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NEWS & ANALYSIS

Will the Mercury Cap-and-Trade System Crash and Burn?

Editors' Summary: On April 23, 2007, the Environmental Law Institute launched its Congressional Briefing series, a set of events designed to highlight and explicate critical areas of environmental law to policymakers. The first seminar in the series focused on regulation of mercury emissions from power plants. After the moderator provided an overview of the dangers of and regulatory response to mercury, the panelists shared their expertise on a range of topics surrounding this issue, including: federal mercury programs; the politics of regulation; special challenges for industry; and the roles of Congress and the states. Below is a transcript of the event.

[Transcribed by ACE Transcription, Washington, D.C. The transcript has been lightly edited, and citations have been added, for ease of reading.]

Moderator:

Leslie Carothers, President, Environmental Law Institute

Panelists:

Steven Bonebrake, Partner, Schiff Hardin L.L.P.

Dan Cunningham, Environmental Policy Manager, PSEG Services Corporation

John Walke, Senior Attorney and Director, Clean Air Project, Natural Resources Defense Council

I. Introduction

Leslie Carothers: Mercury is an element that takes many forms. In the environment, it is transformed into methylmercury, which can bioaccumulate and concentrate in high levels, notably in fish. It is a neurotoxin. It can be harmful to the fetus or to infants, which is why there are fish consumption advisories in areas where fish contain high levels of mercury. These advisories counsel women who are or may be pregnant to minimize their consumption of certain kinds of fish. The Centers for Disease Control and Prevention and the U.S. Environmental Protection Agency (EPA) have said that as many as 6% to 8% of pregnant women may be overexposed to mercury due to fish consumption.

The sources of mercury are varied. Many of them do not exist much anymore, but about 40%—the biggest remaining source in this country—is from coal-fired plants. Medical and waste incinerators were significant sources of mercury in the past. Those emissions have been reduced about 90% by regulation.

A significant part of mercury, it should be added, originates outside the United States. It probably will not surprise you to learn that more than one-half of the contribution from stationary sources is from Asia, and the lion's share of that, of course, is from China. That will probably grow with the building of more coal-fired plants there.

The regulatory response has been varied and fascinating. EPA put out rules on mercury in March 2005,¹ establishing national standards and a cap-and-trade system, the system of emission trading that became familiar in this country with the [sulfur dioxide (SO₂)] rules,² which worked very well. Those regulations were promptly challenged in court by people who felt that the schedule for compliance was too long, that cap and trade was not appropriate for a toxic metal, and that EPA should have regulated under the toxic substances section of the Clean Air Act (CAA).³ That litigation is still pending.⁴ Meanwhile, the states were required to either opt in to the federal program or indicate that they were going to have their own program. More than 20 have opted into the federal standard, but a significant number of states have adopted their own mercury standards that are more stringent in terms of the limit applied and the timetable.

Just to make things even more interesting, a number of states—the New England states plus New York—are now complaining that they cannot meet their water quality standards because of deposition of mercury from outside their jurisdictions. They are now complaining to EPA about doing more on the mercury issue because of that problem.

Finally, there is an international component. Clearly, to solve the total problem will require working with other countries. EPA, in conjunction with the United Nations Environment Programme, is trying to implement some voluntary programs to deal with the sizable pollution coming from outside the United States, principally from Asia.

The issues we are going to talk about today are: What are the differing federal and state approaches? Do they comple-

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

2. 40 C.F.R. pts. 72-75, 77, 78.

3. 42 U.S.C. §7412, ELR STAT. CAA §112.

4. *New Jersey v. EPA*, No. 05-1097 (D.C. Cir. filed Jan. 11, 2007).

ment or conflict with each other? And then how do regulated utilities and energy producers contend with the proliferation of standards? We have a terrific group of people here to speak to those issues. Steve Bonebrake is a partner at Schiff Hardin, a major law firm in Chicago, and he is going to talk about the federal scheme. He will be followed by John Walke, who is a Senior Attorney and Director of the Clean Air Project at the [Natural Resources Defense Council, Inc. (NRDC)]. John is going to talk about what the states are up to and why. And last will be Dan Cunningham, who is an Environmental Policy Manager for the Public Service Enterprise Group (PSEG) based in New Jersey. PSEG is both a distributor of power and a generator of power, and is contending with the differing requirements in a number of states where they operate.

II. Federal Mercury Programs

Steve Bonebrake: I am going to be talking today about some federal regulations that I have spent considerable time working on over the last year or so. I have been involved in the implementation of the federal mercury rule in Illinois and Indiana. I have been involved with implementation of the federal Clean Air Interstate Rule (CAIR) in Illinois and an appeal of the federal CAIR Rule here in the District of Columbia.⁵

At the outset, therefore, I probably should mention that the views I am going to express today are mine and are not necessarily shared by my clients. My task is to talk about some specific federal programs that have been recently promulgated that the states have been wrestling with in terms of implementation, with a focus on regulation of [electric-generating units (EGUs)] and their mercury emissions. I am going to refer to coal-fired electric generators as EGUs today.

There are two sets of EGU regulations I will discuss today. The first is the Clean Air Mercury Rule (CAMR),⁶ and the second is CAIR.⁷ I refer to CAIR in today's presentation as a mercury rule, inasmuch as it has co-benefits that will result in the reduction of mercury. So, although CAIR is actually designed to reduce other types of emissions, part of EPA's design of CAIR was also to dovetail with CAMR and result in some mercury control.

As a starting place for discussion of the federal regulations, it is important to put mercury in context. Mercury is a very interesting element and it is useful to know a little bit about the sources of mercury and the characteristics of mercury that create some regulatory challenges.

It is important to bear in mind, when we think about mercury emissions and regulations, that there are other significant sources of mercury to water bodies. These include wastewater discharges and various wastes that are disposed of that may contain mercury. We also have legacy issues where we may have historic deposits of mercury to various water bodies due to activities conducted in the 1800s or early 1900s that are still creating issues for us today.

In addition to the various types of sources, regulation of mercury is somewhat challenging because there are differ-

ent forms that are emitted by EGUs and, depending upon the form, they are more or less easily controlled and they may transport longer or shorter distances. Elemental mercury, for instance, the predominant form of mercury emitted when certain types of coals are burned in EGUs, can transport thousands of miles before coming down to the ground. Other forms of mercury emitted by EGUs, including reactive gaseous mercury, tend to deposit closer to sources, depending upon precipitation events.

When we talk about the impact of mercury emissions here in the United States, we need to think globally. For instance, EPA has said that about 25% of U.S. EGU emissions come down in the United States. The Electric Power Research Institute (EPRI) has said that less than 10% of mercury deposition in the United States is due to U.S. EGUs. We are talking about an international issue with international sources requiring an international solution.

We also need to bear in mind that with respect to mercury emissions, the form of concern when we talk about human health in particular, is called methylmercury. Methylmercury is not emitted by EGUs; instead, it is a form of mercury that may be created in a water body from mercury emitted by EGUs if there are certain conditions present in the water body. If those conditions are present, something called methylation can occur, creating methylmercury, which can then go up the foodchain and bioaccumulate to concentrations that can be of potential concern to those who consume fish, particularly women of child-bearing years and young children.

With respect to CAMR and CAIR, as I mentioned, there is some interplay between these two sets of regulations. The route to promulgation of CAMR was a long and controversial road. Section 112 of the CAA provides that EPA shall regulate mercury emissions from EGUs as a hazardous air pollutant if it finds that such regulation is necessary and appropriate after conducting various studies referred to in the CAA. EPA conducted a number of studies in the 1990s and made the determination that mercury needed more study before EPA could make a determination under §112.

Then in the year 2000, in the waning days of the Clinton Administration, EPA published notice of its determination that EGU mercury regulation as a hazardous air pollutant was necessary and appropriate, and that EPA would list coal- and oil-fired EGUs as a major source of hazardous air pollutants, which is a prelude to regulation of mercury as a hazardous air pollutant under the [national emission standards for hazardous air pollutants (NESHAPs)] program, which regulates emission of toxics into the air.⁸

On March 15, 2005, EPA did two things. First, it reversed and revised its 2000 finding that it was necessary and appropriate to regulate mercury emissions from EGUs under the NESHAPs program. Second, it promulgated CAMR. Both the promulgation of CAMR and EPA's determination not to proceed under §112 are subject to appeals here in the U.S. Court of Appeals for the District of Columbia (D.C.) Circuit. Today, we are in the process of advising clients on compliance with implementing state programs, as well as on the possible impact of the appeal of the federal program that may, by virtue of the appeals, be changed or, perhaps, even invalidated. So we find ourselves in a difficult landscape from a compliance perspective.

5. North Carolina v. EPA, No. 05-1244 (D.C. Cir. filed Mar. 5, 2007).

6. See *supra* note 1.

7. Clean Air Interstate Rule, 70 Fed. Reg. 25162 (May 12, 2005) (codified at 40 C.F.R. pts. 51, 72-74, 77, 78, 96).

8. 42 U.S.C. §7412(d).

CAIR was promulgated on March 10, 2005, close to the time that CAMR was promulgated. CAIR is designed to reduce emissions of SO₂ and [nitrogen oxide (NO_x)], which, in turn, will reduce particulate matter and ozone in the air. Those regulations apply only in 28 states and in the District of Columbia. So, unlike CAMR, which is a nationwide program, CAIR covers essentially only the eastern United States. CAIR builds on an SO₂ trading program that already exists under Title 4 of the CAA, which we often refer to as the Acid Rain Trading Program.⁹

CAIR establishes, in two phases, 2010 and 2015, a ratchet-down of the Title 4 SO₂ allowances available to EGUs. That will reduce SO₂ emissions by about 45% in 2010, and about 73% by 2015. CAIR also has a program—actually two different trading programs, one seasonal and one annual—designed to reduce NO_x emissions. Those two programs will operate to reduce emissions in two phases, 2009 and 2015, respectively, and NO_x reductions are expected to be about 53% and about 61% at those phases, respectively.

The trading programs under CAIR allow EGUs to make decisions regarding how they will comply. Typically, this involves an economic assessment that considers the value of allowances, projections regarding cost of allowances in the future, evaluation of the cost of controls, and then some mix of a compliance strategy based upon what makes good sense for economic and other reasons. EPA has indicated that CAIR is going to cost about \$50 billion and that some EGUs will install controls to comply with SO₂ and NO_x.

Mercury reduction co-benefits arise from the expected controls that would be implemented by EGUs to reduce SO₂ and NO_x emissions under CAIR. There has been some debate about the extent of the mercury reductions that will be achieved by controls that are essentially designed to reduce other pollutants. But for particular types of units burning particular types of coals, we hear numbers as high as 90% reduction of mercury, and these are from controls that are not specifically designed to reduce mercury emissions.

For other units with different configurations, burning different types of coals, we can expect far less mercury emission reductions. But we would likely get some reductions from the plants installing some controls for CAIR. Before leaving CAIR, I should just mention that CAIR is a subject of a current appeal here in the D.C. Circuit. Oral arguments are expected this fall. We are currently thinking that there is going to be a decision maybe next spring. So CAIR as well as CAMR are the subject of potential court decisions that could invalidate, revise, or perhaps leave the programs alone depending upon the results.

When EPA promulgated CAMR, it noted that the United States was the first country to regulate mercury emissions from EGUs. Therefore, although some in this country will say that EPA should do more at this point in time, the United States is arguably ahead on this issue compared to its neighbors.

CAMR is a national trading program that imposes mercury caps in two phases. The first cap is effective in 2010 and will cap mercury emissions at 38 tons. This is effectively about a 30% reduction of mercury emissions from EGUs. The second phase is effective in 2018. That cap will be 15 tons nationally for mercury emissions from EGUs, with a corresponding reduction of about 70%.

Interestingly, to put this in context, an allowance under the CAMR trading program for mercury is worth one ounce. EPA said in the CAMR Preamble that one acceptable way for the states to implement the federal program and to attain the caps is to participate in the federal trading program. EPA said, however, that the states would have flexibility so long as they attain the caps in the programs that they would design to implement the federal rule. We [the speakers today] have somewhat different numbers in terms of what the states are doing. There are a significant number that have adopted the trading program as proposed under the model CAMR trading program. A significant number of states have opted out of that trading program and are using other methodologies to comply with the federal caps; for instance, in my home state of Illinois, there is a 90% reduction program without participation in the national trading program.

A few principles were identified as being important for EPA when it promulgated CAMR. These have also correspondingly resulted in some discussion as hot-button issues in the state rulemakings regarding mercury emissions. The first is whether it is appropriate to utilize a trading program for something like mercury. Those who oppose the trading program will often argue that trading programs do not require all EGU plants to put on controls. For the plants that do not put on controls, are we exposing the local populace to potential hot spots? That is, for the plants that are not controlled, are they going to be emitting more mercury, which is going to come down and create a local hot spot? On that issue, EPA has said that when CAIR and CAMR are completely implemented, the Agency expects no hot spots attributable to EGU and mercury emissions.

As I mentioned, there is a dovetail between CAIR and CAMR. EPA has made the determination that Phase 1 for CAMR will rely upon the mercury reductions that will be achieved by controls installed under CAIR. Phase 2 of CAMR 2018 requires substantial additional controls installed by EGUs. Another part of the rationale for the later date was the question about the efficacy of mercury-specific control technologies. Both EPA and the U.S. Department of Energy have said that those are still under investigation. For some types of units, the jury is still out on how those mercury-specific controls will work.

III. Politics of Regulation

John Walke: In order to understand why there has been such a widespread rebellion against the EPA mercury rule by the states, I think it is really important to understand the political context. I'm going to take us back to 2000. EPA made a determination that it was necessary and appropriate to regulate mercury from power plants under the most protective, stringent provisions of the CAA dealing with air toxics. At the time, EPA was lobbied very heavily by industry and the White House Office of Management and Budget, with industry urging them not to regulate in that fashion and, instead, to regulate under another section of the CAA.

EPA rejected those lobbying appeals, saying: "Well, one reason we are not doing so is it is not protective. Another reason why we are not doing so is it is illegal. Another is that it would delay mercury regulation for a very long period of time." How do we know this? The Assistant Administrator for Air, the top political air official in EPA at the time, submitted a briefing paper to EPA's rulemaking docket to re-

9. *Id.* §§7651-7651o.

mind them that in fact, the Agency had already concluded that this path they were considering was illegal. EPA ignored that, and the rest is history.

My organization brought lawsuits against the Clinton Administration starting in the early 1990s to urge them to exercise their authority to regulate mercury from power plants. They dragged their feet with studies, but finally made that finding in 2000. Under the legal consent decree with NRDC, they were required to propose a rule by 2004.

EPA merrily proceeded along to consider a series of control approaches; some weak, some quite strong, to regulate mercury under this stringent portion of the CAA, §112, that is exclusively directed toward air toxics. To do so, EPA formed a working group with people from industry, states, my organization, and other environmental groups. Suddenly, in March 2004, an e-mail from EPA went around saying: "We have disbanded this work group. Thank you very much for your service to the United States government. [We] will no longer need your views."

People did not understand what was going on, but it slowly emerged over the next several months that EPA had radically abandoned the course that they were required to follow under the law, and had instead swerved over to the approach that industry had lobbied EPA to adopt back in 2000. The approach required under the CAA to address mercury under the stringent program, the §112 program, which would have required regulation in three years. We would have had rules on the books by 2005 that required compliance by 2008. There were many parties arguing that the control standards per plant, with no trading allowed, should have been 90% reduction.

Now, EPA and industry claim: "No. We cannot possibly do that much." But many states argued that in fact, 90% control was not only technically possible, but feasible. EPA, of course, ignored the parties that were seeking this stronger, more protective approach and finalized the mercury trading rule in December 2005. Shortly after they had done so, an article appeared in the *Washington Post* in which EPA staff confirmed anonymously that they had been ordered by the political officials heading EPA to adopt the standard that they did, not because it was based upon analysis or the law, but because it conformed to legislation that President George W. Bush had introduced in the U.S. Congress but could not get passed.¹⁰

Some of you may have heard of the Clear Skies Bill, which was put forward by this Administration, in our view and the view of enough congressmen to defeat it, to weaken the CAA. Lo and behold, it had a mercury trading program that was identical in terms of dates and pollution rates to the rule that EPA issued under the 1990 CAA Amendments.

Think about the coincidence that legislation Congress adopted in 1990 miraculously yielded the same specifications as legislation that this Administration could not push through Congress in 2003, 2004, or 2005. Well, it was not a coincidence. EPA's Inspector General's Office issued a scathing report in 2005 or 2006 that basically said that EPA was ordered to work backwards from the Clear Skies legislation to come at the result under today's law.¹¹ They were

ordered to manipulate the law and the analysis to come out with the result that the White House and EPA wanted. And that is what happened.

Unsurprisingly, we filed a lawsuit. We filed opening briefs in our lawsuit two months ago. The government's response to our lawsuit is due either at the end of this month or next month. Our reply will be due sometime in the summer. The court should schedule oral arguments sometime in the fall and we will probably have an opinion in early 2008. That rule will be struck down; it will be overturned. The Agency's legal theories are really quite amusing. The reason is that the CAA has never allowed trading of air toxics, and it does not today. The CAA has never regulated toxics under the section of the CAA that EPA invoked, §111, and there is good reason for that; it simply does not authorize regulation of toxics.

There are about 12 or 15 states that have filed lawsuits against it as well, and they believe the same thing. But returning to what people have done in the meantime, there are 20-odd states that have adopted laws and rules basically rebelling against the EPA's industry-friendly, unlawful regulation. They have done so because they know that the controls are available and that industry can install them sooner. Frankly, they care more about protecting the public against mercury hazards that are already causing mercury lake advisories in the vast majority of states in this country. We already have hot spots from mercury in this country, called lake advisories, and you cannot eat the fish that come from those areas.

The Administration's approach to defending this rule was to talk about international mercury emissions. They talk about CAIR, which is designed to regulate smog and soot. The reason they talk like that is because EPA's rule does not require a single ounce of mercury to come out of the air until 2018. What EPA achieved with its bait-and-switch [approach] was to take a regime that would have required plant-specific controls by 2008 and delay that until 2018. And that 10-year delay is worth tens of billions of dollars to industry.

So regardless of whether I win my lawsuit, industry has already won. They have won billions of dollars in delay. There is a Congressional Research Service report that basically echoes a lot of what I'm saying.¹² On its summary page, this report shows that by EPA's own admission, they will not achieve the mercury cuts that they are heralding until 2025.

So we have gone from 2008 to 2025. And what EPA is delivering in 2025 is a 69% cut. If you had a responsible Administration, you would have had 90% cuts by 2008. It can be done faster, and states are moving ahead. Once we win our lawsuit, all states will be forced to adopt more protective rules.

IV. Challenges for Industry

Dan Cunningham: I work for [PSEG], an energy and energy services company based in the Northeast. We are one of the largest companies in the United States. We not only gen-

10. Shankar Vedantam, *EPA Inspector Finds Mercury Proposal Tainted*, WASH. POST, Feb. 4, 2005, at A4.

11. OFFICE OF INSPECTOR GEN., U.S. EPA, ADDITIONAL ANALYSES OF MERCURY EMISSIONS NEEDED BEFORE EPA FINALIZES RULES FOR COAL-FIRED ELECTRIC UTILITIES (2005), available at

<http://www.epa.gov/oig/reports/2005/20050203-2005-P-00003.pdf>.

12. James E. McCarthy, *Mercury Emissions From Electric Power Plants: An Analysis of EPA's Cap-and-Trade Regulations*, CRS RL32868, U.S. Congressional Research Service (Jan. 13, 2006).

erate electricity, but we also distribute it through transmission and distribution. We generate electricity via nuclear, coal, gas, and oil.

I'm an engineer and I have been in the engineering field for over 25 years. I have been out in the field for a good part of that, designing and installing major pieces of capital equipment both in fossil and in nuclear. My company is also a half-regulated and half-unregulated business, which adds a layer of complexity when dealing with a rule such as the mercury rule.

I want to focus on where we have our coal generation, which is the topic of the day. We have coal generation in Connecticut and New Jersey. One thing I always keep in mind from my experience is that if regulation forces you to change the design basis of a combustion process, the fuel chemistry of the combustion process, or the post-fuel gas pressure, the temperature, or the exhaust chemistry, you generally take an efficiency hit. Now, why do I bring that up? If surrounding states that are in the same competitive transmission system are not similarly challenged, you have an uneven playing field. The challenged plants will lose market share, and we have lost market share. The thought I bring to you does not consider the environmental and health benefits from reducing a pollutant such as mercury.

We believe that mercury must be greatly reduced or eliminated from coal generation as soon as possible. We have been saying that for a long time. My company has been an advocate of many environmental initiatives, many in partnership, I will tell you, with NRDC and others. We believe that this is certainly necessary. I was part of that working group process that got the e-mail from EPA. It said, after we have been working for years on this issue, all of a sudden they did not need us anymore. That was very, very frustrating.

Unfortunately, from an economic and health position, by having one state act independently, however, and especially in pursuit of such a really hard pollution to get out of the air such as mercury, neither competitive economics nor health is clearly addressed. Actually, you may create a situation where the cleaner the plant, the more loss of your market share and, thus, what you end up with is a dirtier plant just producing more pollution. That is just not a situation that would benefit any of us.

The situation is made further complex through the transport phenomena of mercury. Emissions from China could impact deposition on the United States. Certainly, emissions from the Midwest and West have some deposition in the Northeast. That is the way the wind blows.

Regulated versus unregulated electric generation also makes economic evaluation complex. The most prominent environmental controls to address mercury emissions are things like scrubbers. A scrubber is a big chemical plant. The scrubber [is] actually bigger than the power plant [and requires] a whole different set of chemistry and people to run it. It is mainly used for SO₂ reduction, selective catalytic reduction (SCR), and to reduce oxides of nitrogen. This is also instrumental in reducing mercury emissions.

Last but not least, to get to that 90% that John referred to, we use activated carbon injection. It is the current technology, and there are technologies coming out all the time as the designers of the world are rewarded for coming up with new designs. Activated carbon is sprayed into the flue gas

stream. Through chemical bonding, it removes the mercury from the gas in a particulate removal device.

EPA has promulgated CAMR to meet the co-benefit mercury reductions from CAIR that will likely require installation of SCRs and scrubbers. New Jersey and Connecticut will have a rule in place to reduce mercury a decade earlier. They can keep that uneven playing field in mind and how they will be rewarded for making reductions earlier rather than later.

It is not a problem any one company, state, region, or even any one country can solve alone. PSEG has been a steady environmental advocate for many years and will continue to do so as can be seen in our climate change position. But when we apply leadership cost into the marketplace, it comes at a cost that may not only be an environmental cost or an economic cost; it could also deprive us of the best environmental and health solution. The sooner we have a uniform, strong, near-term mercury rule, the better for the electric-generation sector marketplace and the better for us all.

V. The Role of Congress and the States

Leslie Carothers: What if the court does decide that EPA's CAMR rule was not proper and sets it aside? Then, what do we do? Do all of the states go forward? Does Congress get involved?

John Walke: I will tell you factually what will happen first: the court would remand. If it rules in our favor, the court would vacate CAMR, abolish the trading program, and order EPA to resume rulemaking under the more protective §112 of the CAA. EPA would have some number of years to do that. They would go to a rulemaking proposal and comment period, and at the outside, could set a compliance deadline three years after the final rule was adopted. So it could well be that we are into the 2012-2013 period, possibly, which again shows that they have achieved the delay they were seeking.

Congress can always get involved. My guess is that if the rule were vacated, Congress would not get involved, since Congress does not necessarily like to legislate when it does not need to. States that have rules on the books with earlier compliance deadlines, presumably, would keep those earlier compliance deadlines because they thought they were important. States could, as a matter of law, shelve those laws or regulations since the EPA rule would no longer be forcing them to keep them on the books. I think the better part of public service, valor, and concern for the public would probably prevent them from just repealing those laws. So you basically restart the process that EPA should have followed had it been following the law, but about five years late.

Steve Bonebrake: There is something called a state implementation plan (SIP), in which, essentially, the state sets up regulations that implement federal objectives, including to comply with what are called national ambient air quality standards. The SIP, essentially, is a collection of state regulations that implement federal requirements. If the federal regulation is no longer dictating a certain thing, states can take some action independently.

In terms of the appeal itself, it seems to me there are a couple of different issues rolling around there. One was the ap-

propriateness of regulating under §112. The second was the CAMR approach itself under the new source performance standard provision, which is another section of the CAA. There may be a middle ground here where EPA might not be mandated to promulgate §112 rules, but the trading program might be set aside. I have not dug in deep enough to find out what that middle ground might look like, but it seems to me that might also be a possibility.

VI. Questions and Answers

Audience member: Does the federal emission trading program for mercury remain viable with a significant number of states already in the process or opting out of participation?

Steve Bonebrake: The last I read was EPA was still satisfied that there was sufficient participation. I think each of us has a somewhat different number in terms of the states that are participating in the federal program. The most recent number I had was 29 state participants. There also are at least five states that have not yet decided.

John Walke: It has been part of the state and public health group strategy to ensure that states do not participate in the trading program so it will not spread. The biggest achievement on that score was probably the state of Pennsylvania, which is either the number one or number two holder of mercury credits in the country. They pulled out, or announced that they were not participating in the trading program, which is a very welcome sign from my perspective.

EPA has put on a game face and said that they do think the trading program is still viable. That may well be correct. Obviously, to the extent that any states withdraw and those credits are not available, it drives up the cost of the allowances, and it makes control a marginally more cost-effective option.

There may be no good numbers, or we may disagree over what that marginal effect is, but I think that is a good thing because it means that controls are being installed locally instead of not installed at all.

To give you a sense of how nasty the politics are on this are, EPA has actually sent its staff out around the country to urge states not to adopt more protective rules, faster rules, or rules without trading. They have testified against what the state wants to do because they are carrying the water of the industry so thoroughly on this. They want their state trading program to push out compliance until 2025. They have taken what is a rather extraordinary and unprecedented step of actually testifying to interfere with state prerogatives to protect their citizenry.

Dan Cunningham: From a very parochial point of view, not a health point of view, the more states that drop out of trading like Pennsylvania, which is our nearest competitive state, the better it is for my company. It creates more of a level playing field. But I am also discouraged when I look at significant transmission lines coming in through the Northeast from states that are not pulling out. I wish we could impose upon them significant controls at the level that my company has to bear in our states and in Pennsylvania to bring a more level playing field to the region.

Audience member: Dan, how will you go about complying with the relatively near-term limits in New Jersey and Connecticut?

Dan Cunningham: New Jersey has the most stringent mercury emission rules in the country; Connecticut is not far behind. The big difference between the two is that in Connecticut there is an alternative emissions limit, that if not but for your best effort, it is a rigorous hurdle to prove that. If you cannot quite reach the reduction requirements, then the commissioner has discretion to apply an alternative emissions limit. New Jersey does not have that. You make 90%, period. We are not sure if we are going to be able to make it, but we are certainly working toward that end in designing to reach that limit in Connecticut and New Jersey. But Connecticut has the possibility of something like a softer landing.

Audience member: Steve, how are you advising your clients in the face of at least the possibility—John would say the probability—that the rule that they are relying on will be set aside?

Steve Bonebrake: Of course, we never divulge any attorney-client communication. But hypothetically speaking, if you are in a state like Illinois, which has adopted regulations that enforce, you have to comply with those state rules. So you are looking at potential uncertainty, but you also have a fixed state rule that is in place that you have to contend with. The regulatory landscape might change in the future, but that is what we have to work with today.

Audience member: On the assumption that the mercury rule is struck down, what is the possibility that Congress might act to deal with the mercury issue, perhaps in the context of legislation on climate that also would deal with utilities?

John Walke: The first-generation climate bills in Congress, the Jeffords Bill in the U.S. Senate and the Waxman Bill in the U.S. House of Representatives, were also power plant, smog, soot, and mercury bills. Those were followed by the Administration's countereffort, Clear Skies. And in the meantime, Sen. Tom Carper (D-Del.) introduced bills in 2003 that like the Jeffords Bill, completely rejected mercury trading, had a 90% control requirement, a faster schedule, and looked remarkably like what some of these states are doing. Sen. Lamar Alexander (R-Tenn.) was a cosponsor of that bill last year. But just this past week, Senators Carper and Alexander introduced separate four-pollutant power plant bills, which had identical mercury provisions—no trading, 90% reduction, very welcome approaches deserving of great praise. I do not see Clear Skies being resurrected with the changeover in parties.

I think the answer to your question on the four-pollutant global warming side of things really depends on where global warming legislation goes, generally. The focus on four-pollutant legislation and power plant [carbon dioxide (CO₂)] legislation has really shifted to multisector or economywide legislation; it goes by different labels. It is still too early to tell what the impact will be of the introductions last week, for example, whether the Jeffords Bill is introduced by another member of the committee.

My personal sense is that the greater momentum is behind multisector climate legislation. You could see a power plant bill emerging from Congress that would regulate mercury. The only real action on mercury that has taken place over the past five or six years that I have been doing this has been a House resolution that attempted to disapprove of EPA's rule. The resolution got more votes than the White House hoped it would but still failed under the Republican House, either last term or two terms ago. But, really, there has been no other legislation that I think has really moved.

Dan Cunningham: The only thing I would add is that my company has long endorsed Senator Carper in his four-[pollutant] bill, and continues to do so.

Audience member: Is there a trade off between a trading system and a reduction standard? Does anyone have a preference for one over the other?

Steve Bonebrake: I think that the trading aspect of CAMR is pretty important to industry for a number of different reasons. Part of that is because of the fact that mercury is emitted in different forms, and the ability to control can be dictated by the type of coal you burn, the nature of your operation, and the kind of control configuration. The ability to get close to 90%, for instance, but to trade the difference, might be pretty important to a particular company. In addition, there are some serious concerns about the reliability and precision of continuous emission monitors for mercury. This is an issue that came up in Illinois. There is some testimony there suggesting that the monitors are simply not at the point that could inform a source whether or not it is complying with the 90% reduction requirement. If you are reporting high erroneously, you have an option of trading to get into compliance. If you are in a nontrading environment, if you erroneously report high, you are in noncompliance with no alternative.

Dan Cunningham: I have heard passionate scientists on both sides of the equation talk about hot spots and how trading might exacerbate that situation. That means that the science is not there yet, collectively, to demonstrate the appropriate way to go. The appropriate step forward is maximum available control technology; no trading, because it is too important an issue, from a human health [perspective].

John Walke: The most important thing about environmental regulations is almost always how much pollution you cut and how fast you do it. Considerations like trading as the instrument are secondary, depending upon whether you think they are going to exacerbate some situation.

When you are dealing with a neurotoxin involving fetuses and newborns and involving a mechanism that was only authorized by Congress for a pollutant like SO₂ in the acid rain program—it was not authorized for a neurotoxin—we as a society have not had our Congress make the judgment.

We supported the acid rain program; we support trading for global warming. The issue is not trading. If the Bush Administration adopted a trading program that required 99% control effective tomorrow, I would sign up for it because it would result in an effective 99% plant-specific controlled program. Instead, they adopted a “do-nothing” program for the first 10 years and pushed off the ultimate control obligation until 2025. That is the scandal, not the trading program.

VII. Conclusion

Steve Bonebrake: John has mentioned a couple of times the “do-nothing” option under CAMR Phase One. From our perspective, that simply is not true. We are going to see at least 30% reductions of mercury emissions EPA has predicted as a result of the requirements of the CAIR program.

I should also just briefly comment on this hot spot issue. I have kind of avoided getting into the nuts and bolts of this, but we have looked at mercury fish advisories vis-à-vis location of EGUs. We presented information about this in some hearings, and we are not finding consistent correlations. Granted, in some particular situations, you might have a hot spot. But these generalizations that hot spots are problems for EGUs are just that: generalizations. We need to be careful when we start talking about health issues in this area.

Just one other thing I will mention. Sometimes we get lost in the fray here. One of the three most significant health studies, a study in the Seychelles Islands, in fact, found no correlation between methylmercury consumption and neurotoxic effect. There has been a lot of speculation about why that is true, but that was the finding. So yes, we should be protective, which is what we are talking about with regulation, but we should also be sensible.

Leslie Carothers: I think it should be said that the National Academy of Sciences did not rely on that particular Seychelles Islands study in its mercury assessment, but you are correct that there are some ambiguities in the health effects evidence.

The purpose of this session today was to try to shed some light on one of the more complicated issues scientifically, institutionally, politically, and from a regulatory policy standpoint. I'm extremely grateful to this panel for doing such a good job of sorting it out for all of us.