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# CLEAN AIR ACT IMPLEMENTATION: EXPERIENCE OF STATE AND LOCAL REGULATORS

## HEARING

BEFORE THE

SUBCOMMITTEE ON ENERGY AND AIR QUALITY

OF THE

COMMITTEE ON ENERGY AND COMMERCE

HOUSE OF REPRESENTATIVES

ONE HUNDRED SEVENTH CONGRESS

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# CLEAN AIR ACT IMPLEMENTATION: EXPERIENCE OF STATE AND LOCAL REGULATORS

**WEDNESDAY, JUNE 5, 2002**

HOUSE OF REPRESENTATIVES,
COMMITTEE ON ENERGY AND COMMERCE,
SUBCOMMITTEE ON ENERGY AND AIR QUALITY,
*Washington, DC.*

The subcommittee met, pursuant to notice, at 2 p.m., in room 2123, Rayburn House Office Building, Hon. Joe Barton (chairman) presiding.

Members present: Representatives Barton, Burr, Whitfield, Shimkus, Shadegg, Boucher, Sawyer, Waxman, Markey, McCarthy, Strickland, and Barrett.

Staff present: Bob Meyers, majority counsel; Joseph Stanko, majority counsel; Andy Black, policy coordinator; Hollyn Kidd, legislative clerk; Michael L. Goo, minority counsel; and Courtney Anderson, minority research assistant.

Mr. BARTON. The subcommittee will come to order.

The Chair would recognize himself for an opening statement.

This afternoon the Subcommittee on Energy and Air Quality will continue its series of hearings on the Clean Air Act. Our last hearing covered the accomplishments of the Clean Air Act. In that hearing, the subcommittee received testimony from academic, environmental, and public health groups concerning the significant progress that has been made toward achieving Federal air quality standards.

Today's hearing will focus on implementation of the Clean Air Act, specifically the experiences of State and local regulators in implementing emissions reductions programs. Importantly, the subcommittee will hear from those on the front line of Clean Air Act implementation, the State and local officials responsible for ensuring that the States meet the Federal air quality standards established by the Environmental Protection Agency.

Under the subcommittee realignment that began at the first of this Congress, the clean air jurisdiction is now within the subcommittee that I chair, the Energy and Air Quality Subcommittee. I note that I am one of the few current Energy and Commerce Committee members who participated in the last major reauthorization of the Clean Air Act back in 1990.

I hope that our hearing today will be a part of a larger record upon which this subcommittee and the full committee can later build another equally bipartisan and effective review of the Clean Air Act.

I am also one of many Members of Congress who believes that all wisdom does not reside in Washington, DC. For that reason, I am eager to hear the experiences of our panel of State and local regulators who were kind enough to come to Washington today and educate us about the real world implementation issues.

I cannot emphasize how important these State officials have been in achieving our Nation's significant improvement in air quality. We Federal legislators should certainly heed their remarks when determining what approach, if any, in terms of new thinking are appropriate for future programs.

Our panel today has officials from the States of Utah, Ohio, North Carolina, Colorado, and Kentucky. So we have got a cross-reference of the geography of this great Nation in terms of the State regulators that are here—officials that are here today. I look forward to hearing their testimony.

Our ranking member on the Democratic side, Mr. Rick Boucher of Virginia, is in his district this afternoon and cannot be here. So taking his place very ably is the distinguished Congressman from Ohio, Mr. Sawyer, and I would recognize him now for an opening statement.

Mr. SAWYER. Well, thank you, Mr. Chairman, and thank you for holding this second hearing today on the Clean Air Act.

As a consequence of the work that has been done over the last now more than 30 years, this country has made enormous progress in terms of the quality of air. It is sometimes difficult to measure the benefits of the work that we do in Congress, but the Clean Air Act is a clear example of the public good that can come from legislation when we work at it.

Nothing is easy. It requires long-term grip, tenacity, and effort. But the Clean Air Act has had that indeed. Overall levels of pollution in this country have dropped nearly 30 percent. Cars in the 2004 model year will be 99 percent cleaner than those produced in 1970. Quite simply, we benefit from the Clean Air Act with every breath we take.

It demonstrates that this country can achieve ambitious environmental objectives that it sets for itself when it makes the goals clear and measures progress toward them. But as the recent EPA report submitted to the U.N. reveals, we still have to confront the issue of global warming in this country and develop meaningful solutions to address it.

The U.S. would still increase the overall amount of greenhouse gases at the same rate that we are today. The President's 17.5 percent target is almost the same as the 17.4 percent reduction that we experienced from 1990 to 2000. It almost guarantees that we will have much higher emissions of greenhouse gases in 10 years, and we will have done little to address the serious problem of global warming.

We have technology to reduce the emissions of greenhouse gases. Now we need a—goodness gracious.

Mr. BARTON. Will the gentleman yield?

Mr. SAWYER. This is the furthest extent that I have seen Western Virginia extend in 200 years.

Mr. BARTON. I just announced that you were in your district this afternoon.

Mr. BOUCHER. Well, let me say that I have made an unexpected appearance for the purpose of contributing an opening statement, and I want to express my appreciation to Mr. Sawyer for being willing to carry out ranking member responsibilities this afternoon. But I did want to make a statement, so after——

Mr. SAWYER. As soon as I am done, why——

Mr. BARTON. He is ranking now.

Mr. SAWYER. In short, what I was about to say was that we need a comprehensive Federal policy for setting benchmarks for compliance. The President's plan recognizes the benefits of cap and trade programs, and I am eager to hear testimony about how those programs have worked in the States.

The acid ran cap and trade program of 1990 has been remarkably successful, and I am convinced that with care and design achievable targets and careful management of a trading system that we can do the same thing. It offers great promise with regard to global warming.

I am also interested in learning more about the challenges that you faced at the State level and the approaches you have developed that can be applied more broadly across the country.

Our witnesses, Mr. Chairman, are the ones that are in the trenches. They know what the difficulties have been in bringing communities into compliance with Federal requirements. I understand your need for flexibility in designing those approaches, and I commend you all today for your work at the State levels, and I am pleased to welcome and recognize Chris Jones from my State of Ohio.

With that, Mr. Chairman, I yield back the balance of Mr. Boucher's time.

Mr. BARTON. I thank the gentleman.

We would recognize the distinguished vice chairman of the subcommittee, Mr. Shimkus, for an opening statement.

Mr. SHIMKUS. Mr. Chairman, if I may, I am not sure if the gentleman from Virginia is in a time crunch. But if he is, I am willing to give him my 5 minutes, so that he can expedite——

Mr. BARTON. All right. The gentleman from——

Mr. SHIMKUS. [continuing] I yield my time to the gentleman from Virginia.

Mr. BARTON. [continuing] Reserves his time, and he is going to let Mr. Boucher give an opening statement.

Mr. BOUCHER. Well, thank you very much, Mr. Chairman. And, Mr. Shimkus, thank you for your courtesies. And, Mr. Sawyer, thank you so much for taking this responsibility this afternoon. I regret that I will not be able to stay for the balance of the hearing.

I did want to take this opportunity, however, to thank the chairman for scheduling this hearing and, in fact, a series of hearings that are planned as we examine the Clean Air Act and the experience that our Nation has had under this series of clean air requirements. Many of the provisions of the Clean Air Act set national air quality standards and then direct State and local regulators to develop and implement strategies for meeting the guidelines that have been set forth at the Federal level.

States and local regulators have truly been on the front lines in improving our Nation's air quality as they have discharged this responsibility under the Federal clean air laws.

The State and local regulators have been largely successful in meeting their goals. Since enactment of the Clean Air Act and of the 1990 amendments to the law, the Nation has made significant progress in reducing emissions and improving air quality while the Nation's economy and energy use have expanded.

From 1970 to 1999, the gross domestic product of the United States increased by 158 percent, and during that same period electricity use increased by 148 percent. Despite these increases and general economic activity, and in the pace of energy consumption, the Nation's air is much cleaner today than it was in 1970.

During the last 30 years, sensible environmental regulations, along with new technology and voluntary actions by our Nation's industry, have led to a significant reduction in air emissions. Sulfur dioxide emissions have declined by 39 percent. Particulate matter has declined by 75 percent. Airborne lead levels are down 98 percent. And volatile organic compounds have decreased by 42 percent.

In addition, coal use has increased by 195 percent during this period of time, while total emissions per ton of coal consumed have decreased by 70 percent since 1970. Particulate matter levels from coal-based utilities decreased 84 percent between 1970 and 1998.

Our Nation's air has been getting cleaner while coal use by electric utilities has been steadily increasing. These improvements in air quality have been due largely to the success of the Clean Air Act of 1970 and the 1990 amendments. And the success of the Clean Air Act has been due, in significant part, to the efforts that have been made by State and local regulators as they have implemented the provisions of the Federal law.

The witnesses testifying before the subcommittee today have extensive knowledge about the Nation's air quality and the implementation of the Clean Air Act. While I will not be here to hear the testimony, I look forward to reading the testimony that these witnesses are presenting regarding the progress in improving air quality which has been made by this Nation over the past 30 years, and the ways in which their State and local agencies have contributed substantially to achieving that success.

I particularly look forward to reading the testimony of these witnesses regarding their opinions on the strengths and weaknesses of the Clean Air Act, their views on the practicality of the Act's requirements, and their recommendations for any potential changes to the Act that they would suggest that this subcommittee consider.

Mr. Chairman, thank you again for scheduling this timely consideration by the subcommittee, and I welcome the testimony of our witnesses.

Mr. SAWYER. Mr. Chairman, I would at this point ask unanimous consent that all members have the opportunity to submit their full statements for the record.

Mr. SHIMKUS [presiding]. If there is no objection, so ordered.

The Chair recognizes the gentleman from North Carolina, Mr. Burr.

Mr. BURR. I thank the chair. Mr. Chairman, it is my pleasure to use my opening statement to introduce Brock Nicholson from North Carolina Division of Air Quality. This is Brock's second tour of duty with the State government serving this time as the State's chief of air quality planning. Prior to rejoining State government, Brock was the chief of the ozone and carbon monoxide development section of EPA's agency office of air quality, planning, and standards.

A registered professional engineer, Brock holds a mechanical engineering degree from North Carolina State and is a retired commission officer with the United States Public Health Service. Most recently, Brock has been working with our State's industry, environmental enthusiasts, and elected officials to craft a North Carolina Clean Smokestacks Bill.

Six months ago I would have given the chances that industry, the environmental community, and State government would have been able to reach an agreement on legislation that reduces emissions without increasing electricity rates for our consumers about the same chances I would have given the Carolina Hurricanes at being in the Stanley Cup.

Well, as of today, a bill has passed the State Senate on April 25. Governor Mike Easley announced that the State's two largest investor-owned utilities have agreed on the framework of legislation that accomplishes lower emissions without raising rates on retail customers.

And, yes, the Hurricanes are up one to zero in the Stanley Cup finals over our ranking minority member Mr. Dingell's Detroit Red Wings after last night's overtime win.

The framework of North Carolina's legislation would lower sulfur dioxide emissions to 250,000 tons by January 1, 2009, and 130,000 tons by January 1, 2013; lower nitrogen oxide emissions to 60,000 tons by January 1, 2017, and 56,000 tons by January 1, 2009.

This legislation is a great example of State initiatives that should be given the flexibility to operate above and beyond the framework of EPA regulations. I hope that Mr. Nicholson will be able to share with us his experience with North Carolina's legislative success, specifically the requirement to study mercury emissions, the uncertainties in mercury control and the health and economic benefits of additional studies of this issue.

Brock, I know that these are difficult budget times in Raleigh, North Carolina, on behalf of the committee. I would like to thank you for taking the time off to be with us.

With that, I yield back my time.

Mr. SAWYER. Will the gentleman yield?

Mr. BURR. I would be happy to yield.

Mr. SAWYER. Is it true, as I heard reported over the weekend, that if, in fact, indeed North Carolina beat Detroit that this would have been the first time that they had beaten Detroit in any setting since 1989?

Not to rub it in, Mr.——

Mr. BURR. The gentleman is incorrect.

Mr. SAWYER. Incorrect.

Mr. SHIMKUS. The gentleman's time has expired. The Chair recognizes the gentleman from Ohio, Mr. Strickland.

Mr. STRICKLAND. Thank you, Mr. Chairman.

I am especially glad that Mr. Jones is here today. Mr. Jones, I appreciate your attendance. I have reviewed your testimony about the implementation of the Clean Air Act. I make note of the fact that you are going to mention the city of Steubenville in your testimony, a place that is near and dear to my heart.

However, an urgent matter regarding the Portsmouth Gaseous Diffusion Plant I think warrants immediate attention, and so I would like to direct your attention to that.

Yesterday evening the Department of Energy held a public hearing about dumping 14,000 metric tons of uranium waste at the Portsmouth site in my district. Over the past, I have worked with your staff to ensure that thousands of canisters of depleted uranium hexofluoride that are currently onsite are converted to a more stable form and stored safely.

I know your agency is concerned that the construction of a conversion facility get underway as soon as possible, but now it is apparent that DOE has not only failed to begin the conversion of the DUF6 since passage of Public Law 105-204, which we passed in 1998, but now DOE intends to compound the problem by making Portsmouth a dumping ground for all of the Department's low energy uranium, natural uranium, and depleted uranium, which is now stored at over 150 sites within the DOE complex.

I have learned that this amount of waste would more than triple the amount of uranium material stored onsite. This plan by DOE is an outrage. I will not stand by quietly while Southern Ohio gets dumped on.

The United States Enrichment Corporation was privatized in 1998, and we were assured that layoffs would be limited. Well, since privatization, I hear regularly about more layoffs at the plant. The brilliant decision to privatize USEC, which I strongly opposed, resulted in the closure of the Portsmouth plant last year, the only plant in the country capable of enriching uranium to commercial specifications using natural feed.

Approximately 2 years after privatization, $630 million was announced for the Portsmouth site in October of 2000. Unfortunately, the Bush administration reversed that decision during the President's first day in office. As I mentioned, we were also promised a DUF6 conversion facility, and this administration continues to deny that it is required by law to build two such facilities, one in Portsmouth, Ohio, and one in Paducah, Kentucky.

When DOE announced it would ship materials from Fernald to Portsmouth, we were told that jobs were at stake. Only a handful of jobs were created under this mission, and now the fact that the Fernald material is already at the Portsmouth site serves as a justification for dumping more of the Department's waste on the communities in Southern Ohio.

It seems as if the Department wants to clean up Fernald, as they promised to do and should do. But in order to accomplish this, they want to dump the material on Portsmouth. It is unacceptable.

I feel that 14,000 metric tons of uranium waste will render the site completely unattractive for economic development opportunities, and that would be a disaster for a part of the State that is already economically distressed.

Director Jones, I intend to call upon our two Senators, DeWine and Voinovich, the Governor, Governor Taft, and my colleagues Portman and Ney to do everything that we can to oppose this unwise and unwarranted decision on the part of DOE to further dump on Southern Ohio.

I return the balance of my time, Mr. Chairman.

Mr. SHIMKUS. The gentleman's time has expired. I now recognize myself for a brief opening statement.

Under the 1998 amendments to the Clean Air Act, six areas in Illinois were designed as non-attainment for one or more criteria pollutants. As a result of Illinois' efforts, five of those areas have since come into attainment. Illinois was able to improve their air quality through a number of common-sense voluntary and market-driven approaches.

For example, the State started the Emission Reduction Market System, a volatile organic materials emissions trading program. Illinois was the first State in the Nation to adopt this type of cap and trade program for volatile organic materials, which contribute to the formulation of ground-level ozone or smog. The program is a cost-effective way to obtain emissions reductions.

Overall, in 2001, participating sources emitted 52 percent less in their baselines and 46 percent less than their allotments of trading units. The State has established a program called Partners for Clean Air, a voluntary organization which was established in 1995 and is comprised of over 300 businesses, industries, local governments, and health organizations, and representing thousands of employees.

Members of the Partners for Clean Air commit to taking voluntary green actions, which is vanpooling, public transportation, limited use of energy, deferring gas-powered lawnmowering, etcetera, to reduce ozone precursor emissions for forecasted ozone action days.

Tax credit and rebate programs are another tool the State has used to reduce pollution. From January 1997 through the end of this month, Illinois offered a rebate program for motorists who purchased alternative fuel vehicles or converted conventional vehicles to alternative fuel vehicles.

Rebates were offered for 80 percent of the conversion costs or original equipment costs, 80 percent of the fuel cost differential over a 3-year period not to exceed $4,000 per vehicle. This coming Saturday, the State is also asking citizens to trade in old gas-driven lawnmowers. In return, they receive a $60 coupon toward purchase of a more environmentally friendly lawnmower.

In my past comments, I talked about how the Clean Air Act really devastated Southern Illinois and the coal industry and some of the other energy producing sectors of the economy. Even with that, Illinois has moved significantly forward to help clean up their air. And with clean coal technology and a new positive energy bill, we look forward to being able to move both generating electricity for the country and doing it in a very positive environment way.

And with that, I will end my statements, and now yield to the gentleman from California, Mr. Waxman, for 5 minutes.

Mr. WAXMAN. Mr. Chairman, thank you for holding this hearing.

Today we will hear from State and local officials regarding their experiences with implementation of the Clean Air Act. The States have a critical role in meeting our clean air goals. The Federal Government has delegated implementation of environmental laws to the States, and each year gives the States millions in Federal funds to ensure that the laws are adequately implemented.

This approach gives the States flexibility to find workable solutions while providing a Federal guarantee that we are working toward healthful air throughout the country. Today's witnesses will discuss some of their successes under this approach.

When learning of the State's impressive work, we must remember the importance of maintaining a strong Federal backstop for clean air. There are many sources that the States are not in a position to properly regulate, particularly those sources which have out-of-State impacts. Additionally, it would be impractical to have every State regulating the emissions of cars, trucks, airplanes, and other mobile sources. Moreover, not all States do an adequate job at cleaning up air pollution.

For these reasons, it is essential that we maintain a balance in the Clean Air Act and keep a strong Federal rule in ensuring clean air. As a series of audits from the EPA's Office of Inspector General made clear a few years ago, States are sometimes failing to police even the most basic requirements of our Nation's clean air and water laws.

That is why I have fought over the years to maintain the Federal role in the Clean Air Act and why big polluters try year after year to weaken Federal oversight and enforcement. And, unfortunately, the polluters all too often find allies to help them with this effort.

In 1995, the Republican leadership in Congress attempted to defund the environmental enforcement attorneys at the Department of Justice. In 1998, the Republican leadership attempted to cut EPA's enforcement budget by $10 million. Last year, President Bush proposed to cut EPA's enforcement budget by $25 million and reduced the EPA's enforcement staff by some 200 positions. And this year, the President has again proposed slashing EPA's enforcement staff by over 200 positions.

This is a serious matter. Without adequate enforcement, our environmental laws will undoubtedly fall short of their intended goal.

I welcome today's witnesses and look forward to hearing from them.

Thank you, Mr. Chairman.

Mr. SHIMKUS. The gentleman yields back his time.

[Additional statements submitted for the record follow:]

PREPARED STATEMENT OF HON. GEORGE RADANOVICH, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA

Good afternoon, and thank you Mr. Chairman for holding this hearing today on the experience of state and local regulators in implementing the Clean Air Act.

After reviewing the purpose of this hearing with local regulators, I have three critical issues to discuss that are of great importance to the San Joaquin Valley congressional district I represent in California.

To begin, one of the major issues is that the EPA has not recognized the San Joaquin Valley Air Pollution Control District's local operating permit program as equivalent to the Title V program under the Clean Air Act 1990 amendments.

The primary distinction between the federal Title V program and the local programs in California is administrative. The federal regulation prescribes numerous

detailed administrative requirements, which pose significant economic burden on the permitting agencies as well as many small businesses, without any resultant air quality benefit. As a result, I believe EPA should recognize the San Joaquin Valley air district's permitting program as equivalent to the federal program.

Another issue of concern in my congressional district, is the discounting of Emission Reductions Credits (ERCs) at the time of use, as required by EPA. California uses a different model to bank ERCs and can demonstrate that, taken as a whole, its programs result in greater reduction in emissions without having to discount ERCs at the time of use. Because of the viability of California's program, I believe EPA should recognize and allow California the ability to continue its current ERC discount program.

Finally, I also have an interest in the development of markets for the trading of non-point source air pollution credits with fixed sources. Several experiments in the trading of water pollution credits between non-point and fixed sources have resulted in significant improvement in overall water quality. That method should be applied to the establishment of similar markets in the air quality arena to determine whether like results occur. I know that there has been some initial work done in this regard in California, and we ought to ensure that we do not miss an opportunity to use market innovations to improve overall air quality.

In closing, I look forward to hearing the experiences of our witnesses and am ready to work with this Subcommittee and the Administration to resolve Clean Air Act issues facing state and local regulators.

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PREPARED STATEMENT OF HON. W.J. "BILLY" TAUZIN, CHAIRMAN, CIOMMITTEE ON ENERGY AND COMMERCE

Today, Chairman Joe Barton's Subcommittee continues its series of Clean Air Act hearings. I applaud Chairman Barton for assembling another informative panel for our Members.

I, along with several other Members still on the Committee, crafted the last major revision of Clean Air Act, the extremely successful 1990 Amendments. Looking back on that process a decade ago, I am proud of the bipartisan nature in which the Committee conducted its business. I know that, under Chairman Barton's leadership, that same bipartisan tradition continues with the Energy and Air Quality Subcommittee's current examination of the Clean Air Act.

I am eager to hear from today's panel of state and local air regulators. Of course, it is the states that must take the policy we establish here in Congress and make it work our there in the real world. Accordingly, it is critical that we receive feedback from states regarding what has, and has not, worked under the current program. Our shared goal is cleaner air, with a strong economy. We can have both.

I thank the witnesses for taking time out of their busy schedules to come to Washington and participate in today's hearing. I look forward to their testimony.

Mr. Chairman, I yield back my time.

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PREPARED STATEMENT OF HON. BILL LUTHER, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF MINNESOTA

Mr. Chairman, thank you for holding this hearing today. State and local regulators are our partners in trying to effectively implement the Clean Air Act and it is essential that we hold hearings to get their perspective on how to reach the goal of improving the nation's overall air quality. I am especially interested in hearing about states that have gone beyond current federal requirements in an attempt to combat regional air quality concerns.

I am also very concerned about possible changes to the New Source Review program that have been rumored for months. If the Administration moves forward with plans to relax NSR standards, I believe it essential that the strong clean air and public health standards under the current program not be sacrificed. If there are fundamental problems to the NSR program, as many have claimed, I believe it is this committee's responsibility to hold investigative hearings on the matter. I look forward to any insight today's state and local regulators may have on the issue and I look forward to the testimony. Thank you.

Mr. SHIMKUS. Now I would like to ask the panel to take their seats. And we would first like to hear from Ms. Dianne Nielson, Executive Director of Utah Department of Environmental Quality.

You will have 7 minutes to give your opening statements. Your full statement is in the record already. The time is yours. Welcome.

**STATEMENTS OF DIANNE R. NIELSON, EXECUTIVE DIRECTOR, UTAH DEPARTMENT OF ENVIRONMENTAL QUALITY; CHRISTOPHER JONES, DIRECTOR, OHIO ENVIRONMENTAL PROTECTION AGENCY; BROCK NICHOLSON, CHIEF OF AIR QUALITY PLANNING, NORTH CAROLINA DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES; ARTHUR L. WILLIAMS, DIRECTOR, JEFFERSON COUNTY AIR POLLUTION CONTROL DISTRICT, ON BEHALF OF STAPPA/ALAPCO; AND DOUG LEMPKE, ADMINISTRATOR, AIR QUALITY CONTROL COMMISSION, COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT**

Ms. NIELSON. Thank you very much, Mr. Chairman, members of the committee, for the opportunity to be here today to talk about implementation of the Clean Air Act.

My name is Dianne Nielson. I am Governor Leavitt's Executive Director for Environmental Quality in the State of Utah, and I am appearing today on behalf of the State of Utah.

In Utah and throughout the west, visibility and air quality represent essential components of western vistas, of our public health and environmental protection, the quality and life and spirit that represents the west. And we value those resources. We protect them through State programs in partnerships with States, tribes, and our Federal neighbors, through organizations such as the Western Governors Association and the Western Regional Air Partnership.

We have learned that we can best accomplish our air quality and visibility goals, the objectives of the Clean Air Act and laws and regulations, where we have programs that foster innovation and flexible approaches to attainment and maintenance of air quality goals and standards.

The Clean Air Act was based on the premise that we would have a national government that set air quality standards and States that develop the plans to implement those standards. Air quality programs traditionally have relied on command and control regulation for achieving those emissions reductions.

And while these approaches have achieved significant environment benefit, benefit that we are all proud of and are served well by, the economic incentive approaches to regulation, such as market trading, also have a place in an enforcement and compliance program, and they have the potential to achieve greater emissions reductions while offering the flexibility and cost savings of program implementation.

The Grand Canyon Visibility Transport Commission and the Western Regional Air Partnership have demonstrated an ability for States, tribes, industry, environmental representatives, academia, local government, the EPA, and our Federal land managers to be able to work together in partnership to develop comprehensive regional air quality programs that work and that serve as a model for future environmental management.

In April 1999, EPA adopted the Regional Haze Rule. In September of 2000, the WRAP submitted an Annex to the report of the

Grand Canyon Commission which detailed the sulfur dioxide emissions reduction milestone graph and a backstop emissions trading program to ensure attainment of that visibility improvement. On May 6 of this year, the EPA proposed a revision to the Regional Haze Rule that would include that Annex.

The States who choose to implement a program under Section 309 of the Annex and the Regional Haze Program must submit their plans by December 31, 2003, not much more than a year from now. The work of the WRAP remains on schedule and will enable us to meet that deadline, and we intend to do that.

The success of this process has been in no small measure a result of the contributions that EPA has made to the partnership and the willingness of Congress to fund that work, and we appreciate both.

On a related note, in a recent decision from the U.S. Court of Appeals regarding the Regional Haze Rule, while the court rejected EPA's group BART determination, or best available retrofit technology application, it did reaffirm the State's role in implementing the program. And the market-based Section 309 program right now remains a viable option under the Regional Haze Rule, perhaps now with even more regulatory certainty.

Congressional multipollutant proposals and President Bush's Clear Skies Initiative also provide opportunities for flexibility for market-based reductions in air pollutants.

As this process moves forward, it is important, however, to remember that a new national program can best serve the west if it preserves the consensus on the sulfur dioxide reductions which are attained within the WRAP's Annex.

And, furthermore, it should preserve the ability for States to require additional emissions reductions, if they need those to meet air quality standards, require new sources to utilize best-available control technology at the time they are constructed, and ensure that new sources do not create visibility impairments or other air quality related problems for nearby mandatory Class I areas.

We participated in the Joint House-Senate Committee workshop on multipollutants, and we are prepared to continue to work with Congress in this effort and the administration.

Where regulatory programs have failed, there have been some basic problems that have been common to those situations. First of all, the process of implementing innovative incentive-based programs is sometimes so complex that the process itself becomes a disincentive. While Project XL was a great idea for piloting innovation, the process was so complex that it wasn't an incentive program at all, but, in fact, a disincentive.

The economic incentive programs that are now being considered offer opportunities for market-based strategies, but the guidance document is 200 pages long. The process is, again, a disincentive. Laws and regulations and policies are sometimes contradictory. We find that in New Source Review, with respect to offsets, and we find it also to some degree as we look at integrated planning and the need to coordinate guidelines and deadlines and conformity and transportation regulation.

Furthermore, frankly, sometimes the Federal regulatory approvals, the process of approval, just takes too long. A non-attainment area can qualify for redesignation after 3 years of conforming moni-

toring data. However, the process of filing the application and the review and approval take many years with very little effect or benefit and added value.

The Clean Air Act should provide for automatic redesignation by operation of law if an area has 3 years of compliant air quality data and leaves State implementation plan controls in place.

Again, thank you to the committee for taking this very important issue under consideration, and I would be happy to answer questions.

[The prepared statement of Dianne R. Nielson follows:]

PREPARED STATEMENT OF DIANNE R. NIELSON, EXECUTIVE DIRECTOR UTAH DEPARTMENT OF ENVIRONMENTAL QUALITY

Mr. Chairman, Members of the Subcommittee, thank you for the opportunity to appear before you today to discuss implementation of the Clean Air Act. My name is Dianne Nielson, I serve as Governor Leavitt's Executive Director for Environmental Quality, and I am appearing today on behalf of the State of Utah.

In Utah and throughout the West, visibility and air quality represent essential components of Western vistas, quality of life, and spirit. We value these resources and work to protect them through state programs, in partnership with state, tribal, and federal neighbors, and through organizations such as the Western Governors' Association [1] and the Western Regional Air Partnership (WRAP) [2], which Governor Leavitt co-chairs with Governor Chino of the Pueblo of Acoma. We have learned that we can best accomplish our air quality and visibility objectives if Clean Air laws, regulations, and program implementation foster innovative, flexible approaches to attainment and maintenance of air quality goals and standards. Through the WRAP, states and tribes have been able to improve technical program components, such as inventories, modeling and fire emissions, and work to implement initiatives such as the SO2 Annex, pollution prevention and renewable energy strategies, and a consensus-based recommendation for EPA's Sulfur In Gasoline Rule. The environmental principles of Enlibra [3] are being used to develop partnerships and solve air quality and regional haze as well as other environmental problems.

The work of the WRAP should serve as the model for consensus-based air quality initiatives and a commitment to workable regional air quality solutions. The Clean Air Act is based on the premise that the national government sets air quality standards, and states develop plans to meet those standards. Although state plans rely on some national programs (e.g., motor vehicle and fuel standards), states have the responsibility for developing and implementing most of the programs in these plans. Air quality regulations have traditionally relied on command and control regulations for achieving emissions reductions. While this approach has achieved significant environmental benefit, economic incentive approaches to regulation, such as market trading, have the potential to achieve greater emissions reductions while offering flexibility and cost savings. The Grand Canyon Visibility Transport Commission [4] and the WRAP have demonstrated the ability of states, tribes, industry, environmentalists, academia, local government, EPA, and federal land managers to work in partnership to develop comprehensive regional air quality programs that work and serve as a model for future environmental management.

In April 1999, EPA adopted the Regional Haze Rule, including an option for nine Western states to implement the recommendations of the Grand Canyon Visibility Transport Commission, through Section 309. In September 2000, the WRAP submitted an Annex to the report of the Commission detailing a set of sulfur dioxide (SO2) emission reduction milestones and a backstop emissions trading program. On May 6, 2002, EPA proposed a revision to the Regional Haze Rule to incorporate this sulfur dioxide program for the West. States that choose to implement a 309 program under the Annex must submit State Implementation Plans by December 31, 2003. The work of WRAP remains on schedule to enable us to accomplish that goal. The success of this process is in no small measure related to EPA's work with states and tribes to develop and implement WRAP initiatives and Congressional funding for the WRAP's work. We appreciate the commitment to the partnership.

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[1] For further information, see www.westgov.org
[2] For further information, see www.wrapair.org
[3] See Enlibra on www.westgov.org
[4] See also www.wrapair.org

On a related note, the recent decision by the U.S. Court of Appeals for the District of Columbia Circuit[5] regarding the Regional Haze Rule, while rejecting EPA's "group BART" or Best Available Retrofit Technology application, did reaffirm the state's role in implementing the program. The market-based Section 309 program remains a viable option, perhaps now with even more regulatory certainty than a Section 308 program.

Congressional multi-pollutant proposals and President Bush's Clear Skies Initiative to reduce multiple pollutants from electric utilities provide additional opportunity for more flexible, market-based reductions in air pollution. Any new national program to address emissions from electric utilities should preserve the Western consensus on sulfur dioxide reductions contained in the WRAP's Annex. Furthermore, any reform of current air quality laws and regulations should preserve the ability of states to require additional emission reductions if they are needed to satisfy Clean Air Act requirements, require new sources to utilize the best control technology available at the time they are constructed, and ensure that new sources do not create visibility or other air quality related problems at nearby mandatory federal Class I areas. We appreciated the opportunity to participate in the joint House-Senate committee workshop on multi-pollutant legislation, and we are prepared to continue to work with Congress and the Administration to accomplish those goals.

Where regulatory and incentive-based air quality programs are not working well, one or more of the following characteristics are common. EPA has worked to understand and resolve state concerns with implementation of the Clean Air Act. However, past conflicting laws, regulations, and guidance, coupled with legal positions that fail to accommodate the conflicts, and the cumbersome command and control regulatory process make progress difficult.

• *The process of implementing an innovative, incentive-based program is so complex that it becomes a disincentive.* For example, EPA's Project XL was a great idea for piloting innovation. However, the time required for the lengthy, complex application process is a disincentive. Likewise, Economic Incentive Programs (EIPs) provide the opportunity for market-based strategies. However, the guidance document is 200 pages long and contains so many protections that only very large, sophisticated state programs can afford to pursue EIPs.

• *Laws, regulations and policies are contradictory.* Emissions offsets under the New Source Review (NSR) program offer a timely example. Section 173 of the 1990 Clean Air Act (CAA) states that actual emissions are required for offsets. Yet, 40 CFR 51 provides for the use of allowable emissions in limited circumstances. NSR offset and emissions banking programs, such as Utah's 10-year old program, have been successful in providing real environmental results and economic flexibility. While EPA has not produced new guidance or rulemaking to address the apparent contradictions, the strict interpretation of the CAA by EPA's Office of General Counsel leaves established offset programs in disarray.

Integrated planning requires coordinated or flexible deadlines for various regulatory decisions. The ability to address regional haze along with PM2.5 and ozone, pollutants that have the same sources and similar technical analyses, makes sense. Conformity of transportation and air quality plans is also appropriate. However, conformity regulations allow only 12-18 months to switch to new mobile emissions models. Where the models represent significant change or increased emissions factors, as they normally do, major revisions in transportation and air quality plans are also required. In those cases 12-18 months is not enough time. Flexibility in integrated planning and transportation conformity deadlines would facilitate program goals.

• *Federal regulatory approvals take too long.* The process of development and approval of Maintenance Plans and Attainment Redesignations is too complex and lengthy. A non-attainment area can apply for redesignation with three years of compliant monitoring data. However, the process of application and administrative review and approval takes years, with little or no environmental benefit or added value. Moreover, in the interim, states are subject to costly, analytical and legal requirements designed for areas that have not attained national air quality standards. The CAA should provide for automatic redesignation by operation of law if an area has three years of compliant air quality data and leaves State Implementation Plan controls in place.

In conclusion, I appreciated the Subcommittee's interest in implementation of the Clean Air Act, and would be willing to answer questions and provide additional information.

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[5] American Corn Growers Association v. EPA

Mr. SHIMKUS. I thank you for your testimony and your punctuality on the clock, and now would like to recognize Mr. Chris Jones, who is the Director of the Ohio Environmental Protection Agency.

My colleagues from Ohio would like to welcome you, as I do, and you have 7 minutes. Your full statement is in the record.

**STATEMENT OF CHRISTOPHER JONES**

Mr. JONES. Thank you, Mr. Chairman, and it is good to see good Ohio representation here on the committee.

I appreciate the opportunity to reflect upon my experience as a regulator implementing the Clean Air Act, and I would like to begin with a simple but often overlooked observation. That is, the Clean Air Act has successfully produced cleaner air across America, much cleaner air. Perhaps nowhere is this more evident than in the State of Ohio.

We are reminded that Time magazine once declared Steubenville, Ohio, the city with the dirtiest air in the Nation, little wonder since in 1975 alone Steubenville had 32 air pollution alerts. Ohio was the first State to use emergency powers granted under the Clean Air Act to temporarily stop production at manufacturing facilities in order to alleviate a particularly severe air pollution episode in Steubenville.

Given this history, I am continually amazed and dismayed by the public perception that the condition of the environment has gotten worse over the past 10, 20, or 30 years. That is far from the truth because of the strong Federal laws, including the Clean Air Act, and because of competent State administration of those laws.

With regard to air quality, for example, Ohio's trend analysis shows over the past 20 years that carbon monoxide levels have reduced more than 61 percent, sulfur dioxide levels reduced an average of 52 percent, nitrogen oxide levels are down 15 percent, and ozone levels in Ohio have been reduced by an average of 13 percent.

In addition, lead levels have decreased by more than 95 percent from 1979 to 1998. From 1972 to 1987, the total particulate matter levels dropped by 45 percent. And $PM_{10}$ decreased by 22 percent from 1989 to 2000. These successes are clear evidence that much of the Clean Air Act works and works well, and I would like to mention a few particular elements.

The acid rain program—by all accounts, Congress' approach toward reducing sulfur dioxide and nitrogen oxides has been a success story. The reductions were achieved on schedule. There is widespread compliance with the standards. The cost of compliance is lower than expected, and the program operates well with a relatively small staff.

State requirements for the 1-hour ozone standard—another area in which the 1990 amendments took an innovative approach to recognizing regional differences was the attainment requirements for the 1-hour ozone standard. Congress created various categories ranging from marginal to extreme, depending on the level of ozone pollution.

The areas with higher levels of ozone had additional time to come into compliance, recognizing the complexity of the situation.

With additional time came more stringent requirements, which were both appropriate and necessary to achieve eventual attainment. In the case of Ohio, we started with seven non-attainment areas for ozone, four moderate and three marginal.

In each case, we were able to meet the 1-hour ozone standard by the prescribed date, except for Cincinnati where we were granted two 1-year extensions that are allowed under the Act. Today, all of Ohio's counties measure attainment with the 1-hour ozone standard, again pointing to the overall improvement in air quality that resulted from the Clean Air Act.

It is worth noting, however, that not all areas of the Nation have complied with the 1-hour standard. As U.S. EPA works to develop its implementation plan for the new 8-hour standard, the issue of a level playing field arises between areas that have yet to meet the old, less stringent standard, and those that have complied and now face additional controls.

Since the early 1970's, there have been large reductions in emissions from automobiles. This continuing improvement has been the result of more efficient engines, emission control technologies, and cleaner burning fuel. And, of course, there have been some unintended consequences, such as the MTBE contamination of groundwater and localized price spikes.

But overall the provisions of the Clean Air Act have combined to keep emissions from automotive sources in check, despite a significant increase in vehicle miles traveled. While these components of the Clean Air Act have resulted in demonstrable benefit, there are other areas proving to be problematic in their implementation. Unfortunately, the result is the provisions of the Act were well conceived in concept, are failing to produce the environmental gains that were promised.

With respect to the Title V program, the Title V permit was intended to provide one document that identifies all of the air regulations a facility must meet. Clearly, this is a sensible approach that can ease compliance monitoring for regulators and for the regulated community. However, U.S. EPA has expanded the required content of the Title V permit to the point that it is excessively lengthy, cumbersome, and confusing, precisely the difficulties I believe Congress sought to avoid in mandating a single permit.

One source of the problem is that Federal regulators are intent on assuring that all portions of the Title V permit are federally enforceable. While I understand the need for Federal enforceability of key provisions, this virtual obsession with duplicative oversight suggests a lack of confidence in the States that undermines our partnership relationship. At the same time, it burdens the States with excessively onerous permit issuance demands.

For example, Ohio EPA recently issued a draft permit for a refinery that's over 600 pages long. Another permit in development, at last count, was 820 pages long. In addition, after initially instructing States to omit insignificant sources from Title V permits, U.S. EPA reversed course and is forcing States to focus resources on insignificant sources.

Ohio facilities currently operate approximately 11,000 larger emissions units at 760 Title V facilities. An additional 22,000 insignificant sources are exempt by State rule from the Federal side of

the permit, although they are subject to State oversight. U.S. EPA recently notified us that our rules are deficient and must be modified, so that these 22,000 additional sources may undergo additional review and scrutiny by the Federal Government.

I would submit to you that that defies common sense. These sources are called insignificant for a reason. Yet we are charged with increasing the number of sources covered by the Federal side of the Title V permits by 200 percent. With virtually every State behind schedule for issuing Title V permits, doesn't it make more sense to move forward and complete the permitting process for the significant sources rather than slowing down the entire process by bringing in large numbers of sources that are, by definition, insignificant and are already regulated by States.

With respect to the MACT standards, Congress set a very aggressive goal for U.S. EPA to issue all of the rules for air toxics within 10 years. We met the early deadlines, and U.S. EPA should be commended. However, we have fallen behind. It doesn't make sense to have 50 States now writing MACT standards for a number of sources that didn't meet the level, and we ought to look at that.

Finally, with respect to redesignation, I would like to echo Ms. Nielson's comments. We have two counties in Ohio that haven't had a violation of the sulfur dioxide standard in 20 years, and we can't get them redesignated because two companies in—one company in each of those counties doesn't meet the standard. It doesn't make sense that we can't redesignate those counties.

The Clean Air Act is complicated. It is multifaceted. Congress can be proud of the extensive air quality benefits it has produced. As States, we share your interest and the interest of U.S. EPA in making it work. I appreciate the opportunity to testify.

[The prepared statement of Christopher Jones follows:]

PREPARED STATEMENT OF CHRISTOPHER JONES, DIRECTOR, OHIO ENVIRONMENTAL PROTECTION AGENCY

Mr. Chairman, members of the subcommittee, thank you for this opportunity to reflect upon my experience as a regulator with Clean Air Act implementation. I would like to begin with a simple but often overlooked observation: the Clean Air Act has successfully produced cleaner air across America. Much cleaner air. Perhaps nowhere is this more evident than in the State of Ohio.

As the Ohio Environmental Protection Agency prepares to celebrate its 30th anniversary this October, we are reminded of our past. We are reminded that Time magazine declared Steubenville, Ohio, the city with the dirtiest air in the nation. Little wonder, since in 1975 alone, Steubenville had 32 air pollution alerts. These alerts were issued when air quality was so unhealthy that people at risk were advised to remain indoors. Ohio was the first state to use emergency powers granted under the Clean Air Act to temporarily stop production at manufacturing facilities in order to alleviate a particularly severe air pollution episode in Steubenville.

Given this history, I am continually amazed—and dismayed—by the public perception that the condition of the environment has gotten worse over the past ten, twenty or thirty years. That is far from the truth, because of strong federal laws including the Clean Air Act, and because of competent state administration of those laws.

With regard to air quality, for example, Ohio's trend analysis shows over the past 20 years:

- Carbon monoxide levels reduced more than 61 percent;
- Sulfur dioxide levels reduced an average of 52 percent;
- Nitrogen dioxide levels down 15 percent;
- Ozone levels in Ohio have been reduced by an average of 13 percent.

In addition:

- Lead levels decreased by more than 95 percent during the 1979-1998 period.

- From 1972 to 1987, the total particulate matter levels dropped by 45 percent.
- Particulates ($PM_{10}$) decreased by 22 percent from 1989 to 2000.

These successes are clear evidence that much of the Clean Air Act works and works well. I'd like to speak to particular elements of the Act that have been especially effective.

*Acid Rain Control Program*—By all accounts, Congress' approach toward reducing sulfur dioxide and nitrogen oxides has been a success story. The reductions were achieved on schedule, there is widespread compliance with the standards, the cost of compliance is lower than expected, and the program operates well with a relatively small staff.

The market-based trading program was innovative in its approach to dealing with the regional nature of many air pollution problems. Its success therefore provides a model that can be used in the future for other circumstances where there are significant reductions to be achieved over a wide area.

*State Requirements for One-hour Ozone*—Another area in which the 1990 Amendments to the Act took an innovative approach to recognizing regional differences was the attainment requirements for the one-hour ozone standard. Congress created various categories ranging from marginal to extreme, depending on the level of ozone pollution. The areas with higher levels of ozone had additional time to bring come into compliance, recognizing the complexity of the situation. With the additional time came more stringent requirements, which were both appropriate and necessary to achieve eventual attainment.

In the case of Ohio, we started with seven nonattainment areas for ozone (four moderate, three marginal). In each case, we were able to meet the one-hour ozone standard by the prescribed date, except for Cincinnati where we were granted two one-year extensions that are allowed for under the Act. Today, all of Ohio's counties measure attainment with the one-hour ozone standard, again pointing to the overall improvements in air quality that have resulted from the Clean Air Act.

It is worth noting, however, that not all areas of the nation have complied with the one-hour standard. As U.S. EPA works to develop its implementation plan for the new eight-hour standard, the issue of a level playing field arises, between areas that have yet to meet the old, less stringent standard and those that have complied and now face additional controls.

*Reductions in Vehicle Emissions*—Since the early 1970s, there have been large reductions in emissions from automobiles. This continuing improvement has been the result of more efficient engines, emission control technologies, and cleaner burning fuel. Of course, there have been some unintended consequences such as MTBE contamination of groundwater and localized price spikes in areas where specially formulated fuels are mandated. But overall, the provisions of the Clean Air Act have combined to keep emissions from automotive sources in check despite a significant increase in vehicle miles traveled.

While these components of the Clean Air Act have resulted in demonstrable environmental benefit, others are proving to be problematic in their implementation. Unfortunately, the result is that provisions of the Act that were well-conceived in concept are failing to produce the environmental gains they promised.

*Title V Permit Program*—The Title V permit was intended to provide one document that identifies all the regulations a facility must meet. Clearly, this is a sensible approach that can ease compliance monitoring for regulators and for the regulated community. However, U.S. EPA has expanded the required content of the Title V permit to the point that it is excessively lengthy, cumbersome, and confusing—precisely the difficulties I believe Congress sought to avoid in mandating a single permit.

One source of the problem is that federal regulators are intent on assuring that all portions of the Title V permit are federally enforceable. While I understand the need for federal enforceability of key provisions, this virtual obsession with duplicative oversight suggests a lack of confidence in the States that undermines our partnership relationship at the same time that it burdens the States with excessively onerous permit issuance demands. For example, Ohio EPA recently issued a draft permit for a refinery that is over 600 pages long. Another permit in development was 820 pages long at last count.

In addition, after initially instructing States to omit insignificant sources from Title V permits, U.S. EPA reversed course and is forcing States to focus resources on insignificant sources. Ohio facilities currently operate approximately 11,000 larger emission units at 760 Title V facilities. An additional 22,000 insignificant sources are exempt by state rule from the federal side of the Title V permit, although they are subject to state oversight. U.S. EPA recently notified us that our rules are deficient and must be modified so that these 22,000 additional sources may undergo additional review and scrutiny by the federal government.

I submit that this defies common sense. These sources are called "insignificant" for a reason. Yet we are charged with increasing the number of sources covered by Title V permits by 200%. With virtually every State behind schedule for issuing Title V permits, doesn't it make more sense to move forward and complete the permitting process for the "significant" sources, rather than slowing down the entire process by bringing in large numbers of sources that are by definition "insignificant?"

This is just one example of how U.S. EPA has changed course in the middle of the Title V process. This lack of continuity is frustrating to the States and is a major contributor to our being unable to meet the original timeframes for permit issuance. For example, in 1995 Ohio received a full approval of our Title V program, which means U.S. EPA found our program acceptable *in its entirety.* Last November, some six years later, we were told in a letter from U.S. EPA that we must change our basic Title V program in *seven different ways* or risk losing the program.

In other words, in 1995 U.S. EPA told us we have a completely acceptable program. Now, despite there being no change in the Clean Air Act, we are told that the same program is deficient. Some of the issues raised in the letter had never before been identified by U.S. EPA as a concern. Others were specifically addressed as a part of the delegation process. Instead of allowing us to use our resources to issue Title V permits under the program they themselves approved, U.S. EPA is forcing us to keep tinkering with the program itself.

The Inspector General's Office of U.S. EPA has reviewed the workings of the Title V program and has identified several areas for improvement, including simplified terms and conditions. As a first step, these recommendations should be implemented.

Second, the fee structure and funding for the Title V permit program should be reviewed and revised. Although the current $25 per ton adjusted to the Consumers Price Index was sufficient at the beginning of the program, it no longer produces sufficient revenue to support the program. This is in part due to the increasing responsibilities associated with these permits and also to the fact that states like Ohio are requiring additional controls, which reduce emissions and improve air quality but lower our fee income.

*MACT Standards*—In the Clean Air Act Amendments, Congress set a very aggressive goal for U.S. EPA to issue all the rules for air toxics within ten years. U.S. EPA was able to meet earlier MACT issuance deadlines and should be commended for those actions. However, they have fallen behind on the issuance of the "10 year" MACT standards. Under 112(j) of the Clean Air Act, if U.S. EPA fails to issue the MACT standards, then states will have the responsibility to issue them on a "case-by-case" basis. This will obviously lead to an inconsistent program with unavoidable inequities for the regulated community, as well as another drain on State resources without financial compensation. More importantly, it subverts the intent of a having a national standard, and thereby makes it less likely that the full potential of air quality improvements envisioned by Congress will be achieved.

*Requirements for Redesignation*—The attainment or nonattainment status of an area should reflect actual air quality. Ohio has not experienced a violation of the ambient air quality standards for sulfur dioxide for over twenty years, yet two counties in Ohio (Lucas and Cuyahoga) remain designated nonattainment. U.S. EPA procedural rules make it very difficult to redesignate in both these cases. In both counties, a single company in does not comply, so U.S. EPA will not redesignate. (One of those companies is litigating its compliance status.) The rules governing attainment designation should be eased to be better able to reflect actual air quality.

The Clean Air Act is a complicated, multi-faceted piece of legislation. Congress can be proud of the extensive air quality benefits it has produced. The States share your interest—and the interest of U.S. EPA—in continued progress. Our suggestions for administrative improvements are offered in the spirit of enabling the Clean Air Act to achieve its full potential.

Thank you. Mr. Chairman.

U.S. ENVIRONMENTAL PROTECTION AGENCY
REGION 5—AIR AND RADIATION DIVISION
*November 21, 2001*

**Correspondence**

(AR-18J)

ROBERT F. HODANBOSI, Chief
*Division of Air Pollution Control*
*Ohio Environmental Protection Agency*
*122 South Front Street*
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*Columbus, Ohio 43266-1049*

DEAR MR. HODANBOSI: This letter is to inform you of the action required by the Ohio Environmental Protection Agency (OEPA) to avoid an April 1, 2002, United States Environmental Protection Agency (USEPA) publication of a notice of program deficiency for the Ohio Title V operating permit program. As you know, we published a Notice of Comment Period on operating permit program deficiencies in the *Federal Register* on December 11, 2000. Pursuant to the settlement agreement discussed in that notice, USEPA will publish notices of program deficiencies for individual operating permit programs, based on the issues raised that we agree are deficiencies. In that notice, USEPA committed to publishing these notice of program deficiencies for fully approved programs, such as Ohio's program, by April 1, 2002.

USEPA received comments concerning the Ohio's Title V program on or before the March 12, 2001, deadline. We have reviewed these comments and, based on our preliminary review, have identified the issues on which Ohio must have taken significant action to avoid Title V notice of program deficiency on April 1, 2002. These issues include;

1. The language of Ohio Administrative Code (OAC) 3745-77-07 (A)(3)(c)(ii) and (iii) limits the reporting of deviations to those which can be detected by the compliance method required by the permit, in violation of the Credible Evidence rule.
2. The Title V permits exempt the reporting of the malfunctions under OAC 3745-15-06(B) from the six-month monitoring reports required by 40 C.F.R. 70.6(a)(3)(iii).
3. The six-month monitoring reports do not require permitees to submit reports of all required monitoring as required by 40 C.F.R. 70.6(a)(3)(iii).
4. All of initial Title V permits have not been issued.
5. Title V permits must contain monitoring, recordkeeping,and reporting requirements sufficient to assure compliance.
6. Applicability of 112(r) and Title IV in the Title V permit.
7. Identification of origin and authority of each permit term and condition in the Title V permit.
8. The statements of basis must conform to the guidelines we will provide to you under separate cover. We enclosed a more detailed discussion of these issues with this letter.

We have been working with your staff concerning these comments and are pleased with Ohio's intent to correct many of these potential deficiencies within a reasonable timeframe. We would like for you to provide us with confirmation of the issues that you are planning to resolve,along with timeframes for these resolutions, so that we will be better prepared to work with you to achieve your goal. Please be aware USEPA reserves the right established in the Act and 40 C.F.R. 70.10 to publish a notice of program deficiency for any or all of these deficiencies at a later date if Ohio fails to address these deficiencies adequately and expeditiously. USEPA also reserves the right to publish subsequent notice of program deficiencies concerning other deficiencies in the Ohio Title V program that were not identified during the comment period ending March 12, 2001.

We look forward to continued cooperation between our offices on Title V program issues. If you have any questions, please contact Genevieve Damico or Kaushal Gupta, of my staff,at (312) 353-4761 and (312) 886-6803 respectively.

Sincerely yours,

BHARAT MATHUR, DIRECTOR
*Air and Radiation Division*

Enclosure

**Enclosure**

ISSUES CONCERNING DEFICIENCIES IN THE OHIO TITLE V OPERATING PERMITS PROGRAM

The language of Ohio Administrative Code (OAC) 3745-77-07(A)(3)(c)(ii) and (iii) limits the reporting of deviations to those which can be detected by the compliance method required by the permit.

OAC 3745-77-07(A)(3)(c)(ii) and (iii) states:

> (ii) That each report submitted under paragraph (A)(3)(c)(i) of this rule shall clearly identify any deviations from permit requirements since the previous report *that have been detected by the compliance method required under the permit* and any deviations from the monitoring, recordkeeping, and reporting requirements under the permit;
>
> (iii) That each permit shall require prompt reporting of deviations from federally enforceable permit requirements *that have been detected by the compliance method required under the permit*, including deviations attributable to upset conditions as defined in the permit, the probable cause of such deviations, and any corrective actions or preventive measures taken. Verbal reports under this paragraph shall be submitted to the director as soon as practicable, consistent with diligent verification and certification, but in no case later than three business days after discovery of the deviation, with a follow up written report within thirty days after such discovery.

The underlined portions of the language demonstrates that Ohio's rules do not require permittees to consider all credible evidence when the permittee reports deviations from the permit requirements. Ohio must remove this language from OAC 3745-77-07(A)(3)(c)(ii) and (iii).

**The Title V permits exempt the reporting of the malfunctions under OAC 3745-15-06(B) from the six-month monitoring reports required by 40 C.F.R. 70.6(a)(3)(iii).**

Ohio's permits provide that quarterly reports satisfy the requirements pertaining to prompt reporting of all deviations (Part I A.1.c.ii). For this reason, the quarterly reports must meet the criteria for deviation reports. Both 40 C.F.R. 70.6(a)(3)(iii)(B) and OAC 3745-77-07(A)(3)(c)(iii) require permittees to report promptly deviations from permit requirements. Yet, Part I.A.1.c.ii of the Ohio Title V permits specifically exclude from the quarterly reporting requirement deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, a part of the Ohio State Implementation Plan. The reporting aspects of the Ohio SIP, OAC 3745-15-06, do not alter the Title V requirement to report all deviations, including malfunctions, in the Title V quarterly report. Ohio must revise Part I A.1.c.ii of the Title V permits to no longer exclude the reporting of deviations resulting from malfunctions in the quarterly deviation reports. OEPA may choose to require that the permittee simply reference the malfunction report required by OAC 3745-15-06 by requiring a similar report to Section D of USEPA's Part 71 six-month report form.

**The six-month monitoring reports do not require permitees to submit reports of any required monitoring as required by 40 C.F.R. 70.6(a)(3)(iii).**

Ohio's permits provide that quarterly reports satisfy the six month reporting requirements (Part I A.1.c.ii). For this reason, the quarterly reports must meet the same criteria as the six-month reports. Both 40 C.F.R. 70.6(a)(3)(iii) and OAC 3745-77-07(A)(3)(c)(i) require that the permittee submit a report of the results of all required monitoring. Ohio's quarterly reports only include a compilation of the deviations being reported by the permittee. This does not satisfy the requirement to submit a report of any required monitoring. Ohio may choose to resolve this issue by requiring permittees to submit reports similar to those required by Section C of USEPA's Part 71 six-month report form.

Furthermore, these same rules require that all applicable reporting requirements must include a semiannual (or more frequent) reporting requirement. The rule allows no exceptions. Therefore, all federally enforceable reporting requirements in a Title V permit must require at least semiannual submission of the reports. Some of Ohio's Title V permits currently require only annual submission of certain reports; Ohio must revise these permits to submit reports at least semiannually.

**All of the Title V permits have not been issued.**

Section 503(c) of the Clean Air Act clearly requires states to issue all of the original Title V permits within 3 years of program approval. We do understand that there are many reasons why Ohio was unable to complete the issuance of these permits within the required 3-year timeframe. However, because the success of this program is dependant on the issuance of the Title V permits, Ohio must develop by March 2002 a schedule for permit issuance, including milestones, to ensure issuance of all outstanding initial permits no later than December 1, 2003. Pamela

Blakley provided an example of a permit issuance schedule in an e-mail on November 7, 2001.

**Title V permits must contain monitoring, recordkeeping, and reporting requirements sufficient to assure compliance.**

A. Title V permits contain monitoring and recordkeeping conditions on the state-only enforceable side when those conditions should be made federally enforceable.

Some Title V permits incorrectly make monitoring and recordkeeping provisions enforceable only by the state when those provisions are federally enforceable. Because a federal rule, 40 C.F.R. 70.6(a)(3)(i)(B),requires the permit to contain all monitoring and recordkeeping necessary to assure compliance, such monitoring and recordkeeping must be on the federally enforceable side of the permit.

One example of this problem comes from the draft Title V permit for Cleveland Electric Illuminating Avon Lake Power Plant (facility ID 0247030013, issued January 30, 2000). The permit requires the source to operate and maintain a temperature monitor in order to measure the temperature of gases entering an electrostatic precipitator. Because the temperature of these inlet gases will indicate whether the source is complying with federally enforceable emission limits in the permit, the requirement to operate and maintain the temperature monitor also is federally enforceable. However, the requirement as written in the draft permit is currently enforceable only by the state.

In another example, the same permit contains a state-only requirement for the source to maintain a logbook for a federally required continuous monitoring system. Such a requirement should be federally enforceable, even though there may already be federally enforceable requirements sufficient to ensure proper operation of the monitoring system. Requirements that will ensure the proper operation of federally required monitoring systems are part of the underlying requirements, and therefore are federally enforceable.

B. Title V permits must contain monitoring, recordkeeping, and reporting requirements sufficient to assure compliance with all applicable limits. The permitting authority must write these requirements in sufficient detail to allow no room for interpretation or ambiguity in meaning.

According to 40 C.F.R. 70.6(c)(1), Title V permits must contain monitoring, recordkeeping, and reporting requirements sufficient to assure compliance with the terms and conditions of the permit. These requirements must involve the best compliance methods practicable, taking into consideration the source's compliance history, likelihood of violating the permit,and feasibility of the methods.

Ohio's Title V permits currently rely too heavily on AP-42 emission factors. These emission factors were not meant to be a basis of compliance with part 70. They are a last resort in compliance assurance (and are not a viable option at all when their reliability ratings are low). In most instances in which AP-42 emission factors are used, more reliable compliance methods are available.

The permitting authority need not impose onerous compliance assurance requirements, but it cannot allow sources to use emission factors as an escape from monitoring, recordkeeping, and reporting activities.

In addition to implementing appropriate compliance methods, the monitoring, recordkeeping, and reporting requirements must be written in sufficient detail to allow no room for interpretation or ambiguity in meaning. Requirements that are imprecise or unclear make compliance assurance impossible.

For example, some Title V permits require monitoring devices to be "installed, calibrated, operated, and maintained in accordance with the manufacturer's specifications," without explaining in detail the steps in these processes or the manufacturer's specifications. These steps must be explained in detail in order for such a requirement to have any meaning. The description of plant activities need not be exhaustive, but they must be specified in the permit if they would significantly affect the source's ability to comply. Leaving the source to follow "manufacturer's specifications" does not help direct the source toward compliance.

In some instances, manufacturer's specifications may not even exist. Many Title V permits contain ambiguous phrases, such as "if necessary." For example: "If necessary, the permittee shall maintain monthly records . . ." The phrase "if necessary" should be removed altogether; the permit should specify exactly what is necessary. In this example, the permit should either precisely explain the situation that would necessitate monthly records, or simply require monthly records at all times. Ambiguous language hampers the source in its duty to independently assure compliance, and leaves legal requirements open to interpretation.

C. Title V permits do not require the submission of an emission control action plan until 60 days after final issuance of the permit, in violation of OAC 3745-25. Although emission control action plans may no longer be critical due to improvements in air quality, Ohio should resolve the deficiency by changing the permits to comply with the rule or by changing the rule itself.

**Applicability of 112(r) and Title IV in the Title V permit.**

We understand from a October 16, 2001, e-mail from Tom Rigo to staff, that OEPA is immediately making changes to the Title V permit to state applicability to 112(r) and Title IV. We are appreciative of this effort and look forward to the timely incorporation of this language in the Title V permits.

**Identification of origin and authority of each permit term and condition in the Title V permit.**

40 C.F.R. 70.6 (a)(1)(i) requires that the Title V permit state the origin of and authority for each term and condition in the permit. Ohio's permits do list the origin and authority on an emission unit basis. It is clear that part 70 and the OAC envision that the origin and authority would be listed on a term and condition basis. For this reason we would like confirmation that OEPA is planning on revising the Title V permit format to include the origin of and authority for each term and condition.

**The statements of basis must conform to the guidelines we will provide to you under separate cover.**

40 C.F.R. 70.7(a)(5) requires that each draft permit must be accompanied by a statement that sets forth the legal and factual basis for the draft permit conditions. Although we recognize that there is little information available to judge the adequacy of a statement of basis besides this requirement, we concur with the comments made by the commentors alleging that Ohio's statements of basis do not meet the intent of part 70. We are, therefore, committing to provide OEPA with some guidelines that will be useful in meeting the intent of part 70. OEPA must follow these guidelines in preparing all future statements of basis to resolve this issue.

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## Office of Inspector General—Evaluation Report

AIR

EPA AND STATE PROGRESS IN ISSUING TITLE V PERMITS

Report No. 2002-P-00008, March 29, 2002

### Executive Summary

To reduce violations of air pollution laws and improve the enforcement of those laws, Title V of the 1990 Clean Air Act (Act) requires that all major stationary sources of air pollutants obtain a permit to operate. Translating and consolidating the applicable air pollution requirements for major stationary sources into site-specific, legally enforceable permit limits is a complex, time-consuming, and resource intensive process. Nonetheless, in passing Title V, Congress provided the statutory authority, fee collection authority, and expectation that all Title V permits would be issued by November 1997, seven years after it passed the Act. However, over a decade later, only 70 percent of the sources have been issued Title V permits.

PURPOSE

The Office of Inspector General (OIG) initiated this evaluation at the request of U.S. Environmental Protection Agency (EPA) Region 5 management because they were concerned about the progress state and local air pollution control agencies (state and local agencies) were making in issuing Title V permits under the Act. In planning the evaluation, we expanded the scope to include other EPA regions and states because problems in issuing Title V permits were not isolated to Region 5. The objectives of our evaluation were to identify:

- Factors delaying the issuance of Title V permits by selected state and local agencies, and
- Practices contributing to more timely issuance of permits by selected state and local agencies.

RESULTS IN BRIEF

*Lack of State Resources, Complex EPA Regulations, and Conflicting Priorities Contributed to Permit Delays*

Nationwide, as of December 31, 2001, state and local agencies had issued 70 percent (13,036 of 18,709) of the required Title V permits. Of 112 state and local agencies approved to administer the Title V program, only 4 state and 17 local agencies had issued all of their Title V permits. In the six states we reviewed, key factors delaying the issuance of Title V permits included insufficient state resources, complex EPA regulations, and conflicting state priorities.

• *Insufficient resources.* Of the six state agencies reviewed, three had problems with resources or staffing. For example, the Massachusetts Department of Environmental Protection collected $1.3 million in Title V fees in 2000, but program costs were $1.9 million for the year.

• *Complex regulations and limited guidance.* In each of the six state agencies reviewed, one or more permit writers reported having difficulty understanding and resolving questions on EPA's complex air toxics regulations and reported having difficulty using EPA's limited guidance to establish adequate site-specific monitoring requirements.

• *Conflicting priorities.* In addition to Title V operating permits, each of the state agencies also issue construction permits to new sources and to sources that are making significant changes to their operations permits that they must act on within specified time limits. Two agencies took deliberate action to ensure that staff were not forced to work on construction permits rather than Title V operating permits.

As a result, many sources do not have the operating permits that were designed to reduce source violations, improve regulatory agency enforcement abilities, establish site-specific monitoring requirements, increase source accountability, and ensure adequate public involvement in the permitting process.

*EPA Oversight And Technical Assistance Had Limited Impact*

EPA did not provide adequate oversight and technical assistance to state and local Title V programs, and did not use the sanctions provided in the Act to foster more timely issuance of Title V permits.

• *Fee reviews of many state and local agencies not performed.* From January 1998 to December 2001, EPA had only evaluated 28 of 112 state and local agencies regarding how they were assessing and managing Title V fees. These reviews are needed to identify potential resource issues at state and local agencies.

• *Revisions to Title V regulations not completed.* While EPA issued regulations in 1992, due to concerns about selected provisions, EPA has been working to revise them since 1994. State officials indicated that dealing with repeated draft and proposed revisions to Title V regulations introduced an element of uncertainty that also contributed to delays in issuing Title V permits.

• *Insufficient data collected.* State and local agencies were not required to consistently provide the information EPA identified as being needed to adequately oversee the Title V program. EPA collected information from all state and local agencies on the number of permits issued, but did not maintain an adequate database on specific delays in issuing individual permits.

• *Act's provisions to take action not used.* Although most state and local programs did not issue their permits within three years of EPA approval, EPA has not used the Act's provisions for issuing notices of deficiency, sanctions, and program withdrawal when state and local agencies have missed the Act's deadline for issuing initial Title V permits.

As a result, EPA oversight had little impact on the delays experienced by state and local agencies. The perspective of senior EPA officials is that they face a dilemma in trying to take more stringent actions, such as sanctions against state and local agencies, while adhering to agency policies to work with state and local agencies as partners in environmental protection to the maximum extent possible. Also, they believe that the Title V program has limited incentives for both states and industries to proactively address the existing permit backlog.

*Management Support, Partnerships, and Site Visits Contributed to More Timely Issuance of Title V Permits*

In the six states we reviewed, three practices that contributed to the progress that agencies made in issuing Title V operating permits were:

• State agency management support for the Title V program.
• State agency and industry partnering.
• Permit writer site visits to facilities.

Each of these practices contributed to the writing and issuance of Title V operating permits on a more timely basis. Employing one or more of these practices, along with sufficient resources, contributed to Florida and Pennsylvania completing most of their permits before other states. However, EPA has not taken a leadership role in collecting and disseminating information on practices that show promise of helping agencies issue permits on a more timely basis.

RECOMMENDATIONS

We recommend that the Assistant Administrator for Air and Radiation:

- Require EPA regions to conduct fee protocol reviews.
- Revive agency efforts to make air toxics standards easier to incorporate into Title V permits.
- Complete the revisions to the Title V regulations.
- Identify and collect information from regions, states, and local agencies to adequately oversee the Title V program.
- Develop and execute a national plan for addressing implementation deficiencies in Title V programs, including specifying the actions EPA will take to address missed milestone dates for issuing the initial permits.
- Develop a plan for identifying, collecting, and disseminating promising practices on the implementation of Title V programs.

Detailed recommendations are contained at the end of chapters 3 and 4.

AGENCY ACTIONS

In his March 26, 2002 response to the draft report, the Assistant Administrator stated that while state and local agencies have made good progress in issuing initial Title V permits, there is still more work to do. He stated that many of the sources remaining to be permitted are the more complex facilities and that the problems identified in the report continue to be of concern. The Assistant Administrator agreed with the conclusion that more can be done to help this effort and will follow up, within 90 days of issuance of the final report, with an action plan based on the report's findings and recommendations.

The Assistant Administrator also provided comments to several recommendations, which are summarized at the end of chapter 3, and some suggested clarifications that were incorporated into the final report.

A major stationary source is any non-mobile source of air pollution that meets one or more criteria as defined in the 1990 Clean Air Act. The criteria for major stationary source determinations is listed in appendix 1.

Mr. SHIMKUS. And we thank you.

Next, we will hear from Mr. Brock Nicholson, Chief of Air Quality Planning for the North Carolina Department of Environment and Natural Resources. Thank you for joining us, sir, and you are recognized for 7 minutes.

## STATEMENT OF BROCK NICHOLSON

Mr. NICHOLSON. Good afternoon, Mr. Chairman, and members of the subcommittee. I am Brock Nicholson. Today I will—I am going to talk about what I think is right with the current system and then discuss some of our concerns and suggestions for improvement.

I do want to first start out by saying that Mr. Williams, to my left here, will talk about a number of items as a representative of STAPPA/ALAPCO. And as also a member of STAPPA/ALAPCO, we certainly endorse those comments that he will make.

What is right with the current system? I think clearly the current Clean Air Act is a conceptually sound approach. We don't think it is fundamentally broken. Under this system, the EPA sets the national goals for protecting public health and welfare. States have the primary responsibility for program development and implementation.

This program is a reasonable compromise between the Federal Government setting straight national technology standards, I will say as the only approach, and each State operating independently of a national system, perhaps as it was prior to the 1970 amendments.

Currently, the National Air Program complements State programs and areas where it makes sense to have nationwide standards—fuels, mobile sources, major stationary emission sources.

I will summarize a little bit what I have below here and just say that this approach, an air quality management approach as opposed to a straight technology approach, carries with it, though, a burden of extra complexity and cumbersomeness in terms of approval, some of the things that you have just heard about, and I think because of that does cause us problems in the implementation. It is resource-intensive, and so forth.

All in all, though, it is a good approach. If, however, we had a straight technology approach that all parties could buy into, that might be a reasonable alternative. But in practice, what has evolved as the preferred approach is this air quality management approach where we do modeling, we determine what is necessary to attain. But this approach needs to be supplemented with doses of prescribed technology, and what I mean by this is strong national measures.

There are some concerns, however, and I will just touch on it a little bit in the interest of time, where the Act is perhaps too cumbersome, time-consuming, resource-intensive, and perhaps inflexible in terms of implementing it in an efficient and cost-effective way, and perhaps, I should say, expeditious manner.

One of these that I will give as an example of maybe questionable technological requirements or technical requirements or technical soundness is that of designations of non-attainment areas. I think we must find a better way to handle designations. States need more flexibility in meeting designation and planning requirements.

First, the non-attainment label is very much disliked by local officials, because of impacts on economic development and the tag that it gives to the area.

Second, designations are often applied across large areas in ways that make little sense. A common mind-set is that non-attainment areas must be very large to catch all possible contributing sources and to deal with pollution transport. However, the authority to control sources need not apply only in non-attainment areas. A better approach might be the area of—concept of areas of violation, AOVs, and areas of influence, or AOIs.

Under the approach, the AOI is the primary area of sources impacting the violating area, but controls are not limited to just this area. The AOV might then be sized in a manner that best balances the need to advise the public of the public health issue of standards violation and the impacts of designating an area.

In addition, the transport of pollutants across States or regions could be better addressed by other means, including stringent national standards on sources contributing to the broad problem across the region or the country. However, I will say that EPA has generally discouraged the development of this AOV/AOI concept.

Another key concern is the need for consistent national emissions control standards that achieve reductions based on state-of-art technologies. To be of most value to the States, the rule adoption process must be as short as possible, certainly shorter than we have been seeing. Emission source categories that are appropriate for national rules include: major stationary sources, light- and heavy-duty on-road vehicles, including diesel retrofits, off-road engines and equipment, both large and small, and MACT sources.

States also need flexibility to go beyond Federal requirements or act sooner. An example is the North Carolina Clean Smokestacks Bill that you heard a reference to earlier, to address multiple pollutants from coal-fired powerplants. North Carolina believes it is vital to move ahead now with this initiative to protect public health, especially from fine particles and ozone.

Given the uncertainty of EPA and Congressional initiatives, North Carolina and other States are taking similar actions providing leadership and impetus for action at the Federal level. The Clean Air Act should provide encouragement and credits for States that take such initiatives. States clearly need strong support from Federal emissions control standards in order to achieve significant progress in meeting air quality goals.

EPA recently has provided the States with some significant measures in national rules for on-road, heavy-duty diesel truck engines. This rule, as well as the 2004 light-duty gasoline standard, or Tier 2 standard with low sulfur, will achieve reductions that individual States could not otherwise realize. And I might add if these reductions aren't realized through stringent national rules, these are opportunities lost that the States can never make up in their strategies to deal with non-attainment.

While North Carolina and some of our surrounding States will benefit greatly from our Clean Smokestacks Bill, we still need the benefits of these reductions across all States.

Another example is the Southern Appalachian Mountains Initiative, which is recently or currently coming to conclusion. It made some significant policy recommendations regarding controls to reduce ozone, acid deposition, and haze in our region. The SAMI study concludes each SAMI State would receive the most benefit from reductions of emissions from within their own State boundaries.

However, the air quality-related problems being encountered by SAMI's Class I areas would not be resolved by only controlled emissions from within SAMI States; hence, again, the need for national programs.

The eight SAMI States with the general support of other stakeholders have specifically recommended the State—and I quote, "The SAMI States support and will promote strong national multipollutant legislation for electric utility plants to ensure significant sulfur dioxide and nitrogen oxide reductions both inside and outside the SAMI region." The national multipollutant legislation should result in no less than the reductions for sulfur dioxide and nitrogen oxides represented by the administration's Clear Skies Initiative.

Reductions from other source categories should also be considered in national legislation, and such legislation should contain suf-

ficient measures to protect Class I areas. Should national legislation fail to materialize, the States that participated in SAMI will work together to consider regulatory alternatives and to encourage non-SAMI States to participate. Leadership by States ahead of national legislation is encouraged.

And, in summary, I will also mention that four Governors—North Carolina, South Carolina, Georgia, and Tennessee—signed an agreement a year ago called the Southern Air Principles, and in this they charged the State environmental commissioners to come up with a multipollutant strategy for this region, innovative energy and innovative transportation initiatives.

The recommendation specifically given our Governor, who hosted the recent summit, was to support and promote strong multipollutant legislation for electric utility plants to ensure significant reductions of sulfur dioxide and nitrogen oxides and mercury, both in and outside of the Southern Air Principles States. Such State initiatives, when allowed, encouraged, and given proper credit, can provide significant air quality benefit and set precedents for national action.

So, in conclusion, the basic framework of the Clean Air Act is sound, even though one might want to consider we want to say on the air quality management approach, or the more technology approach, we need the technology approach in addition. However, we suggest the following improvements.

States need more flexibility to implement, act quicker, or go beyond Federal requirements. Flexibility should not be used as an excuse to do less. States need strong national regulations to provide a foundation for the State plans and the local specific initiatives to take care of air quality at the local level, and national regulations must not be the lowest common denominator.

Thank you for this opportunity to participate in this area.

[The prepared statement of Brock Nicholson follows:]

PREPARED STATEMENT OF BROCK NICHOLSON, CHIEF OF AIR QUALITY PLANNING, NORTH CAROLINA DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES

Good afternoon, Mr. Chairman and members of the Subcommittee. I am Brock Nicholson, Chief of Air Quality Planning in North Carolina's Department of Environment and Natural Resources. I am testifying today regarding the development and implementation of state air quality programs to meet requirements of the Clean Air Act. Today, I am going to talk about what I think is right with the current system, and then discuss some of our concerns and suggestions for improvements.

*What is Right with the Current System*

The current Clean Air Act is a conceptually sound approach. It is not fundamentally broken. Under this system, the EPA sets the national goals for protecting public health and welfare. States have the primary responsibility for program development and implementation. This approach is a reasonable compromise between the federal government setting straight national technology requirements and each state operating independently of a national system. Currently, the national air program complements state programs in areas where it makes sense to have nationwide standards—fuels, mobile sources, and major stationary emissions sources.

The current system, sometimes called air quality management approach, demands a high level of local, state and federal resources to operate properly. However, it is generally a good way to ensure each state problem is dealt with adequately without excessive compliance costs.

An alternative approach, in the extreme, would be a straight technology prescription by the EPA with a one-size-fits-all requirements for all sources categories. This approach would not rely on computer modeling to limit controls to only those sources shown to be critical for attaining the ambient standards.

There are some days when would like the straight technology approach to avoid the lengthy and resource-intensive modeling demonstrations. In the midst of lengthy arguments over modeling assumptions with various stakeholders, we often think: "Let's just have everyone must put on controls without doing the modeling. If later, more controls are needed to meet the ambient standards, we will prescribe more." Then, we are quickly jerked back to the reality of designing a strategy that will meet the ambient standards in the most cost-effective manner. This is the surgical "air quality management" approach versus the "shotgun" technology approach.

In practice, what has evolved as the preferred approach is the air quality management concept supplemented with doses of prescribed technology. This is a good balance for all stakeholders.

*Concerns and Suggestions Regarding the Current System*

The current system has aspects that are too cumbersome, time-consuming, resource-intensive and sometimes inflexible for the states to develop a program, or State Implementation Plan (SIP), in a manner that is best suited for that area. In other cases, we believe the requirements may not be technically sound. For example, the designations of non-attainment areas need to better set the stage for development of state air plans.

We must find a better way to handle designations. States need more flexibility in meeting designation and planning requirements. First, the "non-attainment" label is very much disliked by local officials because of impacts on economic development. Second, designations are often applied across large areas in ways that make little sense. The mindset is that non-attainment areas must be very large to catch all possible contributing sources and to deal with pollution transport. Also, the authority to control sources need not apply only in non-attainment areas. A better approach might be the concept of Areas of Violation (AOV)/Areas of Influence (AOI). Under this approach, the AOI is the primary area of sources impacting the violating area, but controls are not limited to AOI. The AOV might then be sized in a manner that best balances the need to advise the public of a standard violation area and the impacts of designating an area. In addition, the transport of pollutants across states or regions could be addressed by other means, including stringent national standards on sources contributing to the problem. However, the EPA has discouraged the development of the AOV/AOI concept.

Another key concern is the need for consistent national emissions control standards that achieve reductions based on state-of-the-art technologies. To be of most value to the states, the rule adoption process should be as short as possible. Emission source categories that are appropriate for national rules include:

- Major stationary sources
- Light and heavy-duty on-road vehicles, including diesel retrofits
- Off-road engines and equipment, both large and small
- MACT sources.

States also need flexibility to go beyond federal requirements or act sooner. An example is the North Carolina "Clean Smokestacks Bill" to address multiple pollutants from coal-fired power plants. North Carolina believes it is vital to move ahead now with this initiative to protect public health, especially from fine particles. Given the uncertainty of EPA and Congressional initiatives, North Carolina and other states are taking similar actions providing leadership and impetus for action at the federal level. The Clean Air Act should provide encouragement and credit for states that take such initiatives. States clearly need strong support from federal emissions control standards in order to achieve significant progress in meeting their air quality goals. EPA recently has provided the states with some significant measures in national rules for on-road, heavy-duty diesel engines. The reductions from this rule, as well as the 2004 light-duty gasoline with low-sulfur gasoline standard, will achieve reductions that individual states could not otherwise realize. While North Carolina and some of our surrounding states will benefit greatly from our Clean Smokestacks Bill, we still need the benefits of these reductions across all states.

As another example the Southern Appalachian Mountains Initiative (SAMI) has recently made some significant policy recommendations regarding controls to reduce ozone, acid deposition and haze in our region. The SAMI study concludes: "Each SAMI state would receive the most benefit from reductions of emissions from within their own state boundaries. However, the air quality related problems being encountered by SAMI's Class I areas would not be resolved by only controlling emission within the SAMI states."

The eight SAMI states, with the consensus of other stakeholders, have specifically recommended: "The SAMI states support and will promote strong national multi-pollutant legislation for electric utility plants to assure significant sulfur dioxide and nitrogen oxides reductions both in and outside the SAMI region. This national

multi-pollutant legislation should result in no less than the reductions for sulfur dioxide and for nitrogen oxides represented by the Administration's Clear Skies Initiative. Reductions from other source categories should also be considered in national legislation, and such legislation should contain sufficient measures to protect Class I areas. Should national legislation fail to materialize, the states that participated in SAMI will work together to consider regulatory alternatives and to encourage non-SAMI states to participate. Leadership by states ahead of national legislation is encouraged."

In addition to the SAMI effort, the Governors of North Carolina, Tennessee, Georgia and South Carolina agreed to a set of "Southern Air Principles," which recommend multi-pollutant controls for coal-fired power plants and innovative energy and transportation programs that benefit air quality. These recommendations were released at the Governors' Summit on Air Quality hosted by North Carolina Governor Mike Easley on May 10, 2002. The specific recommendation on utility plants is to: Support and promote strong multi-pollutant legislation for electric utility plants to assure significant reductions of sulfur dioxide, nitrogen oxides and mercury both in and outside of the Southern Air Principles states. Such state initiatives—when allowed, encouraged and given proper credit—can provide significant air quality benefit and set precedents for national action.

*Conclusions*

In summary, the basic framework of Clean Air Act is sound. However, we suggest the following improvements:

- States need more flexibility to implement, act quicker or go beyond federal requirements. However, this flexibility should not be used as an excuse to do less.
- States need strong national regulations to provide a foundation for state plans.
- National regulations must not be the "lowest-common denominator."

Thank you for this opportunity to participate in this hearing.

Mr. SHIMKUS. Thank you.

Next, Mr. Art Williams, Director of the Jefferson County Air Pollution Control District, on behalf of STAPPA/ALAPCO. I yield 7 minutes.

## STATEMENT OF ARTHUR L. WILLIAMS

Mr. WILLIAMS. Thank you, Mr. Chairman. Good afternoon, Mr. Chairman, members of the subcommittee. I am Art Williams, Director of the Jefferson County Air Pollution Control District, and today I am testifying on behalf of the State and Territorial Air Pollution Program Administrators and the Association of Local Air Pollution Control Officials. Perhaps we have the longest acronym at the table. I current serve as immediate past president of that organization.

STAPPA and ALAPCO are national associations of air quality officials in 54 States and territories in over 165 major metropolitan areas across the country. We are pleased to have this opportunity to provide our perspectives regarding implementation of the Clean Air Act.

Notwithstanding the impressive progress associated with implementation of the 1990 Clean Air Act, progress that Federal, State, and local governments have achieved together, our Nation continues to face air quality and public health challenges of substantial proportions. I would like to touch on several of the key challenges that remain and a few areas where enhancements can be made.

Perhaps the most complex air quality problem we face is achievement and maintenance of the health-based national standards for particulate matter and ozone. Fine particulate matter, or $PM_{2.5}$, poses the greatest health risk of any air pollutant resulting in as

many as 30,000 premature deaths each year and a variety of adverse health impacts.

Based on preliminary air quality monitoring data, it appears that $PM_{2.5}$ concentrations in 250 U.S. counties located primarily in the east and in California exceed this health-based standard. Attainment of the ozone standard also poses significant challenges. Current data show that more than 300 counties measure exceedances of the 8-hour ozone standard.

Now that the courts have cleared the way for EPA, States, and localities to move forward, it is essential that EPA take swift action to establish implementation strategies for $PM_{2.5}$ and 8-hour ozone. Further, STAPPA and ALAPCO urge timely and effective control programs for sources that contribute significantly to these air quality problems, including powerplants and non-road heavy-duty diesels.

The magnitude of emissions from powerplants and the serious public health and welfare implications these emissions have make controlling electric utilities a top priority. Fortunately, there are tremendous opportunities for doing so in a very cost-effective manner.

Among the most important steps Congress can take to address air pollution is to establish a comprehensive national multipollutant approach for cleaning up outdated powerplants and ensuring that new plants are dramatically cleaner.

STAPPA and ALAPCO endorse the concept of a comprehensive strategy for reducing emissions from electric utilities and, to that end, recently adopted a set of principles upon which we believe a viable multipollutant approach should be based. Our associations believe that such an approach should address all significant emissions from electric power generation, establish stringent emission reduction goals reflecting the best-available control technology, set expeditious deadlines, supplement, not supplant, provisions of the existing Clean Air Act, encourage energy efficiency, and provide flexibility to industry, including trading. More detail is provided in my written statement.

With respect to the regulation of mobile sources and their fuels, we have achieved great progress over the past decade. Perhaps most laudable are two landmark rulemakings issued by EPA in recent years, including the Tier 2 motor vehicle emission standards and low-sulfur gasoline programs, and the 2007 heavy-duty diesel engine and fuel rule.

Our top remaining mobile source priority is the rigorous control of emissions from non-road, heavy-duty diesel engines, including construction, industrial, and agricultural equipment. STAPPA and ALAPCO urge that non-road, heavy-duty diesel engines and their fuels be subject to Federal standards equivalent to those for on-road, heavy-duty diesels and in the same timeframes.

My written testimony includes STAPPA and ALAPCO specific recommendations in this regard. The serious and pervasive public health threat posed nationwide by emissions of hazardous air pollutants, or HAPs, is another continuing concern of our associations. According to EPA, more than 200 million people in the United States live in areas where the lifetime cancer risk from exposure

to HAPs exceeds 1 in 100,000. Moreover, approximately 3 million people face a lifetime cancer risk of 1 in 10,000.

One of the primary sources of HAPs is motor vehicles, including cars and trucks. Unfortunately, EPA's action relative to the Clean Air Act's requirement to regulate mobile sources' air toxics is deficient. We believe far more is necessary at the Federal level to adequately address this critical public health threat.

With respect to industrial sources of hazardous air pollution, the Clean Air Act called for EPA to establish technology-based standards for a large number of source categories by November 2000. Regrettably, EPA did not fulfill its obligation. Accordingly, State and local air pollution control agencies may be obligated to establish these standards on a case-by-case basis for all source categories for which EPA has not set these standards.

Moreover, each day that these sources remain uncontrolled, many millions of people continue to be exposed to hazardous pollutants. EPA must do everything in its power to establish these standards as quickly as possible.

The Clean Air Act's NSR program, New Source Review, is a fundamental component of our Nation's clean air program. However, we believe that this program can be improved. In short, STAPPA/ALAPCO support reform, not replacement, of the existing NSR program with two provisos. First, such reforms must be limited to major modifications and not extended to new sources. And, second, under no circumstances should reforms result in any less protection of the environment than is derived under the current program.

One final issue on which I would like to touch is Federal funding for State and local air pollution agencies. The magnitude of our air quality problem and the associated health effects make it clear that funding for the control of air pollution should be a top priority. Unfortunately, the reality is that State and local air agencies are underfunded.

STAPPA and ALAPCO, in cooperation with EPA, conducted a study of air program funding and estimated that Federal grants to State and local air pollution control agencies, under Section 105 of the Clean Air Act, fell short of our needs by $100 million a year. While we have received modest funding increases in recent years, these increases are not enough.

Unless our programs receive a substantially greater boost in funding, we will continue to face a serious financial shortfall, which will adversely affect our ability to protect and improve air quality.

Once again, I thank you for this opportunity to provide STAPPA/ALAPCO's perspectives on the implementation of the Clean Air Act.

[The prepared statement of Arthur L. Williams follows:]

PREPARED STATEMENT OF ARTHUR L. WILLIAMS, DIRECTOR, AIR POLLUTION CONTROL DISTRICT OF JEFFERSON COUNTY, KENTUCKY ON BEHALF OF THE STATE AND TERRITORIAL AIR POLLUTION PROGRAM ADMINISTRATORS AND THE ASSOCIATION OF LOCAL AIR POLLUTION CONTROL OFFICIALS

Good afternoon, Mr. Chairman and members of the Subcommittee. I am Arthur Williams, Director of the Air Pollution Control District of Jefferson County, Kentucky. I am testifying today on behalf of STAPPA—the State and Territorial Air Pollution Program Administrators—and ALAPCO—the Association of Local Air Pollution Control Officials, of which I currently serve as Immediate Past President. STAPPA and ALAPCO are the national associations of air quality officials in 54

states and territories and over 165 major metropolitan areas across the country. The members of STAPPA and ALAPCO have primary responsibility under the Clean Air Act for implementing our nation's air pollution control laws and regulations and, moreover, for achieving and sustaining clean, healthful air for our citizens. Accordingly, we are pleased to have this opportunity to provide our perspectives regarding implementation of the Clean Air Act.

On November 15, 1990, when President Bush signed into law the Clean Air Act Amendments of 1990, he put in place a precedent-setting statute that completely revamped our nation's approach to improving air quality and declared it a "true red-letter day for all Americans." At the time, STAPPA and ALAPCO endorsed the statute as an earnest commitment to environmental protection and believed that the comprehensive air pollution control strategy established in the Act provided state and local regulators with the tools we needed to make meaningful strides toward achieving our clean air goals. Eleven and a half years later, our associations believe our assessment was accurate and that the Act has served as the firm foundation for many success stories over the past decade.

Prior to the 1990 amendments, our country spent decades struggling with a ubiquitous, perilous and seemingly unrelenting air pollution problem. About 100 areas across the country, home to about 130 million people, exceeded the national health-based standard for ozone; over 40 areas, with a combined population of over 55 million, violated the standard for carbon monoxide; 85 areas, in which 25 million people resided, violated the coarse particulate matter ($PM_{10}$) standard; billions of pounds of toxic chemicals were emitted into our air every year; millions of tons of sulfur dioxide ($SO_2$) emissions contributed to acid rain; and our production of ozone-depleting substances was leading us directly toward devastating damage to our stratospheric ozone layer.

Clearly, we were in need of a fresh start and a clear direction and we got them. The 1990 amendments homed in on the crux of our air pollution problems and framed a comprehensive strategy for attaining the health-based National Ambient Air Quality Standards (NAAQS), cleaning up mobile sources and their fuels, decreasing toxic air pollution, reducing acid rain and protecting the stratospheric ozone layer. As a result, Americans today are breathing cleaner air and reaping the benefits of a cleaner environment.

More than two-thirds of the cities that in 1990 violated health-based national standards for at least one of the six criteria pollutants now comply with those standards; about 1.5 million tons of industrial toxic air pollutants are expected to be eliminated annually due to rules issued since 1990; rainfall in the eastern United States is 25 percent less acidic, due to reductions in $SO_2$ emissions on the order of 6.7 million tons per year; and we have stopped production in the U.S. of the most harmful ozone-depleting substances. What is more, we have achieved these milestones while, at the same time, experiencing strong economic growth. In fact, since 1970, when the first Clean Air Act was enacted, Gross Domestic Product has increased by 158 percent, vehicle miles traveled by 143 percent, energy consumption by 45 percent and U.S. population by 36 percent. Further, it is estimated that by 2010, implementation of the Clean Air Act will prevent 23,000 incidences of premature mortality, 67,000 cases of acute and chronic bronchitis, 1.7 million asthma attacks, 4.1 million lost work days and 31 million days on which activity is restricted.

Notwithstanding this impressive progress associated with implementation of the Clean Air Act—progress that federal, state and local governments have achieved together—our nation continues to face air quality and public health challenges of substantial proportions. In addition, while we continue to maintain that the Clean Air Act, in general, offers a solid and viable framework for our efforts, the benefit of almost 12 years of hindsight allows us to pinpoint those aspects of the statute and the national clean air program that we believe can be improved or augmented. I would like to elaborate on several of the key challenges that remain and a few areas where enhancements can be made.

*Fine Particulate Matter and Eight-Hour Ozone Standards*

Perhaps the most complex air quality problem we face is achievement and maintenance of the health-based NAAQS for particulate matter and ozone.

In 1997, EPA established a new standard for fine particulate matter ($PM_{2.5}$). Although we are still working to complete the data-gathering efforts necessary to determine which areas of the country violate the $PM_{2.5}$ standard, one thing is very clear: $PM_{2.5}$ poses the greatest health risk of any air pollutant, resulting in as many as 30,000 premature deaths each year. Additionally, fine particles are responsible for a variety of adverse health impacts, including aggravation of existing respiratory

and cardiovascular disease, damage to lung tissue, impaired breathing and respiratory symptoms, irregular heart beat, heart attacks and lung cancer.

Fine particles are not only emitted into the atmosphere directly from combustion processes, they are also formed secondarily in the atmosphere from such precursor emissions as oxides of nitrogen ($NO_X$), $SO_2$ and ammonia; in addition to their adverse health consequences, fine particles also contribute to regional haze. Based on preliminary air quality monitoring data, it appears that $PM_{2.5}$ concentrations in 250 counties in the U.S.—located primarily in the East and in California—exceed the health-based standard.

Overall, progress in attaining clean air has been slowest with respect to ground-level ozone. In the southern and north central regions of the U.S., ozone levels have actually increased in the past 10 years, and in 29 national parks, ozone levels have risen by more than 4 percent. A significant factor in this trend is the increase we have experienced in $NO_X$ emissions, which are not only a precursor to ozone, but also a contributor to such public health and welfare threats as acid rain, eutrophication of water bodies, regional haze and, as I just mentioned, secondary $PM_{2.5}$. Over the past 30 years or so, $NO_X$ emissions have increased by almost 20 percent, largely due to emissions from nonroad engines and power plants. Current data show that more than 300 counties measure exceedances of the eight-hour ozone standard.

In 1997, EPA revised the health-based standard for ozone by establishing an eight-hour standard, representing greater protection of public health. Litigation over both the new $PM_{2.5}$ standard and the revised ozone standard has delayed their implementation; however, the courts have now cleared the way for EPA, states and localities to move forward. Not only do STAPPA and ALAPCO urge swift action by EPA in establishing implementation strategies for $PM_{2.5}$ and eight-hour ozone, we also urge timely and effective control programs for sources that contribute significantly to these air quality problems, including power plants and nonroad heavy-duty diesels.

*Power Plants*

Electric utilities are one of the most significant sources of harmful air emissions in the U.S., responsible for 64 percent of annual $SO_2$ emissions, which contribute to acid rain and the formation of $PM_{2.5}$, and 26 percent of $NO_X$ emissions.

In addition, electric utilities are responsible for 37 percent of U.S. carbon dioxide emissions and emit upwards of 67 hazardous air pollutants (HAPs)—including nickel, arsenic and dioxins—in substantial quantities. In fact, power plants are the major emitter of hydrochloric acid, which is the HAP emitted in the greatest quantity in the U.S, and are also responsible for more than one-third of anthropogenic mercury emissions. The persistent and bioaccumulative nature of mercury makes it of particular concern relative to aquatic ecosystems, where it can contaminate aquatic life and pose a serious threat to humans who consume the contaminated species. Based on just such a threat, over 40 U.S. states and territories have issued fish consumption advisories for mercury for some or all water bodies in their jurisdictions.

The magnitude of emissions from power plants, and the serious public health and welfare implications these emissions have, make controlling electric utilities a top priority. Fortunately, there are tremendous opportunities for doing so in a very cost-effective manner. Our nation's electricity generation infrastructure is aged, comprised of many 30-, 40- and 50-year-old plants that continue to operate without modern pollution control technology. Among the most important steps Congress can take to address air pollution is to establish a comprehensive national multi-pollutant approach for cleaning up outdated power plants and ensuring that new plants are dramatically cleaner.

STAPPA and ALAPCO endorse the concept of a comprehensive strategy for reducing emissions from electric utilities and, to that end, recently adopted a set of principles upon which we believe a viable multi-pollutant approach should be based. Our associations believe that such an approach should address all significant emissions from electric power generation and, if properly structured, can increase and accelerate protection of public health and the environment, reduce pollution more cost-effectively than incremental approaches and offer greater certainty to both industry and regulators.

In our principles, STAPPA and ALAPCO call for an integrated approach based on an expeditious schedule that allows us to reduce emissions as rapidly as we can. Such an approach—which should supplement, and not supplant, provisions of the existing Clean Air Act—should include deadlines that are synchronized with other clean air programs. To ensure steady progress toward the final compliance deadline, interim deadlines should be established, with the first interim compliance requirements taking effect quickly.

A viable multi-pollutant approach will also establish the most stringent enforceable national emission reduction goals feasible by capping emissions at levels that reflect the installation of technology no less stringent than best available controls on all existing units nationwide, with existing power plants required to meet a minimum level of control by the final compliance deadline.

STAPPA and ALAPCO also believe that in meeting these emission goals, the regulated community should be afforded flexibility, including an emissions trading mechanism with appropriate limitations and protections against any adverse health or environmental impacts. If emissions allowances are required under a multi-pollutant approach, then they should be allocated equitably, and provisions for allocating to new sources should be established. Further, sources should be encouraged to reduce emissions as soon as possible and, to the extent early reduction credits are provided for, the use of such credits should be appropriately limited.

On the matter of New Source Review (NSR), STAPPA and ALAPCO believe firmly that power plants—both new and existing—must continue to be subject to NSR requirements. Although I will elaborate on STAPPA and ALAPCO's perspectives on NSR and NSR reforms, in general, later in my testimony, I would like to offer the following regarding our views with respect to NSR for power plants.

Current NSR requirements for new sources should remain intact, including, among others, those related to the installation of control technology (i.e., the Lowest Achievable Emission Rate in nonattainment areas and Best Available Control Technology in attainment areas), the acquisition of offsets in nonattainment areas and the protection of air quality increments to guard against adverse local air quality impacts in attainment areas. Further, while certain NSR reforms for existing sources are definitely in order, such sources making major modifications to existing units should be required to install the best available controls on affected units at the time of the modification, acquire any emissions allowances required to address emission increases and ensure against adverse local health or environmental impacts.

In addition, a multi-pollutant approach to reducing emissions from power generation should strongly encourage the most efficient use of any fuel used as input to electric generation or process energy sources, as well as energy efficiency, energy conservation and renewable electric energy. Further, it should support efforts to develop and deploy consistent approaches for distributed resources to mitigate the impacts of small units not otherwise covered by a national multi-pollutant strategy.

Finally, a viable multi-pollutant strategy will ensure that regions, states and localities retain their authority to adopt and/or implement measures—including local offset requirements—that are more stringent than those of the federal government.

As our nation approaches the issue of a multi-pollutant strategy for one of our most significant sources of air emissions, we must do so in a way that institutes an appropriately rigorous emissions reduction scheme on a timely schedule and compels the use of state-of-the-art technology, commensurate not only with the substantial contribution of power plants to our nation's continuing air quality and public health challenges, but also with the level of reductions we will garner from new regulatory programs addressing other big-emitting sources, like passenger cars and heavy-duty diesel engines.

*Nonroad Heavy-Duty Diesel Engine and Fuels*

With respect to the regulation of mobile sources and their fuels, we have achieved great progress over the past decade. Perhaps most laudable are two landmark rulemakings issued by EPA in recent years. In December of 1999, the agency promulgated Tier 2 motor vehicle emission standards and a national low-sulfur gasoline program. The following December, the agency issued a rule (the 2007 Diesel Rule) establishing tighter engine standards for onroad heavy-duty diesels, such as big diesel trucks, and a commensurately stringent cap on sulfur in onroad diesel fuel.

Notwithstanding these truly remarkable accomplishments that will yield tremendous public health and environmental benefit across the entire country, we still have more work to do in reducing emissions from mobile sources and fuels. First and foremost in this regard is the rigorous control of emissions from the last really big mobile source category remaining: nonroad heavy-duty diesel engines (HDDEs), including construction (e.g., bulldozers and excavators), industrial (e.g., portable generators, airport service equipment and forklifts) and agricultural (e.g., tractors, combines and irrigation pumps) equipment.

Nonroad HDDEs are huge contributors to elevated levels of ozone and $PM_{2.5}$—representing a substantial and growing share of the emissions inventories for both $NO_X$ and PM—thus posing a substantial threat to public health, including, among other things, premature mortality from exposure to $PM_{2.5}$, as I discussed earlier. In fact, the aggregate $NO_X$ and PM emissions from nonroad HDDEs exceed those from all

of the nation's highway diesel engines. In addition, the Clean Air Scientific Advisory Committee has concluded that diesel exhaust is a likely human carcinogen at environmental levels of exposure, further heightening the need to take swift and aggressive action to control emissions from nonroad HDDEs. Given the limited authority states and localities have to regulate heavy-duty engines and their fuels, rigorous new federal standards for nonroad HDDEs and nonroad diesel fuel—equivalent to those for onroad HDDEs and fuels and in the same timeframes—are imperative.

STAPPA and ALAPCO have been advocating such new nonroad standards for several years. Specifically, our recommendations are based on several key principles that include the following: 1) availability of 15-ppm low-sulfur nonroad diesel fuel beginning in June 2006, subject to the same flexibilities and schedules provided under the onroad low-sulfur diesel fuel program; 2) promulgation of Tier 3 nonroad HDDE standards for PM (for all horsepower engines covered by the rule), based on emission reductions of 90+ percent (similar to the PM reductions achieved by the onroad heavy-duty diesel rule) to be fully applicable in 2007; 3) promulgation of Tier 4 nonroad HDDE standards for $NO_X$ (for 50 to 750 hp engines), based on emission reductions of 95+ percent (similar to the reductions achieved by the onroad heavy-duty diesel rule), to be phased in between 2007 and 2010; and 4) a strong program to ensure that in-use emissions are not compromised by durability issues, the use of defeat devices or other factors.

Unless emissions from nonroad HDDEs are sharply reduced, it is very likely that many areas of the country will be unable to attain and maintain national health-based air quality standards for ozone and PM. Moreover, a nonroad heavy-duty diesel rule that establishes engine and fuel standards equivalent to those for onroad HDDEs and in the same timeframes will yield enormous public health benefits. EPA must take full advantage of the opportunity to adopt meaningful and timely controls for nonroad HDDEs and their fuels.

*Hazardous Air Pollutants*

The serious and pervasive public health threat posed nationwide by emissions of hazardous air pollutants (HAPs) is another continuing concern of STAPPA and ALAPCO. Just last week, EPA released the results of its National-Scale Air Toxics Assessment (NATA), which provides nationwide estimates of exposure and health risks associated with 32 HAPs. According to EPA, more than 200 million people in the U.S. live in areas where the lifetime cancer risk from exposure to HAPs exceeds 1 in 100,000. Moreover, approximately 3 million face a lifetime cancer risk of 1 in 10,000. Considering that EPA has established 1 in 1,000,000 as the generally acceptable level of risk, these estimates not only illustrate the pervasive nature of the threat posed by HAPs, they also speak to the level of effort that will be required to reduce the risk and the high level of priority that should be placed on doing so.

According to EPA's data and information collected by state and local agencies, one of the primary sources of HAPs is motor vehicles, including cars and trucks. EPA has estimated that approximately 50 percent of all national HAP emissions, which do not include diesel exhaust, comes from mobile sources. The agency has further estimated that for more than 100 million people, the combined upper-bound lifetime cancer risk from mobile source air toxics exceeds 1 in 100,000.

In recognition of the health impacts of mobile source air toxics and the limited capacity of states and localities to directly regulate mobile sources and fuels, Congress included in section 202(l) of the 1990 Clean Air Act a requirement for EPA to promulgate regulations to control mobile source emissions of toxic air pollution. Specifically, the Act mandated that "[t]he regulations shall contain standards for such fuels or vehicles, or both, which the Administrator determines reflect the greatest degree of emission reduction achievable through the application of technology which will be available . . . The regulations shall, at a minimum, apply to emissions of benzene and formaldehyde." Unfortunately, EPA's action relative to this statutory requirement—a December 2000 rulemaking—is deficient. Instead of aggressively addressing mobile source air toxics in a manner consistent with section 202(l) and proportionate to the risk posed, the rule calls for nothing more than the status quo and merely contemplates additional regulation in 2004, if further study warrants it. Clearly, far more is necessary at the federal level to adequately address this critical public health threat.

With respect to industrial sources of toxic air pollution, the Clean Air Act called for EPA to establish technology-based standards for a large number of source categories by November 2000. These standards—known as MACT (Maximum Achievable Control Technology) standards—were to require new sources to apply state-of-the-art technology and existing sources to achieve reductions equal to those achieved by the top performing existing sources. Regrettably, EPA has not fulfilled its obligation; more than 18 months after the statutory deadline, 36 MACT standards cov-

ering 62 source categories still have not been established. Under the section 112(j) of the Clean Air Act, state and local air pollution control agencies are obligated to establish MACT on a case-by-case basis for all source categories for which EPA has not set standards. Although the agency has taken regulatory steps to delay this state and local obligation, environmental groups have objected and it is unclear what the section 112(j) case-by-case MACT regulation will ultimately require. More importantly, however, each day that these sources remain uncontrolled, many millions of people continue to be exposed to hazardous pollutants. EPA must do everything in its power to establish these standards as quickly as possible.

In addition to calling for MACT standards, the Clean Air Act calls for Residual Risk standards, to reduce the risks that remain after implementation of the MACT standards. EPA is required to establish Residual Risk standards eight years after the issuance of MACT standards. However, EPA's delay in establishing MACT standards has also delayed establishment of the health-protective Residual Risk standards. To minimize the public's exposure to dangerous toxic air pollution, EPA must work diligently to establish Residual Risk standards as quickly as possible.

*New Source Review*

The Clean Air Act's NSR program is a fundamental component of our nation's clean air program. For the past 25 years, NSR has been instrumental in achieving millions of tons of emissions reductions that otherwise would not have occurred. Air quality in the U.S. is decidedly better because of this program. However, notwithstanding the pivotal role NSR has played in environmental protection and the fact that for new sources the program is working well, there is broad consensus that the program can be improved with respect to requirements for major modifications to existing sources. Over the past eight years, STAPPA and ALAPCO have worked with EPA and other stakeholders to develop recommendations in this regard. During that time, our associations have gone on record in favor of reforms to the NSR process, and we continue to hold that position.

Although STAPPA and ALAPCO do not believe that the current NSR program is preventing industry from expanding or from increasing efficiency, we do believe that, with respect to major modifications, certain flexibilities should be afforded to sources that install the best controls. For example, our associations have agreed that sources that install the best available controls today should be afforded a clean unit exemption—that is, an exemption from further NSR for a limited time into the future. Similarly, we have supported a plant-wide applicability limit (PAL), provided it declines over time to a level reflecting installation of best available controls and requires all significant new sources constructing under the PAL to install the best available controls.

In short, STAPPA and ALAPCO support reform, not replacement, of the existing NSR program with two provisos: 1) such reforms should be limited to major modifications and 2) under no circumstances should reforms result in any less protection of the environment than is derived under the current program.

*Funding*

One final issue on which I would like to touch is federal funding for state and local air pollution control agencies. It is well established that air pollution presents a pervasive national threat to public health and the environment. The health risks are not only significant, we know of no other environmental problem presenting greater risk. Air quality regulators at all levels of government have worked diligently for many years in pursuit of our clean air goals. In spite of the considerable improvements that we have achieved, clean, healthful air nationwide still eludes us.

Over 160 million tons of pollution are still emitted into the air each year. One hundred and twenty one million people live in areas of the country that violate at least one of the six health-based NAAQS, not to mention the many millions of people who are exposed to toxic air pollutants that cause cancer and other health problems. The magnitude of our air quality problem and the associated health effects make it clear that funding for the control of air pollution should be a top priority. Unfortunately, the reality is that state and local air agencies are underfunded. Although states and localities devote significant resources to their air quality programs, air agencies have been operating for years with inadequate financial support from the federal government. As a result, many of our programs are not as robust as they need to be.

A few years ago, STAPPA and ALAPCO, in cooperation with EPA, conducted a study of air program funding and estimated that federal grants to state and local air pollution control agencies under Section 105 of the Clean Air Act fell short of our needs by nearly $100 million a year. While we have received modest funding increases in recent years, these increases are simply not enough, especially in light

of our expanded responsibilities. Unless our programs receive a substantially greater boost in funding, we will continue to face a serious financial shortfall, which will adversely affect our ability to protect and improve air quality. This shortfall will only become worse as greater demands are placed on our programs. Among the air program priorities for which state and local agencies require additional funding are HAPs; fine particulate matter, especially diesel particulate; compliance; inspections; monitoring; data improvements, including maintaining and improving infrastructures, emission inventories and modeling; haze and visibility monitoring; and outreach to and education of the public and regulated community.

We urge Congress to give careful consideration to our request for a $25-million increase in FY 2003 federal grants to state and local air agencies under Sections 103 and 105 of the Clean Air Act.

Finally, notwithstanding the pivotal role of state and local air agencies in our nation's air quality program, we cannot do the job alone. A strong and effective EPA that is adequately funded to carry out its responsibilities is essential to state and local efforts. Accordingly, we encourage Congress to ensure that EPA is also well funded, and to consider increasing, rather than decreasing, EPA's budget to allow the agency to carry out such important activities as those related to fine particulate matter; mobile sources; retrofitting diesel school buses; national emission standards, including toxic air pollutant standards; training; health research and risk estimates; and modeling.

*Conclusion*

Is the Clean Air Act the perfect environmental statute? No. But it has proven to be a good, sound, workable law with the potential to yield clean air in an efficient and cost-effective manner.

As we look back on our implementation of the Clean Air Act over the past 11 and a half years, we can do so with pride for all that we have accomplished. Though challenges still lie ahead, there are many opportunities for rising to these challenges. As we look forward, we should do so in a way that focuses on how we can augment, rather than replace, our current statutory foundation so that the considerable momentum we have created is not disrupted.

Among other things, we can look to and learn from the successes that have resulted from regional initiatives. Beyond the firm foundation provided by strong federal programs, such regional efforts allow for the development of approaches tailored to regional needs.

We can also continue our efforts to identify and implement innovative approaches to addressing air pollution and find ways to capitalize on the flexibilities provided by the law to resolve implementation problems and move ahead. Our past experiences in seeking "common-sense" solutions to difficult issues have demonstrated that the current statute is structured to accommodate change and keep pace with our needs.

Above all, we must remember that the most valuable asset our nation can ever have is a healthy population and a clean environment. In working to achieve our clean air goals, protecting these assets must be our highest priority.

Mr. SHIMKUS. Thank you.

And I do want to commend the panel for really doing a good job on the opening statements. If you are doing that well protecting the air as you are staying on track of time, I think we are in pretty good shape.

Now I would like to welcome Mr. Doug Lempke, Administrator of Air Quality Control Commission, Colorado Department of Public Health and Environment. You have 7 minutes, sir.

## STATEMENT OF DOUG LEMPKE

Mr. LEMPKE. Good afternoon, Mr. Chairman, members of the committee. My name is Doug Lempke, and on behalf of Governor Owens I would like to thank you today for holding this hearing and for giving the State of Colorado the opportunity to share some of our successes under the Clean Air Act and some of our thoughts on implementing emission reduction programs to meet the requirements of the Act.

Colorado's overall experience in working with EPA, particularly Region VIII, has been positive. However, we believe that changes to the Act and overall programs within EPA would enhance the tools States are provided to improve and protect air quality, as well as provide more options to State agencies to implement effective air quality management strategies and demonstrate our ability to maintain compliance into the future.

Over the past 3 years, Colorado has made it a top priority to ensure that our non-attainment areas meet the national standards and will continue to meet them into the foreseeable future. The Denver metro area was once one of two areas in the United States to be out of compliance with five of the national ambient air quality standards.

As of today, EPA has proposed—EPA has approved our redesignation plans for the Denver metro area for all but the pollutant $PM_{10}$, which they have currently proposed for approval in the Federal Register. This makes the Denver metro area the first major metropolitan area in the country to demonstrate its ability to maintain long-term compliance with so many problematic pollutants.

Region VIII EPA has been particularly helpful in completing this process over the past 3 years. And without their upfront involvement in the process, we would not be where we are at today.

Additionally, my comments today will focus on requirements for the vehicle inspection and maintenance programs, EPA's guidance and its usefulness to States, and the Regional Haze Rule. Colorado believes that enormous emission reductions have been achieved over the years through the implementation of the corporate CAFE or the Federal CAFE standards. However, it has been necessary to implement vehicle inspection and maintenance programs in many non-attainment areas to demonstrate compliance with the national standards.

These programs require all vehicles to be tested to identify a small number of higher-emitting vehicles that require repairs. In some cases, such as Denver, enhanced vehicle inspection and maintenance programs are required to be implemented under the Act.

Colorado believes that the technology and programs exist to identify high-emitting vehicles without putting each motorist through the process of visiting the vehicle testing center. These programs utilize remote sensing instrumentation in programs referred to as clean screening or high-emitter programs. We would suggest that the Act and EPA regulations should readily provide for the implementation of these types of programs instead of the traditional I&M programs.

Over the years, EPA has undertaken an enormous effort to develop guidance documents and keep track of numerous memorandum of interpretation of the programs and provisions of the Clean Air Act. These guidance documents and memorandum can be useful resources. However, they are often adhered to as if they were rules and regulations unto themselves.

This often strict adherence to guidance blunts the attempts of State agencies to creatively apply air quality strategies to meet the requirements of the Act. Colorado suggests that guidance documents should be present—should represent a readily approvable avenue to compliance but not the only avenue.

We propose that implementation of the Clean Air Act could be made significantly more flexible by changing the approach that EPA has taken to rely on some of the guidance documents and the memorandum of interpretation.

The Regional Haze Rule focuses its primary emission reduction requirements on major stationary sources of visibility impairing pollutants. However, there are many sources of pollutants that contribute to visibility impairment in our national parks and wilderness areas.

The first phase of the rule focuses on application of emission controls to stationary sources alone through the analysis and application of best-available retrofit control technology. This process is complicated and litigious at best and unworkable at worst. In fact, the DC Circuit Court of Appeals, a little over a week ago, remanded at least part, and some have argued all, of the rule back to EPA over this very issue.

Colorado believes that prior to our moving forward with implementation of the Regional Haze Rule, EPA needs to resolve the provisions that were remanded by the court. Under the rule, Western States were provided with two options to comply with the rule, and at this point at least one of those options is clearly affected by the court ruling.

We were on the verge of making the choice of which approach to follow, but now we must take a step back and understand what the court has done, as well as wait for EPA to take action on the remand. We suggest that EPA and/or Congress resolve the BART issues, as well as any other issues, as expeditiously as possible.

That concludes my testimony. Again, we appreciate the opportunity to testify here today. And if you have any questions, I would be happy to try to answer them.

[The prepared statement of Doug Lempke follows:]

PREPARED STATEMENT OF DOUG LEMPKE, ADMINISTRATOR, AIR QUALITY CONTROL COMMISSION, COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT

Good afternoon Mr. Chairman, members of the Subcommittee, thank you for holding this hearing today and for giving the State of Colorado the opportunity to share some our successes under the Clean Air Act and to share some of our thoughts on implementing emission reduction programs to meet the requirements of the Act.

Colorado's overall experience in working with EPA, particularly Region VIII, has been positive. However, we believe that changes to the Act and overall operations within EPA would enhance the tools states are provided to improve and protect air quality as well as provide more options to state agencies to implement effective air quality management strategies and demonstrate our ability to maintain compliance into the future.

The issue of implementing programs to demonstrate long-term compliance with national standards is a particularly timely subject for the Subcommittee to ask the State of Colorado to address. Over the past three years Colorado has made it a top priority to ensure that our non-attainment areas meet the national standards and will continue to meet them into the foreseeable future. We are particularly proud of our work in the Denver Metro Area.

The Denver Metro Area was once one of the two areas in the United States to be out of compliance with 5 of the National Ambient Air Quality Standards. At one point Denver and Los Angeles shared this ignoble distinction. Denver was out of compliance at one point with the Lead, Nitrogen Oxide, Carbon Monoxide, Ozone, and the $PM_{10}$ standards.

Just three years ago Denver was still listed as a non-attainment area for Ozone, $PM_{10}$, and Carbon Monoxide. As of today EPA has approved our redesignation the Denver Metro area for Ozone and Carbon Monoxide and adopted our long term compliance plans for both. EPA has recently proposed for public comment the approval

of our Denver $PM_{10}$ maintenance plan and request for redesignation. We anticipate full approval of that plan this year.

This makes the Denver Metro Area the first major metropolitan area in the country to demonstrate its ability to maintain long-term compliance with so many problematic pollutants. It has taken us over 20 years to reach this point with a significant amount of effort invested by a great number of people to comply with the federal requirements to improve Colorado's air quality and protect it into the future.

Region VIII EPA has been particularly helpful in completing this process over the past three years. Without their upfront involvement in the process we would not be where we are today. We applaud Region VIII for their participation in our efforts and their willingness to express their opinion on our approaches to demonstrate long-term compliance with the requirements of the Act in regards to returning Colorado non-attainment areas to attainment status. We would suggest that all regional EPA offices be involved in the development of proposed plans for non-attainment areas to demonstrate long-term maintenance of the national standards as EPA has been with Colorado.

This is our greatest success story of implementing the requirements of the Clean Air Act, with the help of EPA. Additionally, my comments today will focus on; 1. Requirements for vehicle inspection and maintenance programs; 2. EPA guidance and its usefulness to states; and 3. The Regional Haze Rule

*Vehicle Inspection & Maintenance Programs*

Colorado believes that enormous emission reductions have been achieved over the years through the implementation of the federal Corporate Average Fuel Economy Standards and that these standards have provided much of the benefit that carbon monoxide and ozone non-attainment areas have relied upon to achieve the national standards. However, it has been necessary to implement vehicle inspection and maintenance programs in many non-attainment areas such as the Front Range Communities in Colorado. These programs require all vehicles to be tested to identify a small number of higher emitting vehicles that require repairs to lower vehicle emissions to acceptable levels. In some cases, such as Denver, enhanced vehicle inspection and maintenance programs are required to be implemented under the Act.

Colorado believes that the technology and programs exist to identify the high emitting vehicles without putting each motorist through the process of visiting the vehicle testing center. We believe that the implementation of such programs could be used to maintain air quality compliance with the national standards and should be readily provided for under the Act. These programs utilize remote sensing instrumentation and can identify vehicles with lower emissions in programs referred to as "Clean Screening" or conversely they can identify vehicles with unacceptably high emissions in what is typically referred to as "Hi Emitter" programs. This technology can be implemented through a variety of passive or active programs. Remote sensing can be conducted in real world or on road settings with subsequent notification to motorists or with motorists actively being pulled over on the spot for confirmatory testing and if necessary be required to repair the vehicle such that the emissions are reduced to acceptable levels.

In addition, current requirements for vehicle inspection & maintenance programs mandate modeling techniques with EPA approved models that have been sharply criticized to over-predict the impacts of mobile source emissions on ambient air quality. In fact, the National Research Council reached this conclusion in their 2001 report where they stated;

> The MOBILE model will continue to be used to determine future emissions-reduction credits that states will receive from implementing I/M or from modifying their current I/M programs. MOBILE is a static, not a dynamic, model and is therefore a simplified representation of emissions changes from I/M. Historically, MOBILE has overestimated emissions reductions from I/M programs. It remains to be seen whether MOBILE6, which is a major revision from MOBILE5, will also overestimate I/M benefits or whether it will be a more accurate representation of I/M benefits. Indications are that MOBILE6 will estimate lower emissions reductions from I/M programs than are estimated by MOBILE5.

While MOBILE6 is an improvement with respect to quantifying the benefits of an I/M program, we are concerned that the model still does not accurately reflect the benefits of the I/M program nor does it quantify the degree of certainty with which it predicts the benefits. As mentioned, it is a static measurement and does not reflect what is actually happening in the real world. While identifying this problem is easy, identifying the solution is not. One problem is that while MOBILE6 is an improvement over MOBILE5 it has taken so long for it to come out that newer data is most likely available that would be more reliable. Therefore, a recommendation

that we would make is that the turnaround time on revisions to the MOBILE model be reduced so that it is not outdated when we receive it.

*EPA Guidance Documents*

Over the years EPA has undertaken an enormous effort to develop guidance documents and keep track of numerous memorandum of interpretation of the programs and provisions of the Clean Air Act. These guidance documents and memorandum can be useful resources, however, they are often adhered to as if they were rules and regulations in and of themselves. This often strict adherence to guidance blunts the attempts of state agencies to creatively apply air quality strategies to meet the requirements of the Act to the situation of the day. All to often we experience circumstances of a situation that are different than the guidance, but we are required to adhere to the guidance and make it fit. This is particularly true in the modeling of emission impacts and permitting of stationary sources.

Colorado suggests that guidance documents should be just that—guidance on how to achieve the desired result. We believe that guidance documents should be, at least somewhat, open to interpretation. We believe that guidance documents should present a readily approvable avenue to compliance, but not the only avenue. We also believe that the programs we submit for consideration of approval into our State Implementation Plan should not be put on hold until guidance is developed only to have the program subsequently rejected because it does not follow the guidance.

We propose that implementation of the Clean Air Act could me made significantly more flexible by changing the approach that EPA has taken to reliance on the guidance documents and the memorandum of interpretation it has created. We believe that this added flexibility could address many of the issues that we, and other states experience in attempting to implement the requirements of the Clean Air Act.

Colorado has previously commented on the inflexibility of guidance in regard to the overhaul of the New Source Review Program and the proposed multi-pollutant legislation and can make those comments available.

*Regional Haze Rule*

The regional haze rule focuses its primary emission reduction requirements on major stationary sources of visibility impairing pollutants. There are many sources of pollutants that contribute to visibility impairment in our National Parks and Wilderness Areas, however, the first phase of the rule focuses on application of control technology requirements to stationary sources alone through the analysis of Best Available Retrofit Technology. This process is complicated and litigious at best and unworkable at worst, and in fact, the DC Circuit Court of Appeals, a little over a week ago, remanded the determination of BART in the regional haze rule back to EPA for further action.

On Friday, May 24th the DC Circuit Court of Appeals issued its' ruling in American Corn Growers Association versus United States EPA. It appears that the Court ruled that the process of analysis to determine the most appropriate Best Available Retrofit Technology to an individual source was invalid. The Court vacated the BART rules and remanded them to EPA. In its opinion the court expressed that the manner in which EPA addressed the five factors to be considered in a BART analysis were inconsistent with the text and structure of the Act.

Colorado believes that prior to our moving forward with implementation of the regional haze rule, EPA needs to resolve the provisions that were remanded by the court. While it is important to resolve haze issues in our country's Class I areas, we suggest that the legal issues raised with the rule must be resolved before we can move forward with its implementation. Under the rule western states were provided two options to comply with the rule and at this point at least one of those options is blurred. In Colorado, the choice of which option to pursue has been very controversial. We were on the verge of making that choice as the court issued its ruling. Now, we must take a step back and understand what the court has done as well as wait for EPA to take action on the remand.

Mr. SHIMKUS. Thank you, and we appreciate your attendance today.

I think the chairman has directed that I ask Mr. Shadegg if he would like to take the first round of questions. You have 5 minutes.

Mr. SHADEGG. Yes, I would very much. Thank you very much. I will be brief.

I want to begin by asking you, Mr. Williams, about the issue of diesel and the—you touched upon in your testimony the issue of diesels that are currently exempt. As I understand it, that includes

diesel construction equipment, anything that is considered off-road diesel equipment. Does that include—and that would include construction equipment and farm equipment, is that correct?

Mr. WILLIAMS. Yes.

Mr. SHADEGG. Does that also include diesel railroad trains?

Mr. WILLIAMS. I believe EPA has a separate rulemaking for locomotives.

Mr. SHADEGG. It has a separate rulemaking?

Mr. WILLIAMS. I believe so.

Mr. SHADEGG. Okay.

Mr. WILLIAMS. And I think also for marine engines there has been a separate rulemaking. So the primary—I am sorry.

Mr. SHADEGG. Can you elucidate for me when those exemptions were granted, whether or not you think they are appropriate, and how you think we ought to address whether they should be continued or they should be brought in? Because it seems to me if we are doing—we are making real progress on over-the-road diesel engines, and while I don't disagree with having exempted them initially, it seems to me at some point you have to broaden the net and bring in other sources. And I guess I am interested in specifically what it is you recommend with regard to those sources.

Mr. WILLIAMS. I don't know that it is so much an exemption as that they have not yet been regulated through the Clean Air Act. The first significant category were the on-road diesels, both with the technology—the emissions technology and sulfur in the fuels.

This remaining category of non-road, which includes construction, industrial, agricultural, really dwarfs, in terms of the magnitude of emissions, the on-road. And what we have recommended is a very similar approach over similar timeframes both addressing the technology for emissions control equipment on the engine side, but also significant reductions in the sulfur on the fuel side.

We believe that this—addressing this category of diesel, the non-road heavy-duty diesel, will dramatically improve air quality, will help make progress both on the ozone and the $PM_{2.5}$ standard. Of course, there is growing concern about the carcinogenic impacts of diesel. So we do believe that this is a very important and appropriate role for EPA to extend regulation to, and we are hopeful and optimistic that by the end of the year EPA will undertake a rulemaking to do that.

Mr. SHADEGG. Well, we are making progress I think on clean diesel. We are getting close. I believe there is a significantly improved standard to be in effect for 2004. And I hear discussions—and I have asked a couple of people that are constituents of mine whether it is accurate, and I get differing opinions. But I hear that in the not-too-distant future we are on the verge of a diesel engine that is cleaner than a natural gas engine. And there has been some discussion of that.

I read a letter to the editor here in Washington, DC. The DC City Council just bought a bunch of natural gas buses, and shortly after doing so a letter to the editor appeared saying that was foolish because they are costly, and we are on the verge of a diesel engine that is cleaner than a natural gas engine.

And while I don't want to impose a burden on some of these industries, particularly the farm industry or the construction indus-

try, or, for that matter, the trains that move a great deal of freight, it seems to me over the road was our first target. If over the road has been the cutting edge to get to cleaner diesel, then we ought to be expanding that cleaner diesel out to where it is applicable in other sources.

And it seems to me if we are going to—there is no point in having two different diesel fuels around. If we have a cleaner diesel for over the road use, I see little reason to make it not applicable also to off the road or used for engines that are not on the road.

I guess the other question I would like to ask is Mr.—do you pronounce your name Lepemke?

Mr. LEMPKE. Lempke.

Mr. SHADEGG. Lempke. Okay. I was fascinated by your testimony on the issue of guidance, and I was a little bit confused. I want to make clear, what you are saying is that using the term "guidance," the EPA is essentially establishing rules without actually creating rules. Or is it that people just follow them as rules voluntarily?

I mean, is it a problem that EPA needs to correct by making it clear that they are not—that you, as the State of Colorado, are not bound by guidance? Or is it a problem that people just don't have the courage to not follow guidance?

Mr. LEMPKE. Thank you. I think it is a little bit in between the two of those.

Mr. SHADEGG. Okay.

Mr. LEMPKE. I think everybody realizes that they are not enforceable as rules. But in practice, overcoming that is difficult. So just, you know, leaving those guidance documents and those memorandum up to a little bit of interpretation to the situation of the day, so to speak, would be a bit more helpful, you know. Just a little bit of change in the way that EPA overall looks at those.

Now, we have worked with Region VIII pretty well on that, but it is difficult sometimes. As I think was mentioned earlier in a presentation here today, some of these guidance documents are, you know, hundreds of pages long. And that, in and of itself, is a giant hurdle to get over when you are trying to look at trying to implement a program.

Mr. SHADEGG. Well, I am very sympathetic with your call for flexibility. My home State is Arizona. The air pollution problems we face in Arizona are dramatically different than they face in, say, Maine, or maybe even Virginia. We have severe problems with particulate driven by dust. That is not a problem in other parts of the country. We have lots of dirt roads still in existence.

We have just lots of issues, and there are many places where we need flexibility, and I thought you made a rather compelling case for how flexibility has worked for Colorado. And if the Congress needs to address this issue of making it clear that guidance is guidance, and that you cannot be held accountable for deciding that that guidance doesn't work for your State, I would be happy to work on that point, because I think that is a valid point.

If, in fact, something rises to the level of requiring a rule, make it a rule. But if it is guidance and it will work for Maine or Minnesota or Michigan, or someplace where it is wet and green, but it won't work for parts of Arizona which are dry and brown, or, for

that matter, parts of Colorado that are dry and brown, I think you need the flexibility to use what works in your region.

Mr. SHIMKUS. The gentleman's time has expired. The Chair recognizes the gentleman from Ohio, Mr. Sawyer, for 5 minutes.

Mr. SAWYER. Thank you very much, Mr. Chairman.

Mr. Jones, thank you very much for being here and for your testimony. You talked about the significant progress that our State has made in meeting the 1-hour ozone standard. Are there regulatory approaches in Ohio that can serve as lessons elsewhere in the country, either for the 1-hour standard or for other standards that are involved in the Clean Air Act?

Mr. JONES. Mr. Sawyer, I probably risk alienating the Northeast States. They get offended when I say we are in attainment and they are not. Part of what we did, as you know, was the enhanced automobile emissions testing, which I think has been described as the single-most unpopular program Ohio has ever put in place.

Mr. SAWYER. Painful.

Mr. JONES. But we did it at a relatively low cost for the motoring public, and we did it to our targeted non-attainment areas.

What we attempted to do was essentially broaden the base that sought reductions. We have obviously made significant reductions, believe it or not, in our powerplant emissions. I think the statistics I mentioned in my testimony are an indication that we have literally gone after pretty much all of the sources in our State, and we will face that again with the new 8-hour standard once we get an implementation plan promulgated by U.S. EPA.

But I think the one item I would suggest is there has to be the ability to look at regional approaches. But your definition of "region" is the key. I think we are—we have never said anything but that we have an impact on Western Pennsylvania, and I think that is what all of the modeling says. We have a very hard time convincing people that the State of Maine is in non-attainment because of Ohio.

Certainly, there are transport issues, and we have acknowledged that, but there is a need for a regional approach. And where it is particularly important is an area like Cincinnati. The Cincinnati metropolitan area actually goes into Northern Kentucky, which not only puts us into another State but into another U.S. EPA region.

And you have the potential for literally the same metropolitan area having separate designations from separate U.S. EPA regions governed by different State law and regulation. And it makes it tremendously complicated for us to try to come up with something that isn't impacted downwind.

Mr. SAWYER. What can we do from here?

Mr. JONES. I think the—and this is the difficult part of it. You keep hearing about flexibility from us, and I think that is the linchpin. I think there is—there seems to always be a concern that there will be a race to the bottom at the State level. And I think what you have seen when you look at the facts is the States aren't racing to the bottom.

Mr. SAWYER. I think that is——

Mr. JONES. In simplest terms, we can't afford to. And so I think allowing States to experiment, and sometimes not succeed, is a key to this. And, unfortunately, the penalties that are imposed are sig-

nificant, and there is not a lot of incentive not to follow the guidance or follow the cookbook.

Mr. SAWYER. Everybody has talked about flexibility, and some of you have talked about the importance of market-based trading systems.

Could you care to comment—would any of you care to comment on the efficacy of such systems in dealing with mercury? No?

Mr. NICHOLSON. Well, I think just a quick reaction, I know people do get excited about that prospect, maybe in both directions. But a lot of people feel like that given the immediate area health concerns that maybe that is not the right course to follow.

We haven't, in North Carolina, given it a lot of thought yet, even though our bill, our Clean Smokestacks Bill, has a provision where we are to study the issues of need for control further than what we may get with our scrubbers for the SO2, which we hope to get a considerable co-benefit. But we are to report back to the legislature in 2005 with recommendations on what to do about mercury beyond what we might otherwise be getting.

But we are allowing trading within the State for the SO2 control. So this will be an issue we will have to study. I think, though, any program that would allow trading must necessarily have a provision that allows for protection of local impacts, assuming we can learn enough to understand how to do that. That could very well be an issue, and what are those impacts and the nature of them.

Mr. SAWYER. Thank you.

Mr. SHIMKUS. The Acting Chair now turns to the chairman of the subcommittee, Mr. Barton, for 5 minutes.

Mr. BARTON. Thank you, Mr. Chairman. I enjoy being down here. I can throw bombs from here. You know, I can't—I have to be responsible when I am sitting where you are sitting.

I want to commend our panel today. We have worked very hard to try to get a balanced panel of State and local input on the Clean Air Act. And I have read your testimony, and I have listened to some of the answers to the questions, and I just want to compliment each of you individually for being here.

I have a general question, and then I have some specific questions. My general question, which is open to all of you, we have a—I think our representative from Utah put it best, that the basic model of State, Federal, and local interaction, or that Federal set the standard but we ask the States and locals to help implement it, with kind of a negotiation or a cooperative approach, it works, but it works very cumbersomely.

One of the things that the Feds have which causes a lot of consternation at your level is this ability to threaten these huge fines and the withholding of highway funds if you don't do certain things. Now, those threats are normally made by some mid-level, non-responsible EPA representatives, so that if your level complains to my level, and my level complains to the EPA, the EPA says, "We didn't do that," because it didn't come from the person who could actually impose the fine or withhold the funds.

We have to have some hammers. So my general question—and if you all can't give us an answer today, if you want to talk to your association groups—I would be very interested in an alternative

hammer. In other words, doing away with the withholding of highway funds or the threat of withholding of highway funds.

If we were to eliminate that, but still need some sanction weapon, some sanction instrument in the Federal arsenal, what would that be? How could we maintain the general model yet eliminate the highway fund withholding and maybe these huge fines, but still give the Federal Government some ability to sanction its State and local governments—just refuse to cooperate.

If you all want to take a stab at it right now on the record, fine. If you want to think about it and get back to us in writing, that is fine, too. But that is my general question. I think, Mr. Jones, you have got a comment.

Mr. JONES. Mr. Barton, I am the sixth kid in my family, and our negotiations with the U.S. EPA are a lot like when I negotiate with my older brothers.

Mr. BARTON. Big brother, huh?

Mr. JONES. Yes, I can negotiate, but that is my big brother and they are going to win. And I think without talking to my colleagues at ECOS, I think part of it is the incentive side of it. Other than the intrinsic value of cleaning the environment, you don't necessarily gain anything by doing more or meeting the deadlines.

And there is certainly an intrinsic value to improved environmental conditions, but beyond that there is a big hammer and not sort of a co-equal incentive on the other end.

Mr. BARTON. Well, it is a hammer that is seldom used. But it is often intimated that it will be used. So what I am looking for is something that you may not threaten it as often, but if the State and locals don't cooperate, you could actually use it, but the highway thing just seems like a nuclear bomb. I mean, and in Texas when, you know, cars stalled in traffic in the Dallas/Ft. Worth area probably are 60 percent of the emissions problem, it doesn't make a lot of sense to withhold highway funding, which is going to make the problem even worse.

Does anybody else want to comment on it before I go into my specifics? Let the record show they are all shaking their heads no.

I want to ask the gentleman from Colorado, one of your citizens 12, 13, 14 years ago, when we did the Clean Air Act, came to me with an idea for remote sensing, which some—I think in its commercial form is called the Smog Dog. EPA has pretty well fought that tooth and nail in terms of giving credits for using it. But good ideas actually do work, and that technology does work, and it has been used in some parts of the country. Colorado has used it some.

What would you recommend we do if we—when we do legislative revisions to the Clean Air Act to perhaps increase the availability of that as a solution to some of the issues that we are trying to address?

Mr. LEMPKE. Thank you. The Denver metro area, as a serious carbon monoxide non-attainment area, was required under the statute to implement an enhanced inspection and maintenance program, when we fully had available a remote sensing technology that we could have looked at to implement instead of an enhanced vehicle inspection and maintenance program.

The reason that we were termed serious is not because we had such excess violations. It was really because we had a lag in the

time of turning in a plan to show long-term compliance. I think that if Congress or EPA were to act by statute or regulation, it would simply be to provide the opportunity under the rules or the provisions to allow for the implementation and the use of clean screening in either of those two fashions, or the implementation of remote sensing in either of those two fashions, sort of in the identification of clean vehicles and screening them out of the fleet, or identifying the high emitters. That technology has—or that process has a little bit more of a challenge I think on implementation, but it is still out there and seems to be, from our perspective, pretty viable.

Mr. BARTON. Okay. My time has expired. I am going to—I may have a wrap up question when we get back from the vote. We will go to the other side.

I do want to let you know one thing. We are going to do a number of hearings on the Clean Air Act. We are not going to rush to judgment one way or the other. But when we get ready to go to possible legislative solutions, you know, I am really going to encourage members of this subcommittee to work with their State and local officials to come up with constructive improvements.

If we are going to continue to get the air quality cleaner and cleaner, which we all want to do, we have got to depend upon people at your level to give us real world potential solutions, because they will not come from this town. They are only going to come from people that are there on the streets every day trying to make the Clean Air Act work.

So while we don't have a lot of members here, this hearing and the follow up to it is one of the most important hearings we are going to do in terms of looking at the Clean Air Act. And I yield back.

Mr. SHIMKUS. Thank you, Mr. Chairman.

I would just say on the remote sensing, I know the State of Missouri uses it on exit ramps. I am from Illinois, but I travel through there, and they bill—they just send the passing form to their citizen. And sometimes the citizens forget to send in the money. So even though they have been told they passed, they haven't paid for the certification that they passed the test. But it is a—it is working in the State of Missouri from what I understand.

I would like to yield to my other colleague from the State of Ohio, Mr. Strickland, for 5 minutes.

Mr. STRICKLAND. Thank you, Mr. Chairman.

Mr. Jones, I will ask you a question on today's topic. But before I do that, I would just like to ask one question regarding the issue that I brought up in my opening statement regarding DOE's plan to ship this what I would call waste—they may choose to call it something else—to the Portsmouth site. Has DOE discussed that with you, to your knowledge?

Mr. JONES. Well, Mr. Strickland, we have had general discussions with DOE at the Ohio field office level, but not in particular. I did have people at the meeting last night. We have already been in touch with a couple other States, Representative Portman's office. We don't believe any additional shipments should occur until we get very clear decisions made by DOE to fulfill what we believe,

as you do, is the commitment to plants. And we are very concerned about where this is going.

We have expressed that a number of times to the Secretary, and we will continue to press it. But we certainly share your concern. The Governor has been very involved in trying to work through this situation, as you have, and we very much appreciate your support as well. But we very much plan to comment on the meeting last night.

Mr. STRICKLAND. Thank you, sir. It is very reassuring to hear you say that.

The only question that I have, and I know my friend Mr. Markey probably has lots of questions that he wants to ask, so I am just going to ask one question, and then, Mr. Markey, if you would like, I will yield the remainder of my time to you.

You have indicated in your testimony that the Title V permitting process is a problem because there have been decisions to change forces in the middle of the stream, so to speak, and that a program that Ohio had that was considered sufficient, even a model program perhaps, is now being looked upon as a model—or as an effort that is inefficient or deficient and may be—you know, although the law hasn't changed, you know, you are being judged in a different kind of way.

And I am wondering if you would just make a statement about that, and I am wondering if the others feel—if they are confronted with the same kind of dilemma—result of changing expectations after you have made good faith efforts to comply in every way.

Mr. JONES. Actually, I think part of the frustration with changing it is that, obviously, we haven't done the most complicated Title V permits yet. We still have additional fairly complex permits, the utility permits, some of the refinery permits that have to be done. Part of this process was building up an ability to do Title V permits, the training that goes into learning how to do that, to prepare you to do the really complex ones.

Well, 6 years ago we had a fully delegated program, and last November we got a letter that basically says seven different parts of your program, although they haven't changed, are now deficient. And when I look at them, some of them are, in my mind, kind of silly. I mean, we—the comment was, we don't require a report to appear in our 6-month reports.

Well, right, we require them in a quarterly report. It strikes me that is a little more frequent. Doesn't make sense that that is a deficiency, but that is something that we have to then go through the rulemaking process at the State level, which involves public hearings, comment period, responsiveness to comments, then the legislative process, to approve rules.

So it doesn't do anything to help us get these permits done in a timely manner, and I think everybody here shares the same problem. We haven't met the deadline. We are trying to meet the deadline. We have got—we have submitted a new schedule to U.S. EPA to try to actually beat the next deadline. When you change programs in the middle, it is going to make it hard for us to meet that deadline.

Mr. STRICKLAND. Thank you.

I yield back my time to the Chair. If Mr. Markey wants it, I would be happy to yield it to him.

Mr. SHIMKUS. The gentleman is recognized for 25 seconds.

Mr. MARKEY. Thank you, Mr. Chairman, very much.

You know what is interesting is that everyone comes here, they wait in line, and then they watch it on the screen up there.

You know, like they could sit back in their office and watch it on WebTV, you know, Webcast. But that way they wouldn't be able to tell everyone back in the office who else was there. Okay? So I think that is the only reason people come now, because they are only coming and getting a good view, you know, of the screen. But they can go home and say who—what other interests were represented in the room that the TV didn't pick up.

Anyway, I thank you, Mr. Chairman.

It is an interesting phenomena, though, watching where people's eyes are during the testimony.

So we have this problem in New England. We are not represented on this panel, first of all, so we begin there. So we will have to try to construct, to some extent, the position that——

Mr. SHIMKUS. The Chair would hate to interrupt my friend and colleague, but we are already 30 seconds over the final end of Mr. Strickland's time. If you would allow me to move back to regular order, I will try and make my questions real quick, so that you would have time to ask yours.

Mr. MARKEY. Oh, sure. Have you—you haven't recognized yourself yet?

Mr. SHIMKUS. I always defer to my colleagues.

Mr. MARKEY. Oh, no. I didn't know that you hadn't asked——

Mr. SHIMKUS. No, we are still—we still have Mr. Whitfield and myself, and we are bouncing back and forth.

Mr. MARKEY. Oh, I did not know that. I did not know that. Okay.

Mr. SHIMKUS. And I will be quick. I wanted to ask Ms. Nielson, based upon the May 24 DC Court of Appeals decision recently on the EPA's regional haze, can you please clarify whether the recent Appeals decision will inhibit the WRAP Annex or the States that are parties to the Annex from moving forward to address regional haze and visibility issues in the west?

Ms. NIELSON. Mr. Chairman, I don't believe it will impact the Annex or the Section 309 programs. The Annex, in fact, includes a set of milestones which are specifically designated within the rule that is now out for public comment and a backstop trading program, both of which will assure that we make reasonable progress.

So I believe that the Annex could go forward through rulemaking. We hope EPA will adopt it promptly, because, as I indicated in my testimony, that needs to be in place for us to submit SIPs by the end of December 2003. And that with that rule in place that the Section 309 program, as the State of Utah looks at it, could go forward.

Mr. SHIMKUS. Great. Thank you.

Mr. Lempke, I am also very interested in New Source Review, and I think in your testimony you talk about some of the problems of the limitations. Can you readdress that for us?

Mr. LEMPKE. Thank you. Some of the primary problems that we have had in New Source Review is with the guidance documents.

EPA has issued several interpretations, memoranda of interpretation with regard to how the New Source Review Program is implemented. And some of these guidance documents and memoranda are even conflicting with themselves.

It has been very difficult for the State of Colorado to implement some of the New Source Review provisions and comply with the guidance also.

Mr. SHIMKUS. Go ahead and just continue talking. We are used to them.

Mr. LEMPKE. So it is—some of the provisions of the New Source Review Program, in regards to the guidance, have been most difficult for Colorado.

Mr. SHIMKUS. Thank you. And if I can get Mr. Markey back in here, I will give him some of my final time.

And, Mr. Whitfield, is he—Mr. Whitfield, for the sake of time, I will just yield my remaining 2½ minutes to you. And if you can pick up on your questions.

Mr. WHITFIELD. Well, I had a number of questions, Mr. Chairman, but we are voting. I have got somebody out here, and I know these people have been very patient. But we will have a number of other hearings on this, but one issue that I want to just touch on briefly—on this issue of non-attainment, how is it determined in each State where monitors are placed to determine if a particular county or a city is in non-attainment or in attainment?

Mr. NICHOLSON. I will try to answer that. Brock Nicholson. There are criteria that EPA suggests that States use in terms of locating monitors to cover population, types of areas, whether it be rural or urban, and then the States also place monitors to support modeling demonstrations or gather data to understand the impacts of urban areas. In fact, that is one of our problems in terms of designation of areas.

We have what we think have been good technical reasons to do these models properly, placed monitors downwind of urban areas, typically in rural areas. And, of course, one of the issues that we are facing is once we measure a violation in that rural area, even though we think it properly represents the upwind urban area, which may be 30, 40—20 to maybe 60 miles away, that it properly indicates the problem from the urban area, not necessarily the—suggesting a strategy is necessary specifically for that rural area, even though it does indicate, you know, population exposure and non-attainment there. So that is one of our issues.

In terms of the recommendations we are suggesting for areas of violation and areas of influence, that kind of approach could help better address that issue than a one-size-fits-all, whole counties, whole MSAs.

Mr. WHITFIELD. Well, how many monitors does the State of North Carolina have?

Mr. NICHOLSON. We have—for ozone, we have a fairly extensive network, and we have anywhere from 44 to 47 a year—operating a year statewide. This is ozone monitors. And about a comparable number of PM fine.

Mr. WHITFIELD. And, Mr. Williams, in Louisville, how many monitors are there in Louisville?

Mr. WILLIAMS. Mr. Whitfield, we have three monitors in Jefferson County, and then we have one each in Clark and Floyd and Southern Indiana, one in Bullitt, and one in Oldham. So we have a total of seven in the non-attainment area.

Mr. BARTON. [presiding] The gentleman's time has expired.

Mr. WHITFIELD. Okay.

Mr. BARTON. If there are any other questions, put them in the record. We have got—recognize Mr. Markey for 5 minutes, and, if no other member shows up, then that will be our last in-person questioner, and we will adjourn.

Mr. Markey for 5 minutes.

Mr. MARKEY. Thank you, Mr. Chairman, very much.

There is no New Englander on the panel. Just the way the winds blow, much of what happens in a big chunk of the country just blows the bad air over New England. That is just the way the air currents work.

And so it is a little bit like being in a restaurant and having 10 guys over there on that side of the restaurant decide they are going to all break out cigars after dinner. And there is a fan right behind them blowing it all the way across the other side of the room toward you, and you are still eating dessert. And somebody goes over to complain, and they go, you know, "Cut it out. You know what I mean? We have got a right to smoke cigars. You know? It is a free country." And so, you know, you decide you are going to start a movement to ban smoking in restaurants, you know, because you get very upset with them because they are not being respectful of what is happening with that fan blowing the smoke in your face. That is what happens to us, so we get a little bit upset by it and pretending that it has no impact on us.

Mr. Nicholson, in your testimony, you touched on the need for stringent national standards for pollution sources contributing to problems beyond their State and regional borders. What parts, very quickly, of the Clean Air Act have helped control this interstate pollution problem?

Mr. NICHOLSON. Well, I think that is correct. I do believe that we need national rules to help take care of this issue, even though we may have differences of opinion on the extent to which long-range transport occurs. Our results of our analyses suggest that we do need, under the national program, control across the Nation to deal with this issue, not necessarily——

Mr. MARKEY. What have you learned from the Southern Appalachian Mountains Initiative that could be helpful?

Mr. NICHOLSON. I think a key thing we have learned is that it is important to control in every State. Each State gets the greatest benefit from control in its own State, with some spillover benefit to its neighbors. Long-range transport is not as long-range as we had originally thought. It is a significant lesson learned, but necessary to be controlled across the whole region or country to effect benefits, even downwind in New England.

Mr. MARKEY. Mr. Williams, do you agree with Mr. Nicholson? Do you agree with Mr. Nicholson as to the limits of how far this pollution can travel?

Mr. WILLIAMS. Well, I assume he is talking primarily about ozone. I think ozone has a several hundred mile reach, based on

the studies I have seen coming out of the Ozone Transport Commission. And certainly Section 126 of the Clean Air Act is an important mechanism that has been used in the northeast to impose obligations in particular on the Midwest of the U.S.——

Mr. MARKEY. So are you saying that you don't believe that New England is affected by——

Mr. WILLIAMS. Oh, no.

Mr. MARKEY. [continuing] what is coming out of the Midwest?

Mr. WILLIAMS. No, I am agreeing with you.

Mr. MARKEY. Oh, you are agreeing with me.

Mr. WILLIAMS. Yes.

Mr. MARKEY. Okay. So do you agree with that as well, Mr. Nicholson, that we are affected in New England by what happens in the Midwest?

Mr. NICHOLSON. Well, I think it is a matter of degree. I am not saying that all of New England's problems only come out of the Midwest. There may be days on which there are reasonable contributions. I think what is important is every State intervening between the Midwest and the New England area needs to control, to a significant degree, and I think if everybody does their share then we will all be better because of that.

Mr. MARKEY. We now have 8 million children in the United States with asthma, 16 million adults, 24 million Americans with asthma all together, and the number just continues to skyrocket. And we know it is logically related to the air that people breathe in their lungs, and obviously this is about as serious a health care problem as you could have.

Mr. Williams, New England regulators have also expressed strong support for the New Source Review Program. They believe that New Source Review has led to significant advancements in pollution control and that these advancements would not have come about without technology control-based regulation. Do you agree with that assessment?

Mr. WILLIAMS. Yes. STAPPA/ALAPCO agrees with that assessment.

Mr. MARKEY. Now, as you know, the administration's Clear Skies proposal is linked to elimination of the New Source Review Program. Jeffrey Holmstead, EPA Assistant Administrator for Air and Radiation, has said that New Source Review would provide no benefits, and even would be counterproductive with an emission trading system. Do you agree or disagree with Mr. Holmstead?

Mr. WILLIAMS. We have had over 10 years of involvement with EPA and other key stakeholders working on NSR reform. We clearly believe that NSR should be reformed, that there are opportunities for improvement. We believe it should be retained and improved.

Mr. MARKEY. He says that there are no benefits, and it would be counterproductive to have a New Source Review. Do you agree or disagree with Mr. Holmstead?

Mr. WILLIAMS. I would tend to disagree with that.

Mr. MARKEY. Disagree. Okay. Hasn't New Source Review and the acid rain program also, and emissions trading program, same concept, successfully coexisted since the 1990 amendments to the Clean Air Act?

Mr. WILLIAMS. Yes.

Mr. MARKEY. Yes. Isn't it necessary to maintain the New Source Review Program in any national emissions trading program in order to protect local and regional public health?

Mr. WILLIAMS. Our associations believe that is true.

Mr. MARKEY. Yes. How about you, Mr. Nicholson?

Mr. NICHOLSON. Well, I think certainly a form of New Source Review should remain. Whether it is the existing one, that is a good question to look at.

Mr. MARKEY. Do you disagree with Jeffrey Holmstead when he says that the New Source Review would provide no benefits and even would be counterproductive? Do you agree or disagree with that?

Mr. NICHOLSON. Well, whether or not I agree or disagree, I don't understand the basis of his comment. So I guess I cannot comment on that.

Mr. MARKEY. If those were his comments, would you disagree?

Mr. NICHOLSON. I would tend to disagree with that.

Mr. MARKEY. Tend to disagree.

Mr. NICHOLSON. Yes.

Mr. MARKEY. Okay. So, Mr. Chairman, I know that time is of the essence here, and there is a roll call on the floor. Again, I think this is the No. 1 public health issue in the country, and I think that we just have to deal with the fact that we are shortening the life expectancy of millions of people even as we are funding NIH to solve, you know, the—to find the clues to diseases.

Simultaneously, we have a program which creates disease, and I am afraid that increasingly we are finding that in most—in many, many cancers that the links are environmental and not genetic. And, in fact, only 10 percent of cancer is, in fact, genetic. That most of it comes from some other place in our economy.

And since we also know that Japanese women, for example, contract breast cancer at only one-quarter of the rate as American women, but within one generation after coming to America they contract it at the same rate as American women, then there is something in our environment. There is something in what we do in this country. And I think this is a big part of it, the way in which we treat emissions from these powerplants and from automobiles as well.

Mr. Chairman, I yield back the balance of my time.

Mr. BARTON. I thank the gentleman from Massachusetts. We will have other written questions for the record. I want to, again, thank each of the panelists for your excellent testimony and participation. We will be in touch.

This hearing is adjourned.

[Whereupon, at 3:44 p.m., the subcommittee was adjourned.]

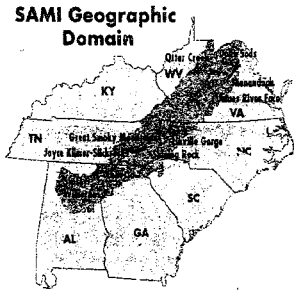
[Additional material submitted for the record follows:]

# SOUTHERN APPALACHIAN MOUNTAINS INITIATIVE
(MAY 2002)

## MISSION

Through a cooperative effort, identify and recommend reasonable measures to remedy existing – and to prevent future – adverse effects from human-induced air pollution on the air quality related values of the Southern Appalachians, primarily, those of Class I parks and wilderness areas, weighing the environmental and socioeconomic implications of any recommendations.

## KEY FINDINGS AND CONCLUSIONS



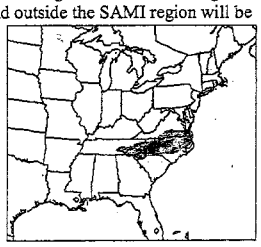

1. Sulfur dioxide, nitrogen oxides, volatile organic compounds and ammonia are the predominant emissions contributing to ozone, to the fine particles that cause haze, and to acid deposition. Coal-fired electric utility plants are the largest source of sulfur dioxide. Highway vehicles and utilities are the largest sources of nitrogen oxides, highway vehicles are the largest human sources of volatile organic compounds, and agricultural sources are the largest contributors to ammonia gas.

2. Sulfate (from sulfur dioxide) is the largest contributor to fine particles that impair visibility. Sulfur dioxide emissions reductions must be made to improve visibility. Reductions in ammonia will be beneficial for improving visibility, under some sulfur dioxide control strategies.

3. The highest acid deposition occurs in West Virginia and along the North Carolina-Tennessee border at high elevations. Sulfate deposition decreased under all SAMI strategies but nitrate deposition decreases were partly offset by ammonia deposition increases. Sulfur dioxide reductions under the 1990 acid rain controls are not sufficient to prevent sensitive streams from acidifying. Many streams improve with the most stringent SAMI strategy but few change to a different fish habitat class. To reduce acid deposition affecting some streams in the SAMI region, sulfur dioxide emissions reductions must be made.

4. High elevation spruce-fir forests are most at risk from acid deposition. Large reductions in nitrogen deposition generated by nitrogen oxide and ammonia sources inside and outside the SAMI region will be needed to reduce nitrogen saturation effects in these sensitive forests. Most forests in the SAMI region are not at risk from nitrogen saturation.

5. Ozone exposures are greater for forests growing on ridge-tops than for forests growing in valleys. Growth of most forest stands will not change in response to the SAMI strategies, and tree death is not anticipated even without additional emissions reductions. Small changes in the abundance of individual tree species within forest stands may occur. While probably not a region-wide concern, nitrogen oxide emissions reductions may be important to reduce ozone effects to certain species in specific locations.



An example of the relative benefit of controlling sulfur dioxide in an individual state.

6. Each state benefits most from emissions reductions that occur in that state, as shown by the example above for North Carolina with the weather patterns that occurred on July 15, 1995. Dark blue indicates the highest sulfate reductions. Each state will also benefit from emissions reductions in surrounding states. The SAMI region will benefit from emissions reductions in the Midwest, Central and Northeastern regions

7. For SAMI to accomplish its mission, emissions reductions are essential within each member state as well as outside the region.

## ACCOMPLISHMENTS

1. A voluntary, consensus-based organization composed of a variety of stakeholders investigated a complex environmental topic. Using conclusions drawn from this analysis, SAMI recommended actions to address air quality problems in the Southern Appalachian Class I parks and wilderness areas.

2. SAMI successfully applied an integrated, one-atmosphere model that addressed fine particles, ozone, and acid deposition simultaneously. Previous studies addressed these topics separately.

3. SAMI identified the states and regions contributing to the air quality impacts on Class I national parks and wilderness areas in the Southern Appalachians.

4. SAMI projected future changes in air quality and estimated the effect of those changes on streams, forests and visibility.

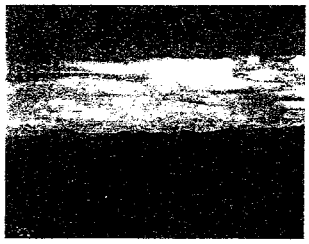
## SAMI RECOMMENDATIONS

The SAMI states support and will promote strong national multi-pollutant legislation for electric utility plants to assure significant sulfur dioxide and nitrogen oxides reductions both in and outside the SAMI region. This national multi-pollutant legislation should result in no less than the reductions for sulfur dioxide and for nitrogen oxides represented by the Administration's Clear Skies Initiative. Reductions from other source categories should also be considered in national legislation, and such national legislation should contain sufficient measures to protect Class I areas. Should the national legislation fail to materialize, the states that participated in SAMI will work together to consider regulatory alternatives and to encourage non-SAMI states to participate. Leadership by states ahead of national legislation is encouraged.

Each SAMI State should seek ways to reduce ammonia emissions from animal feeding operations. Also support should be given in future work such as VISTAS to improve the understanding of the sources of ammonia, to develop better inventories, and to seek more effective control approaches.

Where States have control strategy option choices in their eight hour ozone and fine particle State Implementation Plans, that also have co-benefit for the environmentally sensitive Class I areas, they should choose them. Ambient ozone monitoring should be conducted near all Class I areas in the future.

Each SAMI state should encourage energy efficiency, conservation, and use of renewable energy to reduce the emissions from stationary and mobile sources.



Look Rock in the Great Smoky Mountains National Park

For more information: www.saminet.org The final report is due in August 2002.

# Southern Air Principles Report

## Executive Summary

**May 2002**

### Introduction

Air quality is a shared resource, and all sectors of society bear a responsibility for improving air quality and protecting our natural resources. Scientific research and evaluation show that air pollution is not confined to state boundaries. The southern states are experiencing unprecedented population and economic growth, as well as associated increases in energy and vehicle use, which have contributed to increased air pollution. To ensure clean air and a reliable, affordable energy supply, we must develop new strategies to address issues such as regional haze, ozone, fine particulate matter, acid deposition, and mercury that threaten public health and the environment.

In 2001, the Governors of Georgia, North Carolina, South Carolina and Tennessee entered into a Southern Air Principles agreement, which recognizes that regional air quality problems must be addressed through regional approaches that consider each state's unique qualities and needs. As directed by this agreement, the signatory states have worked together to develop joint multi-pollutant strategies to address the problems of ozone pollution, acid deposition and reduced visibility. The states have also worked together to develop innovative transportation and energy policies that will protect and improve air quality in the South.

To accomplish this charge, a Southern Air Principles Work Group was created with representatives of the states' air quality, transportation and energy agencies. The work group formed three focused groups: 1) developing a joint multi-pollutant strategy, 2) developing innovative transportation policies, and 3) developing innovative energy policies. Because these issues overlap, many of the work group members participated in multiple focus areas. The Air Principles work groups have met frequently by conference call and communicated through electronic mail. Additionally, the representatives working on a joint multi-pollutant strategy held several meetings to work on their charge.

The work groups considered a number of policy options identified as having potential for achieving significant reductions in emissions of pollutants that adversely impact air quality in the Southern Appalachian Mountains, as well as air quality in our towns and cities. They also considered legislative actions and policy decisions within their own states, as well as those occurring on the national level. Each of the work groups has attempted to offer realistic measures that can be adapted to fit each state's unique qualities and needs.

The complete reports of the work groups are attached to this summary.

## I. Multi-pollutant Strategy

Air pollution sources, including power plants, emit multiple pollutants that traditionally are regulated independently. Since localized and regional ozone, fine particulate matter, acid deposition, and haze impacts are caused by multiple pollutants, multi-pollutant control strategies may more effectively reduce environmental impacts; provide more efficient control of environmental pollutants; provide for collateral mercury emissions reductions; and support economic competitiveness and cost effectiveness.

Through the Southern Air Principles agreement, the governors recognized that regional air quality problems must be addressed through regional approaches that address each state's unique qualities and needs. The document directed the chief environmental officers of the signatory states to work together to develop and recommend joint multi-pollutant strategies to address the problems of ozone pollution, acid deposition and reduced visibility. The information and recommendations provided by the Southern Appalachian Mountains Initiative (SAMI) were also to be taken into consideration.

Representing their respective chief environmental officers, the air quality directors of Georgia, North Carolina, South Carolina, and Tennessee have met and consulted several times since June 1, 2001. Much of the initial focus was to gather information from other national and regional multi-pollutant strategy initiatives. Several developments, including legislative and policy actions, have occurred since the signing of the Principles. These actions demonstrate the emerging focus on the issue.

The Southern Appalachian Mountains Initiative (SAMI) has completed its technical work and has formulated observations and conclusions. In summary, SAMI concluded that:

- Each SAMI state would receive the most benefit from reductions of emissions from within their own state boundaries. However, the air quality related problems being encountered by SAMI's Class I areas would not be resolved by only controlling emissions within the SAMI states;
- Significant sulfur dioxide reductions are needed for improvement of visibility in the SAMI region and acid deposition in SAMI Class I areas;
- Within the SAMI region, Class I areas and other parts of the Southern Appalachians are very fragile and would benefit from nitrogen oxides control; and
- Controlling ammonia is more important than originally envisioned, so states need to improve their understanding of the sources of ammonia, develop better inventories and seek effective ammonia control approaches.

On September 10, 2001, the Southern Governors' Association (SGA) and the Southern States Energy Board released a report on energy policy in the South at their 67th annual meeting in

Lexington, Kentucky. The SGA report calls for a national energy policy based on maintaining a stable energy market achieved by addressing supply needs, increasing conservation and improving efficiency (Summary of *Energy Policy in the South; Integrating Energy, Environment, and Economic Development: A Balanced and Comprehensive Approach*, September 2001).

The National Governors Association adopted NR-18, Comprehensive National Energy Policy, at its annual meeting in August 2001. An excerpt from the Regulatory and Environmental Issues section states:

> Congress should pass legislation to establish a flexible, market-based program to significantly reduce and cap emissions of sulfur dioxide, nitrogen oxides, mercury, and voluntary reductions of carbon dioxide from electric power generators. The legislation should provide regulatory certainty by establishing reduction targets for emissions, phasing in reductions over a reasonable period of time, and providing market-based incentives, such as emissions-trading credits, to help achieve the required reductions.

Finally, several multi-pollutant Congressional bills have been introduced. In addition, on February 14, 2002, the Bush Administration announced a multi-pollutant strategy, referred to as the Clear Skies Initiative (CSI). While implementation details are still being developed, the Clear Skies Initiative proposes to establish a cap and trade program for nitrogen oxides, sulfur dioxide, and mercury. Further, several states, including North Carolina, have adopted or are considering multi-pollutant strategies.

**Multi-pollutant Strategy Recommendations**

**A. Support and promote strong multi-pollutant legislation for electric utility plants to assure significant reductions of SO2, NOx, and mercury both in and outside the Southern Air Principles states.**

Southern Air Principles states will determine the most appropriate strategy to achieve these emissions reductions for their states. Results from SAMI revealed that each SAMI state would receive the most benefit from reductions of emissions from within their own state boundaries. Leadership by states ahead of possible national legislation is encouraged. Because an individual state may not be able to resolve its air quality issues without assistance from neighboring states and other regions, a strong national multi-pollutant strategy helps all states, including those that have reduced emissions from sources within their own borders, towards the goal of clean air. Early reductions obtained from an individual state's efforts should be recognized, encouraged and rewarded by any subsequent national measures.

The Southern Air Principles states recommend a multi-pollutant strategy that:

- Requires significant reductions in air contaminant emissions from electric generating units achieved within a reasonable and certain timeframe.
- Uses a stringent cap and trade program as appropriate and requires significant reductions in air contaminant emissions from electric generating units. The sum of emissions from all electric generating units (both existing and new) cannot exceed the total represented by the cap.
- Assures that local air quality impacts are assessed and then addressed within an expeditious and certain timeframe.
- Includes provisions that will reward and encourage early reductions; provides incentives to achieve these goals; and considers additional pollutants.
- Resolves what is the appropriate level and timing of implementation of the cap; how to allow for new growth; and what should be the appropriate scale of the trading program (individual states, four states, regional, national, etc.).

The reductions of sulfur dioxide, nitrogen oxides and mercury would provide improvements in public health and in regional air quality areas of concern, such as areas affected in a significant adverse way by deposition, visibility, ozone and fine particulate matter.

**B. Reductions from other source categories should also be considered in state and national legislation and regulations.**

The Southern Air Principles States recognize that sources other than electric power utilities contribute to the sulfur dioxide, nitrogen oxide and mercury emission inventories. As such, they agree to work cooperatively to improve their understanding of the emission sources and to develop strategies for effective emission reductions from appropriate source categories.

**C. Recognize the value and importance of all Class I areas and work cooperatively to assure SAMI recommendations are implemented.**

The Southern Air Principles states recognize the value and importance of our Class I areas and agree to cooperatively work together with groups such as VISTAS and other appropriate stakeholders in the implementation of SAMI recommendations. The Southern Air Principles states recommend that we assist in the improvement of the understanding of the sources of ammonia, and the development of better inventories and strategies for effective ammonia control approaches. Southern Air Principles states also recommend that SAMI make available to the various Regional Haze Planning Organizations (RPOs) the geographic sensitivity modeling results that show that states within those RPOs collectively impact visibility in the SAMI Class I areas. Furthermore, the level of communication and cooperation between Southern Air Principles states and the federal land managers for our Class I areas has been greatly improved and enhanced as a result of SAMI efforts.

This improved relationship has helped provide greater consideration of federal land manager concerns and provided more certainty in air quality permitting. We recommend that we continue to build on and improve this relationship.

**D. Continue to consult, consider and develop strategies as necessary to successfully implement these recommendations.**

In order to accomplish the above recommendations, we recommend that the chief environmental officers of the Southern Air Principles states should continue their collaborative efforts and encourage other states' participation in these efforts toward the development of emissions reduction strategies.

**E. Provide periodic reports to the Governors.**

The chief environmental officers of the Southern Air Principles states will provide periodic reports regarding progress to their Governors and appropriate staff. Such reports are envisioned to be presented on an individual state basis, as well as by way of future Air Quality Summits.

## II. Innovative Transportation Options

Air emissions from transportation sources contribute significantly to air quality impairments in the Southern Appalachian Mountains as well as across the Southeast. SAMI projects that mobile source contributions will continue to increase without proactive steps to reduce these emissions. The policy recommendations in this report offer both short- and long-term options to address mobile source emissions across the four states and in the Southern Appalachian Mountains.

### A. Alternative Fuels and Vehicle Technologies

Broad availability and use of cleaner vehicles and cleaner fuels are essential components to a southeastern strategy to reduce mobile source air emissions and offset national reliance on imported oil. A southeastern alternative fuels policy will provide both air quality and energy benefits.

**Recommendation:**

**Increase the availability and use of cleaner fuels in the Southeast.**

Implementing this goal will require that the states adopt policies that address the availability of alternative fuels, availability of alternative fuel vehicles, and fuel distribution infrastructure. To achieve this goal, the work group recommends that the states adopt the following policy options.

- Develop a southeastern regional network of alternative fuel stations along interstates and major highway corridors. In cooperation with the U.S. Department of Energy (DOE) Clean Cities program, the states should conduct a feasibility study to select initial corridors and identify potential markets and fuel types.

- Develop a broad-based regional consortium to encourage the availability and promote the use of clean and alternative fuel vehicles in the Southeast. Such a regional consortium should include state, federal and local government agencies; fuel producers, suppliers and retailers; vehicle manufacturers and dealers; public and private fleet managers, and others.
- Hold an annual Southeastern Alternative Fuels and Technology Forum beginning in the fall of 2002. The initial forum will seek to identify critical needs and near-term actions necessary to significantly increase the availability and use of clean and alternative fuels and vehicles in the Southeast; develop a consensus between government and the private sector on interstate goals for improving and enhancing alternative fuels infrastructure; and build partnerships with organizations and interests that are committed to building alternative fuels infrastructure.
- Collaborate with local governments, businesses and the U.S. Department of Energy to establish and operate additional Clean Cities programs in the Southeast. The annual Southeastern Alternative Fuels and Technology Forum will support this effort.
- Provide adequate fueling infrastructure for alternative fuel capable vehicles in state fleets in accordance with the spirit of the Energy Policy Act of 1992 and, if appropriate, to make this infrastructure available to local and federal government fleet vehicles.
- Place priority, where feasible, on purchasing alternative fuel vehicles certified to meet low-emission vehicle (LEV), ultra low-emission vehicle (ULEV) or zero-emission vehicle (ZEV) standards and challenge local governments and businesses to match this commitment.
- Identify and facilitate support for the advancement of clean alternative fuels and for vehicle and infrastructure technologies.
- Pursue incentives to promote the availability and use of clean and alternative vehicles, such as tax credits, rebates, and grants and loans for suppliers and users of alternative fuel vehicles and supporting infrastructure.

In deliberating the policy recommendations outlined in this report, the work group considered availability, benefits and disadvantages of the clean and alternative fuels and vehicles marketed and used in the four states. The work group also considered the substantial costs of developing refueling infrastructure and a delivery network. The recommendations focus first on public and private fleets, as existing alternative fuel programs in the four states have concentrated on government and private sector fleets where fuel infrastructure can be centralized and fleet managers have a large degree of control over how the vehicles are used and refueled.

Achieving the goal of increased availability and use of clean and alternative fuels and vehicles will require a concerted, ongoing effort. The states should continue to seek sources of

funding (federal. state and private sector) for necessary studies and planning and development of an infrastructure network that will meet the needs of the four states. Significant challenges in advancing the use of alternative fuels must also be addressed, for example, the relatively small number of alternative fuel vehicles currently in use and the barriers to broader use of alternative fuels by average citizens. Additionally, the states must help public fuel providers understand the advantages and benefits of providing multi-fuel stations and offer incentives that encourage providers and suppliers to invest in infrastructure for multi-fuel stations.

**B. Regional Transportation Initiatives**

**Recommendations:**

**Develop regional alternatives to automobile travel to address the growing trend in vehicle miles traveled and to provide desirable and efficient alternatives to motor vehicle and air transportation.**

- The states should work cooperatively to seek support and funding for an integrated regional transportation system initiative, including an integrated intercity rail plan to connect major cities with other than highways.
- To reduce air pollution in Great Smoky Mountains National Park, the states should support alternative transportation projects to relieve congestion and reduce vehicle emissions inside the park, as well as on major routes used to access the park.
- The states should develop a regional transit partnership that will explore options for an integrated regional transportation system (e.g., intelligent transportation systems, smart card technology, information clearinghouse) that unites transportation systems and tour operations near the park.

A long-term plan for reducing vehicle miles traveled and associated mobile source emissions must include convenient, accessible and affordable mass transit alternatives on the local level as well as from a regional approach. Efforts must also continue to relieve congestion and vehicle emissions inside the national park.

**C. Heavy-Duty Vehicle and Equipment Initiatives**

**Recommendation:**

**Where feasible, the states should implement strategies to reduce pollution from state-owned and/or operated heavy-duty vehicles and equipment.**

The states should consider strategies such as emissions control retrofits, cleaner diesel fuels, accelerated vehicle replacement, repowering, changes in operating characteristic and engine

reprogramming. The states should also challenge local governments, transit operators and businesses to match this commitment.

Heavy-duty vehicles and equipment, including highway and non-road applications, emit significant amounts of fine particulate matter ($PM_{2.5}$) and the precursors that lead to ground-level ozone and $PM_{2.5}$ formation in the Southeast. Although new, more stringent federal emissions standards will be phased in beginning in 2004, heavy-duty engines typically have long service lives and, as a result, the current fleet of dirtier heavy-duty vehicles and equipment will likely be polluting for many more years to come. However, there are several potential barriers to implementing strategies to reduce heavy-duty vehicle and equipment emissions that must be overcome.

### D. Southeastern Alternative Fuels and Technology Task Force

**Recommendation:**

**Appoint a Southeastern Alternative Fuels and Technology Task Force to coordinate regional alternative fuels initiatives. The task force would consist of state transportation, energy and air quality officials, and others as determined by the governors. Among its duties, the task force would:**

- Plan and hold an annual Southeast Alternative Fuels and Technology Forum in partnership with the U.S. DOE Clean Cities program.
- Establish and work with the regional alternative fuels / technology consortium.
- Act as liaison between the regional consortium and state agencies/environmental chiefs/governors to ensure that state goals and needs are being addressed appropriately. The task force would also serve to communicate the limitations and liabilities of various technologies and fuels to state government.
- Work to lower the barriers to implementation and utilization of clean alternative fuels in the Southeast.
- Identify applicable laws, rules and policies that need to be changed or developed in order to promote a regional alternative fuels network.
- Work within their states to identify and support state fleet purchasing and vehicle use policies needed to promote the purchase and use of clean alternative fuels.

Developing an effective cooperative regional effort will require ongoing participation and responsibility from the state agencies involved. This task force would provide the necessary continuity and communication within and between the four states, other government agencies and private sector partners.

## III. Innovative Energy Options

Energy production and consumption clearly have significant environmental and economic impacts on the region. According to projections by the Southern Appalachian Mountains Initiative (SAMI), the Southeast could see a 50 percent increase in electricity generation by the year 2010 as compared to 1990 levels. In comparison, SAMI projects southeastern population growth will be approximately 25 percent during that same time period. These projections assume that growth will continue at the same rate as in the past decade and that no concerted conservation efforts are implemented. As the southeastern states continue to grow, it is incumbent upon state and federal government leaders to take steps to curb per capita energy consumption and to seek means to further reduce associated air quality impacts.

The work group has considered numerous policy options that address air quality issues through energy programs. The following energy policy options address both air quality concerns and energy consumption growth trends in the Southeast.

### A. Green Power

**Recommendation:**

**Develop a strong green power network in the Southeast. To promote the development and increased use of green power, the states should—**

- Pursue financial incentives that encourage growth and investment in green power technologies.
- Encourage investor-owned, public and rural electric cooperative utilities to offer green power pricing programs.
- Consider means to purchase green power for state-owned and operated buildings.
- Promote commercial and residential use of green power, where available, including incentives for consumer use.
- Partner with the Atlanta Regional Office of the U.S. Department of Energy in cooperative green power initiatives. Annual southeastern green power summits should be held to review current issues in developing green power sources and to support further coordination of projects in the Southeastern states.

Green power incentives throughout the states, such as North Carolina's 35 percent tax credit for green power generators, will encourage economic development, especially for businesses looking to promote their technologies throughout the region. Incentives must also be offered to end-use customers, for example, state or utility loan programs, rebates, tax credits and zoning ordinances designed to reduce financial barriers to green power. There must also be an extensive green power

education program to provide technical information for industry professionals, as well as more general information to the public.

**B. Energy Efficiency for Buildings and Industry**

**Recommendation:**

**Adopt the new International Energy Code and consider means to encourage compliance with energy-efficient construction standards, such as providing financial incentives to local governments responsible for codes implementation and enforcement.**

A vast amount of our energy use occurs in our buildings and industrial sectors, roughly equating to about two-thirds of our total energy consumption. Building energy codes serve not only to improve energy efficiency, but also to reduce energy demand. Energy-efficient buildings have lower energy costs, create less demand for fossil fuels, and reduce or prevent air emissions from new power generation. According to the Building Energy Codes Program, U.S. Department of Energy, strengthening energy codes increases the likelihood of energy and cost savings in new construction and renovations to existing buildings. New buildings can be designed to be both more comfortable and more efficient, cutting heating and cooling costs by close to 50 percent.

In the industrial arena, hundreds of millions of dollars could be saved annually with energy efficiency measures that would average paybacks of three years or less. Much of these savings could be found in troubled industries, such as textiles and furniture, which desperately need to reduce their operating expenses in order to compete effectively in the global marketplace. The states should aggressively market their existing programs or establish new programs that assist industry in reducing its energy use and resulting air emissions through quality energy auditing, training and financial incentive programs.

**Recommendation:**

**Place special emphasis on reducing energy expenditures in public education through energy audits, design and technical assistance, training for school officials and building designers, and adequate capital financing to secure the needed energy improvements for both new and renovated buildings. In both the construction of new facilities and the renovation of existing buildings, states should seek to reduce energy expenditures by at least 30 percent.**

In the buildings sector, which constitutes about 36 percent of our energy usage, each of the participating states faces the prospect of spending many billions of dollars over the coming decade for new construction and renovation of public schools and community college and university buildings. These education buildings, where energy expenditures may exceed more than $2 billion

for the four states, drain taxpayer resources for energy expenses that could be more wisely invested in faculty and teacher support, as well as other pressing educational needs.

Recommendation:

**Institute a comprehensive and aggressive energy efficiency program for state facilities and universities that will yield a minimum reduction of 30 percent in energy expenditures. Alternative financing strategies, such as performance contracting and the issuance of bonds, should be seriously considered as a possible means of covering the capital expenses of this much needed endeavor.**

Energy efficiency improvements in state facilities and related operations could yield substantial cost savings. Given the present budget difficulties in each of the four states, it is an ideal time to reduce energy expenses. For example, Tennessee expects to save $5.1 million annually through energy efficiency in state buildings. Aggressive energy conservation programs would also place the governors in position to lead by example, demonstrating that states can and will take action to control their energy expenditures. Such leadership will give added credibility to other state energy programs that are reaching out to local schools and governments, business and industry, and the general public.

Today, state agencies and universities in the four states are estimated to spend in excess of $700 million annually on their energy bills. A comprehensive energy efficiency campaign in state facilities could reduce this amount by 30 percent or more. Alternative financing strategies, such as performance contracting and the issuance of state bonds, should be investigated to potentially provide a vehicle for raising the capital for such an effort during the present lean budget period.

### C. Industries of the Future (IOF) Program for Improving Regional Air

Recommendation:

**Expand, broaden and enhance existing state energy efficiency programs for industry to result in significant reductions in air pollutants and costs savings to industry that is increasingly struggling to compete in a global marketplace. States should partner with the U.S. Department of Energy, as in the recent case of Tennessee and North Carolina, to formally establish Industries of the Future programs that seek increased efficiencies and process improvements in selected energy-intensive industries.**

Expanding and enhancing existing state and federal energy efficiency programs for industry can achieve large reductions in both energy use and air emissions for the region. The U.S. Department of Energy (DOE) Industries of the Future (IOF) program seeks a 25 percent improvement in energy efficiency and a 30 percent reduction in air emissions for the selected energy-intensive industries by 2010, and a 35 percent improvement in energy efficiency and a 50

percent reduction in emissions for the selected industries by 2020. This program motivates and assists industry with developing technology solutions to critical energy and environmental challenges that will produce additional business and community benefits.

**D. Financing Energy Efficiency, Renewable Energy and Low-Income Needs**

**Recommendation:**

**Give strong consideration to developing and advocating state legislation that would create a public benefits fund to finance state energy efficiency, renewable energy and low-income energy programs.**

Ensuring that our homes and businesses operate in the most efficient manner and that the region's extensive renewable resources are developed over the next decade to meet a large portion of the region's anticipated energy growth requires a mechanism to finance these activities. The need for this financing mechanism has never been greater.

To meet this need and fill the gap created by the elimination of energy efficiency and other programs at utility service companies, the growing trend across the country has been to create a public benefits fund by placing a small charge on each electric utility customer. More than 20 states now have a public benefits fund in place, using a minimal charge of 1 to 3 mills per kilowatt-hour (i.e., 1 mill = .1 of 1 cent). Although this is a very small charge per customer, costing only a few dollars per year, it can generate substantial funds needed for energy efficiency and renewable energy investments, as well as low-income assistance.

Funds collected for a public benefits fund should be used primarily as direct incentives to energy users to employ energy efficiency and renewable energy measures in their homes, businesses, schools and local governments. Outreach and education is an essential ingredient to raising consumer awareness and helping them make sound, informed decisions about the purchase of these energy-related measures. A minority portion of the funds should also be used to educate consumers about the benefits of these technologies and to augment low-income fuel payments when funds from existing sources are exhausted.

**E. Renewable Portfolio Standard**

**Recommendation:**

**Give strong consideration to developing and advocating for state legislation that would establish a renewable portfolio standard. The requirement of renewable resources, as part of the utilities' overall generation mix, should be set to correlate with the available renewable resource potential and existing resources that are being utilized.**

The South's renewable energy resources are among its greatest assets. The region is blessed with the most abundant biomass energy resources in the nation (e.g., animal waste, wood waste,

potential for energy crops and landfill gas). The southern region also possesses good solar and hydro resources and has extensive potential for wind energy in the Appalachian Mountains and along its coastline. Many of these resources are virtually environmentally benign, such as solar and wind power, and the remainder typically have far lower emissions and less environmental disruption than typical fossil fuel plants. The development of these resources, located within the boundaries of our states, leads to less dependence on outside sources of fuel and generates in-state jobs and economic growth.

To accelerate the development of renewable resources, ten states in the nation have taken the lead and established a renewable portfolio standard (RPS). The RPS establishes a minimum percentage of renewable energy generation that is required, usually increasing gradually over a decade or more, to be provided by utility companies in the state. This percentage usually begins at a level near current renewable energy generation and then grows each year. In most states, trading of credits is allowed to enable smaller utilities or those having difficulty developing renewable resources to meet the requirement by buying credits from those who may have developed excess renewable capacity.

### F. Interconnection Standards and Net Metering

**Recommendation:**

**Give strong consideration to developing and advocating state legislation, such as that in the state of Georgia, which would allow for net metering and simplified interconnection standards for small renewable energy generators. Net metering laws encourage small-scale renewable generation and, thereby, increase the contribution of these resources to the state's energy mix. Alternatively, a state could also enact net metering rules through the appropriate regulatory authority.**

The development of renewable and distributed resources across the South suffers from a lack of clear and streamlined standards that pave the way for easy interconnection of these resources to the utility grid. In many instances, roadblocks and barriers have been placed in front of small generators who wish to sell power. Since many renewable resources are inherently decentralized, removing the barriers to interconnection is essential to tapping their full potential.

To date, 36 states have passed legislation that allows for "net metering" or the exchange of power bought and sold by small generators at the utility company's retail rate. Such laws, now in place in Georgia and nearby Virginia in our region, require only a single meter on a household that runs forward or backward as energy is supplied to or purchased from the grid. Such laws also spell out simple interconnection standards and clarify the process for tying into the utility grid.

## Southern Air Principles
## Summary of Energy Report

### I. Nature of Issue

- Energy production and consumption have significant environmental and economic impacts on the southeast states.
- Southern Appalachian Mountains Initiative (SAMI) projects a 50 percent increase in electricity generation from 1990 levels by 2010 in the southeast if no conservation measures are implemented.
- Per capita energy consumption needs to be addressed in order to improve air quality in the southeast.

### II. Recommendations

- Develop a strong green power network in the Southeast by states pursuing financial incentives that encourage growth and investment in green power technologies, encouraging investor-owned, public and rural electric cooperative utilities to offer green power pricing programs, and promoting use of green power by state governments, commercial and residential entities.
- Adopt the new International Energy Code and consider means to encourage compliance with energy-efficient construction standards, such as providing financial incentives to local governments responsible for codes implementation and enforcement.
- Place special emphasis on reducing energy expenditures in public education through energy audits, design and technical assistance, training for school officials and building designers, and adequate capital financing to secure the needed energy improvements for both new and renovated buildings.
- Institute a comprehensive and aggressive energy efficiency program for state facilities and universities that will yield a minimum reduction of 30 percent in energy expenditures.
- Expand, broaden and enhance existing state energy efficiency programs for industry to result in significant reductions in air pollutants and costs savings to industry that is increasingly struggling to compete in a global marketplace.
- Give strong consideration to developing and advocating state legislation that would create a public benefits fund to finance state energy efficiency, renewable energy and low-income energy programs.
- Give strong consideration to developing and advocating state legislation that would establish a renewable portfolio standard.
- Give strong consideration to developing and advocating state legislation, such as that in the state of Georgia, which would allow for net metering and simplified interconnection standards for small renewable energy generators.

Full report is available at http://daq.state.nc.us/quick/summit/
Prepared by the NC Department of Environment and Natural Resources

## Southern Air Principles
## Summary of Transportation Report

### I. Nature of Issue

- Air emissions from transportation sources contribute significantly to air quality impairments in the Southern Appalachian Mountains as well as across the Southeast.
- Mobile source contributions will continue to increase without proactive steps to reduce these emissions.
- The transportation system affects air quality through land use impacts from road construction and use, as well as through air pollution from motor vehicle use.
- Motor vehicle emissions of concern include nitrogen oxides ($NO_x$), volatile organic compounds (VOC) and fine particulate matter ($PM_{2.5}$).
- Southern Appalachian Mountains Initiative (SAMI) estimates that vehicle miles traveled in SAMI states will increase 267 percent between 1990 and 2040. Further, SAMI projects that VOC and fine particulate emissions will continue to increase over the next 40 years.

### II. Recent Developments

- The Southern Governors' Association and the Southern States Energy Board report "Energy Policy in the South" recommends several policies to increase fuel efficiency and the use of alternative fuels.
- The National Energy Policy Development Group recommendations include national legislation to provide income tax credits for the purchase of new hybrid or fuel-cell vehicles.
- Georgia enacted a new tax law in 2001 for the purchase or lease of new alternative fuel vehicles.
- Tennessee's Interagency Energy Policy Work Group recommendations included encouraging telecommuting for state employees, expanded carpool options and pre-tax benefits for state employees using public transit or vanpools.
- South Carolina's Governor signed an executive order to increase the use of alternative fuels and require all state agencies operating alternative fuel vehicles to use alternative fuels whenever practical and economically feasible.
- The North Carolina General Assembly enacted legislation to reduce by 25 percent projected NOx emissions from mobile sources, including measures to increase mobile emissions testing, increase the use of alternative fuels, and reduce vehicle miles traveled.

### III. Recommendations

- Increase the availability and use of cleaner fuels in the Southeast.
- Develop regional alternatives to automobile travel to address growing trend in vehicle miles traveled and to provide desirable and efficient alternatives to motor vehicle and air transportation.
- Where feasible, implement strategies to reduce pollution from state-owned and /or operated heavy-duty vehicles and equipment.
- Appoint a Southeastern Alternative Fuels and Technology Task Force to coordinate regional alternative fuels initiatives. The task force would consist of state transportation, energy and air quality officials, and others as determined by the governors.

Full report is available at http://daq.state.nc.us/quick/summit/
Prepared by the NC Department of Environment and Natural Resources

## Southern Air Principles
## Summary of Multi-Pollutant Strategy Report

### I. Nature of Issue

- The Southern Air Principles agreement envisions regional approaches to addressing air quality that address each state's unique qualities and needs. That Southern Air Principles are:
  - Each state must do its part to protect and improve air quality.
  - Regional air quality problems must be addressed through regional approaches that address each state's unique qualities and needs.
  - The southern states must continue to work together to develop and implement new strategies that will improve regional air quality, such as multi-pollutant regulatory strategies for reducing nitrogen oxides, sulfur dioxide and mercury and innovative transportation and energy policies.
- Southern states are experiencing unprecedented population growth and expansion of urban and suburban areas, as well as associated increases in energy and vehicle use, all of which contribute to air pollution.
- Air pollution sources, including power plants and vehicles, emit multiple pollutants that contribute to a complex mixture of air pollution problems in the southern states and across the country.
- These problems include too much ozone, too many tiny particles, too much acid deposition, too much mercury and too much haze.
- Strong multi-pollutant strategies will effectively reduce these air pollution problems.

### II. Recent Developments

- Southern Appalachian Mountains Initiative (SAMI) was a ten-year, eight southern state study of the effects of air pollution on visibility and the environment in the Southern Appalachians. SAMI has now completed its technical work and findings and is preparing a final report.
- SAMI found that each state receives the most benefit from reductions of emissions from within their own state boundaries, and that each state also benefits from a strong national multi-pollutant strategy.
- The Southern Governor's Association and the Southern States Energy Board released a report calling for a national energy policy.
- The National Governor's Association adopted a Comprehensive National Energy Policy that calls for a flexible, market-based program for the significant reduction and capping of emissions of sulfur dioxide, nitrogen oxides, mercury, and the voluntary reduction of carbon dioxide emissions.
- Several multi-pollutant Congressional bills have been introduced and the Bush administration has announced its 'Clear Skies Initiative' to establish a cap and trade program for nitrogen oxides, sulfur dioxides and mercury.

### III. Multi-Pollutant Strategy Recommendations

- Support and promote strong multi-pollutant legislation for electric utility plants to assure significant reductions of SO2, NOx and mercury both in and outside the Southern Air Principles states.
- Reductions from other source categories should also be considered in state and national legislation and regulations.
- Recognize the value and importance of all Class I areas and work cooperatively to assure SAMI recommendations are implemented.
- Continue to consult, consider and develop strategies as necessary to implement successfully these recommendations.
- Provide periodic reports to the Governors.

Full report is available at http://daq.state.nc.us/quick/summit/

Prepared by the NC Department of Environment and Natural Resources

# Southern Air Principles

Protecting and improving air quality is essential to safeguard public health, protect our natural resources and promote the long-term economic vitality of the South. Air quality is a shared resource, and all sectors of society bear a responsibility for improving air quality and protecting our natural resources.

Scientific research and evaluation show that air pollution is not confined to state boundaries, as evidenced by the adverse impacts of air pollution on the Southern Appalachian Mountains and other sensitive areas. Air pollution affects us all regardless of where we live. The southern states are experiencing unprecedented population and economic growth, as well as associated increases in energy and vehicle use. To ensure clean air and a reliable, affordable energy supply, we must develop new strategies to address issues such as regional haze and pollutants that threaten public health and the environment.

Air pollution sources, including power plants, emit multiple pollutants that traditionally are regulated independently. It is recognized that multi-pollution control strategies may significantly reduce environmental impacts; provide more efficient control of environmental pollutants; and support economic competitiveness and cost effectiveness. It is in the public interest to protect and preserve public health and the environment while providing more efficient and cost-effective regulation of pollution sources.

It is critical that the states continue to cooperate through regional partnerships that recognize the unique qualities of each state and offer flexibility to address each state's needs. Therefore, we, the undersigned members of the Southern Governors' Association, hereby agree to the following **Southern Air Principles** that will enhance local, state, and regional efforts to protect and improve air quality; ensure the protection of public health and welfare of the southern states; and promote the attainment of a high quality of life.

- **Each state must do its part to protect and improve air quality.**
- **Regional air quality problems must be addressed through regional approaches that address each state's unique qualities and needs.**
- **The southern states must continue to work together to develop and implement new strategies that will improve regional air quality, such as multi-pollutant regulatory strategies for reducing nitrogen oxides, sulfur dioxide and mercury and innovative transportation and energy policies.**

Therefore, to fulfill these principles, the chief environmental officers of the signatory states are directed to consult, consider and formulate a proposed joint multi-pollutant strategy; to address the problems of ozone pollution, acid deposition and reduced visibility; to take into account in developing the strategy the information and recommendations provided by the final Southern Appalachian Mountains Initiative (SAMI) report; to provide a progress report to the Governors by December 31, 2001; and to make recommendations on the joint multi-pollutant strategy to the Governors by March 15, 2002.

Signed this 3rd day of Dec. 2001.

Don Sundquist, Governor
State of Tennessee

Michael Easley, Governor
State of North Carolina

Roy E. Barnes, Governor
State of Georgia

Jim Hodges, Governor
State of South Carolina