should be eliminated as a source in the United States, that is, coal has to be done within our lifetime in order to reach environmental goals, are going to find that there are consequences for that choice, not only to the environment but politically.

So, John, I understand where you are coming from and I disagree with you, but I don't see the Bush Administration's regard for the use of coal as being anything other than ex-

actly what they said it was, which is that this is part of our energy portfolio. This is the way we want to approach it.

Jeremy Kranovitz: I have to say that I am shocked, shocked to hear that there are different opinions about this.

Jeff Holmstead: Just a couple of observations. I was in the room during all of those discussions about Clear Skies and CAIR and all of those other things, and there was never any sort of political discussion about which states were important, or we've got to do this for coal or that for that coal. Yes, there was a very robust internal policy debate, but never any suggestion that we needed to do something for a political reason or to reward certain states.

John uses as his evidence the fact that somehow the models that we used spit out numbers about impacts on coal prices. The model that we used was developed over a period of more than ten years by several different administrations. We have some people here in this room who know about all the work and effort that went into developing that model. It doesn't just look at impacts on coal on a state-by-state basis. It looks at virtually everything you could think of that affects energy, and the price of energy, on a state-by-state and a region-by-region basis when you impose different types of constraints on power plants The model was used to analyze the effect of various policies on energy prices in every single one of the [North American Electric Reliability Council (NERC)] regions.

To suggest that this was somehow part of a political exercise is just silly. It is also silly to use as a conspiracy theory that somehow what came out of the CAIR and mercury rules just happened to line up with Clear Skies. Of course it lined up with Clear Skies.

We went through a very robust internal policy debate and we had discretion under the CAA as to where we would set those levels. I don't know why it is surprising that we set them at the level that was consistent with what had come out of the internal policy debate.

When I was in the private sector, I'd never had a client that owned a coal-fired powered plant. I didn't know very much about coal-fired powered plants. I knew a lot about NSR, but primarily its effect on other industries. So everything I learned about coal-fired powered plants came from the time I was at EPA.

One of the things I enjoyed was a level of detailed discussion and analysis that went into developing the straw proposal that then went into the interagency process. I was a proponent of the straw proposal but quickly realized that there were a couple of areas in which we just couldn't justify our original proposals, especially on mercury. And most of the career people who helped develop the straw proposal agreed that based on some assumptions and things we learned about the expense of getting to the mercury cap levels in the straw proposal, it just wasn't worth it.

Bill Becker: I was just going to tell you what the cap was.

Jeremy Kranowitz: What was it?

Bill Becker: Five to seven-and-a-half tons.

Jeff Holmstead: Five to seven-and-a-half. In fact, what came out in the final CAIR rule was consistent with the straw proposal for NO_X . The one area where I think there

was an honest discussion and real disagreement on policy grounds was on the SO_2 cap and whether it was going to be two million tons or three million tons. And what you got in CAIR was the equivalent of three million tons. But whether you're going to get an 80% or an 85% reduction or 75% or 70%, whatever the numbers were, the differences were at the margins. And it may very well be that over time, depending on what happens with the [particulate matter with a diameter of 2.5 microns or less ($PM_{2.5}$)] standard, that number for SO_2 will need to go down even lower.

For many people in the environmental movement and even some people at EPA, coal-fired powered plants are public enemy number 1. I've seen these almost religious battles take place inside the Agency. I've seen them take place outside. But I think whenever you get into the religious battle as opposed to a policy battle, it's going to be polarized. There are some people who view power plants simply as a key part of powering our economy. There are other people who see them as nothing other than a big source of pollution. The fact of the matter is that they're both right, and you need to understand both of these points of view. Unfortunately, the public discussion about coal-fired power plants really has become a religious battle, and I think it's going to continue to be that way.

Jonathan Martel: Even in the very most polarized, intense fights, someone has to be giving some thoughts to a settlement strategy. The question in these battles, when they become so polarized, is whether we are keeping the door open to some path to be able to continue to talk about ways to bridge the gap. And in particular, as Jeff has pointed out, when we reach a religious level, whether it is a direct mail campaign, red meat to a particular constituency going to the press, or to direct appeal to the public opinion, you might jeopardize that.

When you hear words alleging withholding of information that affects public health, killing large numbers of people, and I think even, we've heard today in the past two panels reference to the word "evil" at least twice, does that dehumanize the other side in a way that tends to close the door or limit the door to pursuing what is an essential part of any pitched battle, which is having some settlement strategy? From both sides of this debate, what do we need to do to keep those doors open?

Bill Becker: I'd like to respond. It's difficult to keep the door open when the door's been shut in your face from the very beginning. And I kind of sugarcoated this, but maybe I need to say it more directly. The states don't have a direct mail campaign. I have a limited number of members of our association and I don't need to do anything to get more or less. We have 48 of the 50 states who are members, we have 165 local air pollution control agencies. I don't send out letters to the states saying: "Give us a lot of money so we can influence Congress or EPA." We don't have political action committees, we are a 501(c)(3), we don't have a dog in the fight other than we want to clean up the air.

The states hear from industry. We hear from industry. When the industry said: "We want reform on NSR." our association got together and we came up with reform concepts that were moderate, but they were certainly better than EPA's. We asked for a meeting with the Administrator, we asked for a meeting with Jeff, we asked for a meeting with

the staff at [the Office of Air Quality Planning and Standards (OAQPS)]. We never had a meeting to discuss these recommendations. We were shut out at the beginning.

On mercury, imagine over a year and a half period, EPA conversing responsibly, I might add, with stakeholders including state and local agencies and industry. Our people flew in from out of town on their nickel. It was abruptly halted. As I mentioned, we never got a chance to discuss why and this creation of §111, which had never been used before, was never, ever discussed during the year and a half process.

So, Jonathan, when you say gosh, what kind of exit strategy is there of getting everybody together, there was never a chance of getting together to begin with notwithstanding our strong push to do that. I happen to think very strongly that when people sit down and talk like we are now—

Jeremy Kranowitz: We certainly made a lot of progress on this one.

Bill Becker: Well, at least you know a little more directly that the slamming of the door on mercury and NSR mattered to state and local agencies. Perhaps with a little more talking instead of an audience in your private setting, it might have resulted in some meaningful discussions.

Jeremy Kranowitz: Jeff, now that you're out of EPA, are there ways that EPA or other government agencies could work to improve the process in terms of allowing more stakeholders into the room? And just on the polarizing issue as an aside, Keystone recently finished a year-long process on the future of nuclear power, and had somebody from NRDC sitting there at the table as well as other environmental NGOs that are more concerned about our climate change and are agnostic about what to do about nuclear energy.

I had half a dozen electric utilities that wanted to build more nuclear. I had somebody hired by the state of Nevada to fight Yucca Mountain to the end, which he called a "lifetime appointment." And yet, we sat these people around the table and some of them had been fighting for 30 years and we opened this conversation with, well, where has that gotten you? The answer was nowhere. I am wondering if indeed there is an ability to change the process to try to bring in different stakeholders and perhaps see the path of process or make some changes there to allow those stakeholders to be heard, acknowledged and go to a logical end.

Jeff Holmstead: I am tempted to say: "Oh, sure, there is." But I am not sure that is the case. I mean, at some point the amount of process that goes into these decisions is actually pretty extraordinary. Bill has expressed his concerns to me before today about the process for mercury and for NSR. I actually, honestly, don't ever remember turning down a meeting to meet with you or your guys, Bill. Again, someone may have turned you down on my behalf, but I don't think that yet another meeting would have made any difference. I knew exactly what their views were. I knew what John's views were. I had the broad range of views in front of me and at some point you need to make a decision and move forward

Again, I can look at some regulation negotiations that worked. I would look at RFG [reformulated gasoline],

which worked pretty well, but NSR was completely different. There was a FACA [Federal Advisory Committee Act] group convened on NSR reform in 1992 that had gone on for eight years and could never be resolved. I think EPA does a better job today than it did—let's say pre-1990—of meeting with all interested parties and really understanding their points of view. I know people in EPA who spent enormous amounts of time making sure they learned the issues. I think this is especially true of the MACT process. But I don't know that simply more process is going to result in agreement where there are just kind of fundamental religious differences on some of these things.

Karl Moor: Whatever we've learned on SO₂, NO_X, mercury, and PM, certainly the scale of CO₂ legislation is going to be remarkable. When I think about the lessons learned with regard to the gaps, things left unstated that should have been stated, things that Congress should have thought about and didn't, the amount of time and effort that has gone into the preparation of the ground for a legislative effort is significant but still not enough.

During the consideration of global climate change legislation, we need supreme legislative efforts. Are we, as the subject area experts on both sides of the issues, thinking through clearly with all the long-term and far-reaching consequences? Are we thinking through clearly how this Act is going to operate in light of the experiences that we've had with so many of these other issues and to minimize the need, frankly, to get together just to disagree.

We need to think about the enforcement provisions, we need to think about the NSR impacts, those types of things. I think the experience in the last 3 to 15 years shows there can be much wasted efforts on both sides if we're given anything less from people that we elected to write these laws.

John Walke: There is a tremendous amount of dialogue that occurs between environmental groups and industry parties. There are lots of goings on about climate—NRDC and the American Chemistry Council just negotiated a fine bill—the mercury export ban—that I think is, I hope, going to become a law. There was a consensus among all sides—there was a good process and a good outcome. What Bill and I are talking about are a smaller number of examples that were absolutely dominant and responsible for the controversies of the past seven years involving the CAA.

They should serve as a model for us for how not to do things. In each instance, I dare say harkening back to Jonathan's question, the Administration and industry collectively overreached. They got greedy. And when that happens, you end up losing. They lost the equipment replacement rule under NSR in the D.C. Circuit. I believe they are going to lose the mercury rule resoundingly next spring.

And regarding the climate debate, if you think that President Bush's head-in-the-sand-so-much-that-the-soles-of-his-feet-were-being-sunburned is a good outcome for industry ultimately, I think you've got another thing coming because—look what happened. The states have stepped into the breach, you've got 15 or 18 states now having adopted California standards. You find the [regional greenhouse gas initiative (RGGI)] in the Northeast, you've got greenhouse gas compacts in the Northwest, you've got states in this country discussing consortiums with countries in Europe to engage in trading.

You've got bills moving ahead in the Senate. The Administration has been on the sidelines the entire time. That's not going to prove to the ultimate benefit of either the industry or regulated entities or the consumers or voters of this country. I think the responsible, smart businesses have recognized that and they've come to the table for dialogues and discussions and we welcome those.

Jeremy Kranowitz: Clearly one of the problems is that we all just talk too much; there's been too much hot air and CO₂ emissions coming from all of us up here. I realize that we have gone long but would love to open it up and see if there are questions from the audience.

Audience Member: Jeff, did I hear you right—that you don't think that mercury is a big issue?

Jeff Holmstead: Yes, you heard me absolutely correctly. The only way humans are exposed to mercury is from eating fish. We actually did studies on where that fish comes from and not surprisingly, the vast majority comes from the oceans. If you looked at the mechanism by which mercury gets into those fish, it is extraordinarily complicated.

But the bottom line is, when you look at how mercury gets into the food supply, it is not a local issue at all. That mercury comes from all over the world, about a third of it is natural, that comes from natural sources, about a third is anthropogenic, about a third is reentrained anthropogenic. But if you look at where that mercury comes from and you look at what would happen if we were to eliminate all U.S. power plants, you have essentially a non-detectable impact on people's exposure to mercury.

Idon't remember the exact number—I used to have this at the tip of my tongue—but it was like 3,000 tons a year of mercury is emitted and deposited and about 40 tons of that 3,000 comes from U.S. power plants. And we actually did some studies to see if there were localized populations that might be consuming a lot of fish around certain areas where there tends to be a concentration of power plants, and we couldn't find any. So that is part of it.

The second thing is there was some early work on whether elevated exposure to mercury can raise heart risks and that is an ongoing controversy. If you put that issue off to the side, and you look only at the effects in children who were born to mothers with elevated mercury levels, what you are talking about is—across these studies—perhaps a tenth of a percentage point lowering of IQ among those children. The public press always claimed that mercury is causing birth defects, but that is not what it is. We're not even talking about less than half a percentage point of potential IQ loss because of U.S. power plants. We're talking about total mercury exposure, the vast majority of which has nothing to do with U.S. power plants.

So, the more we looked at the analysis, the more it became clear that mercury emissions from U.S. power plants was simply not a big public health issue.

Bill Becker: Just a quick response, if I may. Forty-six of the 50 states have advisories in place to alert people not to eat the fish in their waterways. Second, there have been studies very recently, in fact, when you were there that show that the benefits of controlling mercury are not only many kilome-

ters downwind but are also locally. And third, we're talking about a neurotoxin.

If our mercury doesn't land in the U.S. waterways, it lands someplace else and the CAA is pretty explicit that if there's technology available to clean it up, the industry is responsible for cleaning it up. It doesn't require a benefits study to determine whether the fish get healthier to eat. The CAA says if there is technology available to clean up of mercury from power plants then you are supposed to clean it up.

Jeff Holmstead: Well, that is not quite what the CAA says. The other thing is, if you eliminate mercury from U.S. power plants, you don't change any of those advisories. You still have 46 states with mercury advisories because it is something like 80% or more of the mercury that gets deposited in the United States comes from overseas. So, if you eliminate all coal burning in the United States, you still have mercury advisories in 40 some odd of the states of the Union.

Karl Moor: It's funny, the notion that there is an obligation that is transcended regardless of anything that the CAA says, that says if any pollutant is coming out, if it could have any possible harm anywhere in any circumstances, there is an obligation for control.

It is symptomatic of where I think we're going to head on the CO₂ issue, which is lead by sacrifice, lead by an example that says control it, even if we're not necessarily contributing to the solution of a particular problem. I think that kind of absolutism on an approach to emissions of any kind can lead to problems. Reciprocally, it is just as wrong to take the view that we don't need to take steps, where sensible, to reduce emissions.

But the absolutist approach is that, "We'll do it no matter whether or not it produces any result because, by golly, it is the right thing to do." This probably is the debate that is going to go on for about another 20 years, as we decide how dramatically to make CO_2 reductions.

Jeremy Kranovitz: It seems like this is an issue where you all might all benefit from a nice, neutral forum.

Well, thank you all for participating today and for listening to these issues, even the polarized issues that are not going away. They're going to be with us for a while and we hope that, at least we have some start and an ability to continue the discussions. Thank you very much.

III. Conclusion

All told, despite disagreements and stridency, we have clearly made tremendous strides in achieving cleaner air at acceptable economic costs. Along the way, the participants, including EPA, the states and stakeholders, have learned how to "play the game," to find common ground in some cases and to raise the alarm or proceed over objections in others.

An area of particularly intense dispute apparent from the discussion above—the PSD program—illustrates the dynamics of how politics, legislation, regulations, enforcement and changes in science can affect the direction and even tone of debate from which lessons might be learned. The focus of the PSD debate has been the requirement to go through permitting and upgrade emissions controls to best available control technology (BACT) when modifying a major source in a manner that significantly increases emissions. The origin of the program, through a lawsuit and then codification in the 1977 Amendments, focused on preserving air quality in areas already meeting NAAQS and pristine air quality in national parks and wilderness areas, with allied labor interests who wanted to limit the incentive for business to move from urban areas subject to tighter emissions controls. After debate and litigation, the basic rules were adopted in 1980—at the end of the Carter Administration. The rules were left then to the Reagan Administration to implement and interpret. In overhauling the statute in the 1990 Amendments, Congress passed on legislative clarification or reform of the program. After some debate in 1992 over rules for electric utilities, in 1998 the Clinton Administration initiated major enforcement cases alleging violations largely during the Reagan years at coal-fired power plants, which the Bush Administration continued while at the same time pursuing revisions to the rules that would make many of the allegedly violative 1980s actions legal if undertaken today. In addition to the political back-and-forth, as a result of computer modeling advances by the time of the 1998 enforcement, EPA concluded that the emissions from these sources in attainment areas were contributing to unhealthy air far downwind in the urban northeast corridor, particularly with respect to ozone and fine PM. As a result, in the enforcement actions EPA and some environmental activists have thus painted a picture of callous polluters causing death and disease that was not understood at the time the program was adopted and implemented.

The PSD debate highlights how what arguably might be the most valuable discussion of an appropriate level of stringency based on the latest science and the regulatory means to achieve that most cost effectively has devolved into debate about the competing interpretation of regulations by successive politically opposed administrations, enforcement leverage, and indifference to human suffering on the part of law breakers.

At this moment, as work on traditional clean air challenges remains, and we confront the unprecedented urgency, complexity and reach of climate change regulation, the dynamics of changes in political control, science, and transparency of objectives might well help to maintain a positive and productive dialogue. There is no better time to think hard about what is most effective over the long run and in the aggregate for government, stakeholders and the public at large.