

**“BUMP-UP” POLICY UNDER TITLE I OF THE  
CLEAN AIR ACT**

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**HEARING**  
BEFORE THE  
SUBCOMMITTEE ON ENERGY AND AIR QUALITY  
OF THE  
COMMITTEE ON ENERGY AND  
COMMERCE  
HOUSE OF REPRESENTATIVES  
ONE HUNDRED EIGHTH CONGRESS

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## **“BUMP-UP” POLICY UNDER TITLE I OF THE CLEAN AIR ACT**

**TUESDAY, JULY 22, 2003**

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

The subcommittee met, pursuant to notice, at 9:30 a.m., in room 2123, Rayburn House Office Building, Hon. Joe Barton (chairman) presiding.

Members present: Representatives Barton, Cox, Whitfield, Shimkus, Radanovich, Issa, Tauzin (ex officio), Boucher, Wynn, Allen, Waxman, Pallone, McCarthy, Strickland, Capps, and John.

Also present: Representative Upton.

Staff present: Bob Meyers, majority counsel; Bob Raney, fellow; Andy Black, policy coordinator; Peter Kielty, legislative clerk; Michael Goo, minority counsel; Bruce Harris, minority professional staff.

Mr. BARTON. The subcommittee will come to order. I want to welcome everyone to today's hearing on the “Bump-Up” Policy under Title I of the Clean Air Act.

Without objection, the subcommittee is going to proceed pursuant to Committee Rule 4(e) which governs opening statements by members and the opportunity to defer those statements for extra questioning time. Is there an objection?

Hearing none, so ordered.

The Chair will now recognize myself for an opening statement. Over the course of its history, the Clean Air Act has been called many things. There is no doubt that the Act, which runs to over 400 pages, is complicated, technical, and subject to varying interpretations.

Some of the Clean Air Act's complexity is a normal result of the legislative process, but in other cases different policies and priorities have been added to the Act without the full coordination of some of the other provisions in the Act. I believe that today's hearing offers an example of such conflicting priorities.

In 1990, Congress was concerned with the amount of progress that had been made to attain the 1-hour ozone standard, Part D, Subpart 2, was added to the Clean Air Act to place ozone non-attainment areas on a specific schedule for attainment. The worse the existing air quality, the longer the time that Congress allowed for attainment. As a price to be paid for missing deadlines, requirements on noncompliant areas were increased by bumping those areas up into higher and more onerous classifications.

In 1990, however, Congress was also aware that the pollution from one area could affect another downwind area. While in many cases precise computer modeling on this transport issue did not exist, Congress enacted provisions providing for regional ozone transport commissions. Congress also recognized the transport in provisions to Section 110 regarding mandatory provisions of the State Implementation Plan requirements.

By 1994, the EPA and the Clinton Administration determined that nonattainment and transport provisions could sometimes be in conflict. On September 1, 1994, then Assistant Administrator Mary Nichols issued a memorandum that provided for the extension of attainment dates for downwind areas in cases of overwhelming transport of air pollution. Commenting on the conflicting provision in the Clean Air Act, she stated, "It would be an odd or even absurd result for downwind areas unable to attain due to transport, to be penalized for a failure to address a problem that is beyond their ability to control. The EPA reads these provisions together to avoid arguably absurd or odd results and to, on balance, give effect to as much of Congress' manifest intent as possible. Avoiding penalizing the downwind areas for failure to do the impossible constitutes a permissible balance."

So Mary Nichols, Assistant Administrator for EPA at the time, and the Clinton Administration back in 1994 made the common-sense observation that if you are in noncompliance because of downwind transport issues, we need to recognize that.

This 1994 policy was affirmed in a 1998 Guidance Memorandum signed by Richard Wilson, who was then Acting Administrator for Air and Radiation. Note, in the 1994 effort he stated, since the issuance of that memorandum, the history of efforts to analyze and control ozone transport has led EPA to believe that it should expand the policy's reach to ensure that downwind areas are not unjustly penalized as a result of transport. He noted ongoing efforts of the Ozone Transport Commission to assess the movement of pollution in the eastern United States, and issued a Guidance Memorandum to specify the conditions under which downwind area attainment dates could be extended where transport of pollution prevented timely attainment.

This Clinton Administration policy was the state of the law until 2002, when three court cases overturned EPA's extended attainment date policy. Although three separate District Court opinions were rendered, the decisions turned on each court deciding that EPA did not have sufficient statutory authority in the Clean Air Act for extension of attainment date policy.

I am an engineer and not a lawyer, so I can't quibble with the legal rationale of the District Court decisions, however, a few things do stand out in my mind about the practical situation that has been created by the District Court opinions.

First, for 1994 to 2002, downwind areas came to rely on EPA's policy of extending deadlines over the course of those 8 years. They were, in fact, granted extensions by the agency empowered by Congress to implement the Clean Air Act. Thus, by any measure, the reliance of downwind areas on this policy was reasonable and appropriate.

Two, the basis of the attainment date extension policy is simple fairness. The concept, as I understand it, is not to penalize non-attainment areas for emissions that are beyond their ability to control. Downwind areas are not relieved of their obligations, they are simply allowed a more reasonable time period to achieve attainment.

Three, the structure of Subpart 2 serves to bump-up areas to the more serious classification when their monitored air quality in many cases is getting better. For example, in Baton Rouge—and we have the Mayor of Baton Rouge in the audience today—if Baton Rouge were classified today, it would be a marginal nonattainment area, the lowest classification, not a severe nonattainment area, the next to highest classification. Thus, the penalty applied in the bump-up can be widely disproportional to amount and character of the remaining violations in the actual situation of the air in the region under question.

Four, results of being bumped-up are far from benign. Initial local planning is required, constructing offsets increased, severe enforcement penalties may be triggered under Section 185 should even minor infractions occur. Transportation conformity requirements can also be affected.

As one of the few members of this committee who was on the committee during the 1990 amendments, I am not convinced that in the case of transport this was the deliberate and specific intent of the 1990 amendments to the Clean Air Act. In fact, I can state it is my opinion that it is the exact opposite of what the intent was. Faced with this, I think it is more than fair to examine what is the right policy to apply through the Clean Air Act based on what we know now in 2003 about air pollution and local efforts to achieve air quality standards.

The courts looked at the state of the law as Congress left it in 1990, that is 13 years ago. We should be concerned with reasonable and just results more than some commitment to every jot and title of the Act. This subcommittee needs information about this issue and what might be done to address the situation.

This is a very important hearing. I have read the testimony. I am looking forward to questioning some of the witnesses, especially from our second panel, to explore some possible solutions.

So, with that, I would end my statement, and would yield to the distinguished gentleman from Virginia for his opening statement.

Mr. BOUCHER. Thank you very much, Mr. Chairman. I think that today's hearing is both timely and appropriate. It provides an opportunity for subcommittee members to become well acquainted with the debate surrounding the EPA's bump-up policy, the litigation that has ensued over that policy, and the options that the subcommittee now has before it in considering the plight of a group of metropolitan regions that fail to achieve attainment of air quality standards, not because of locally produced emissions but because of transport of pollution into their region from elsewhere.

During the Clinton Administration, the EPA granted extensions of compliance deadlines to communities that were out of compliance because of pollution transport from other regions. The extensions were only for the time necessary for the region responsible for the transported pollution to itself achieve attainment. The urban

area seeking the extension was literally unable to achieve compliance with ambient air quality standards by normal control of local emissions. The applicant for the extension was the victim of another region's emissions.

This seemingly sensible EPA policy of granting extensions in these truly extraordinary circumstances was challenged in court, and no less than four United States Courts of Appeal ruled that under the language of the Clean Air Act, as amended, the EPA is without authority to grant extensions to these deserving localities. Therefore, an automatic bump-up to the next most severe category is now occurring by operation of law.

I think fairness requires that we devote attention to the matter, and I want to commend Chairman Barton for organizing this conversation during which we will do so. I will be interested in the witnesses' views about the problems the inability of EPA to grant extensions will create for the localities that are out of compliance through no fault of their own, the urgency of the situation from their perspective, and what course the witnesses suggest that the subcommittee now take.

Thank you very much, Mr. Chairman. I look forward to hearing from the witnesses.

Mr. BARTON. Thank you, Mr. Boucher. The distinguished full committee chairman is recognized for an opening statement.

Chairman TAUZIN. I thank the chairman and thank him for this hearing. Chairman Barton, I know that you know how important this issue is to communities such as one in Louisiana that is represented in this room today. Although the title of the hearing, Bump-Up Policy under Title I of the Clean Air Act, may have some people scratching their heads, I can assure you it is a most serious matter to local communities, and it is a serious matter for States that are most affected by it.

Today's hearing seeks to get to the heart of what these communities face in terms of complying with the Clean Air Act in attempting to improve local air quality for their citizens. As reflected on the second panel, today's hearing has a direct bearing on Baton Rouge, Louisiana, our State capitol city. This community represented today by The Honorable Bobby Simpson, the Mayor-President of Baton Rouge and the Parish of East Baton Rouge—and, Mayor, I want to welcome you to this hearing today.

The community has been making substantial progress in cleaning up its air, but during the past 2 years it has suffered only three violations of the hourly ozone standard, yet, this area stands on the verge of being bumped-up to a severe ozone classification, an action that will require additional State planning, expensive control measures, and increased construction off-sets which can serve as a disincentive to new development, and severely impact the economy of this important city in our state.

My understanding is that Baton Rouge believes that a new requirement for reformulated gasoline requirement alone will cost its citizens between \$48 and \$72 million per year, while producing a negligible effect on local pollution.

As forcefully indicated in its testimony, Baton Rouge believes it was set up to fail by the EPA's imperfect understanding of ozone control strategies and the flaw in EPA guidance, but it is Baton



Rouge, not the EPA, which will suffer the consequences of this failure.

Today's hearing will also receive testimony from witnesses from Texas, Georgia and New Jersey. All of these States have nonattainment areas. Our witnesses will discuss their views on bump-up policies as well as their unique local conditions. In this regard, some of these areas have been involved in extensive litigation over their nonattainment status, with lawsuits stretching back many years and in some cases stretching as far into the future as anyone can see, or even want to look, but look we must.

Today we will explore the origins of the bump-up in the 1990 Clean Air Amendments. We will also hear about policies initially drafted by the Clinton Administration in 1994 to address overwhelming ozone transport. We will hear about the attainment date extension policy that was subsequently issued by EPA in 1998, published in 1999, repeatedly applied to several areas of the country, and we will hear about how such policies were invalidated by court decisions in 2002, leaving affected communities literally in the proverbial lurch.

Such an examination can easily get bogged down in details and nuances, however, I am most interested in taking a step back and analyzing the basic question of whether the law in this area makes any degree of common sense.

When we enacted the 1990 Clean Air Act Amendments, we attempted to address a broad range of concerns in this very room, both to correct the previous flaws in the statute and chart a new course on such matters as acid rain, hazardous air pollutions and Federal permits. We also enacted new policies for attainment of the ozone standard, but I think it is important that we concede something up front—that is, in 1990 we had far from perfect knowledge of either the underlying causes and atmospheric behavior of air pollution, or the best regulatory and nonregulatory methods to address pollution.

As opposed to 1990, we now know that pollution transport occurs to a greater extent than previously envisioned, and that many downwind areas are affected by it. Yet, under the Clean Air Act, EPA cannot fully take this into account in granting justified extensions of compliance obligations. Compared with 1990, the air is demonstrably cleaner in many areas, yet, the provisions of the current Act work to impose stricter controls and penalty measures on local areas even as this progress is being made and air quality approaches attainment. And based on the lessons we learned, we know the flexible implementation of air pollution standards actually can work, often achieving larger reductions in pollution at lower cost. But the current Act, as forcefully demonstrated by the 5th Circuit and the 7th Circuit and the D.C. Circuit opinions on the attainment date extension policy may allow little room for interpretation, much less flexible implementation.

Therefore, the remaining question is, what should we, and can we, do anything about it? It is my hope this hearing will help us provide the committee with some answers. I am very interested in the recommendations of our witnesses, and obviously extraordinarily interested in the work of this subcommittee in giving the full committee some ray of hope that we can cure these problems

before communities like Baton Rouge, Louisiana is hurt so terribly by the misapplication of these laws.

I thank the chairman for the time.

Mr. BARTON. We thank the gentleman. Does the gentlelady from California, Ms. Capps, wish to make an opening statement?

The gentlelady is recognized for 3 minutes.

Ms. CAPPS. I thank you, Mr. Chairman, and thank you for calling this important hearing. Thank our witnesses for being present, as well.

Mr. Chairman, since the Clean Air Act was passed in 1970, air quality and public health have improved in many regions of our country. However, even after 30 years of progress, many areas still violate basic health standards and, as a result, the health of tens of millions of Americans remains at risk.

Two weeks ago this committee met to discuss the President's so-called "Clear Skies" Proposal. At that hearing I raised a number of concerns with the President's plan. I believe, Mr. Holmstead, I believe it was you that I was questioning as well on behalf of the Administration.

For example, the Administration's plan eliminates the tools local communities can use to clean up their air and meet clean air deadlines. This will make continued pollution problems more likely. It is clear that delaying the goals of the Clean Air Act will not make our air cleaner or protect our health. And now, 2 weeks later, here we are discussing another dangerous policy that could waive stronger anti-smog requirements for cities with some of the worst air pollution.

Take a look outside today, if you think we should be delaying the clean-up of air in the DC area. EPA has illegally extended the clean air deadlines in these cities without bumping them up to higher pollution categories. The courts have consistently ruled that the EPA's extension policy violates the purpose and intention of the Clean Air Act. This is clearly a flawed and unlawful practice.

As a public health nurse, I have long been concerned with the state of our Nation's air quality. I am not someone who likes to pick on our Nation's Capital, but let us use Washington, DC as an example of air pollution problems that need to be addressed.

Last summer, the Washington, DC area suffered its worst ozone pollution in more than a decade. This included 9 code red days, 19 code orange days, and two code purple days when the air was deemed very unhealthy. This means the lives of fragile citizens, our children, and those suffering chronic asthma problems are severely impaired on these days. It poses a special threat, as I said, to residents with asthma and other respiratory diseases, including more than 53,000 asthmatic children. It is sad that during a typical summer day here in our Nation's Capital more than 2400 people will visit the emergency room due to breathing difficulties, many of which could be prevented.

Washington, DC area residents now face another summer of ozone pollution that will put them at further risk of asthma attack, emergency room visits, lung damage, and other serious health impacts. The Washington area is more than 10 years behind in adopting adequate anti-pollution programs. The DC area needs stronger, not weaker clean air protections, and it needs them now. But EPA's

extension policy could lead Washington, DC down a path toward dirtier air when we should be finding ways to improve public health.

Mr. Chairman, I have a letter from a number of elected officials who are opposed to any proposal that would weaken anti-smog requirements. These are locally elected officials from Maryland, from Virginia, and I would ask that this letter be read into the record.

It is not only a problem in Washington, DC. EPA reports that 133 million Americans live where the air is unhealthy to breathe because of ozone pollution. EPA's extension policy would delay the adoption of badly needed anti-pollution measures in communities all across the Nation. It is a bad idea, and one that jeopardizes the health of millions of Americans. I am hopeful that this committee will see this policy for what it is, dangerous and unlawful.

We need to respect and carry out the Clean Air Act, as written, and ensure that the public and local communities receive the protective measures that the law promises. It is irresponsible to allow the EPA to use delay tactics. Our children and our families have already waited too long for clean air.

Mr. BARTON. The gentlelady's time expired about a minute ago.

Ms. CAPPS. Thank you. I will yield back, and look forward to the testimony of our witnesses.

Mr. BARTON. If you will share the letter with our counsel, we need to look at it, but I am fairly certain we will accept it into the record.

Ms. CAPPS. Thank you.

[The letter follows:]

VIA FACSIMILE

*January 16, 2003*

The Honorable TED STEVENS  
*Chair, Appropriations Committee*  
*United States Senate*  
*Washington, DC 20510*

The Honorable ROBERT BYRD  
*Ranking Member, Appropriations Committee*  
*United States Senate*  
*Washington, DC 20510*

The Honorable BILL YOUNG  
*Chair, Appropriations Committee*  
*United States House of Representatives*  
*Washington, DC 20515*

The Honorable DAVID OBEY  
*Ranking Member, Appropriations Committee*  
*United States House of Representatives*  
*Washington, DC 20515*

DEAR SENATORS STEVENS AND BYRD AND CONGRESSMEN YOUNG AND OBEY: We understand that officials from the Environmental Protection Agency (EPA) may be supporting attempts to block anti-smog requirements for the Washington, DC area and other cities across the country. We are concerned about the impact that this would have on the health of our region's residents, and urge you not to include EPA's proposal in the FY2003 omnibus appropriations bill, or any of the FY2004 appropriations bills.

Specifically, we understand that EPA may be seeking a statutory change to the Clean Air Act that would codify the agency's practice of extending air quality attainment deadlines without imposing new pollution control measures. The 1990 Clean Air Act allowed EPA to extend a city's deadline for complying with air quality standards, but in return required the agency to demand stronger pollution control measures. EPA's practice of extending cities' deadlines without imposing now pollu-

tion controls has forced communities like the national Capitol region to live with dirtier air.

As local and state elected officials, we have long been concerned with the quality of our region's air. Last summer the Washington, DC area suffered its worst ozone pollution in more than a decade, including nine "code red" days and 19 "code orange" days. This severe pollution poses special threats to residents with asthma and other respiratory diseases, including more than 53,000 asthmatic children. In addition, it would negatively impact communities outside the Washington, DC area, such as Baltimore, that are already complying with tighter pollution control requirements.

Enacting legislation that weakens the Clean Air Act would send our region down a path toward dirtier air at a time when we should be finding ways to improve public health in our communities. We urge you not to include any proposals that would weaken anti-smog requirements in the FY2003 omnibus appropriations bill, or any other bills.

For more information, please contact Alec Evans in D.C. Councilmember Phil Mendelson's office: (202) 724-8064.

Sincerely,

JAMES ALMAND, *47th District, Virginia House of Delegates*; PHIL ANDREWS, *District 3, Montgomery County Council, Maryland*; ROBERT BRINK, *48th District, Virginia House of Delegates*; JIM BURTON, *Mercer District, Loudoun County Board of Supervisors, Virginia*; KAREN DARNER, *49th District, Virginia House of Delegates*; TOM DERNOGA, *District 1, Prince George's County Council, Maryland*; PAUL FERGUSON, *Acting Chair, Arlington County Board, Virginia*; MARK HERRING, *Leesburg District, Loudoun County Board of Supervisors, Virginia*; PHIL MENDELSON, *At-Large, Council of the District of Columbia, Washington, D.C.*; TOM PEREZ, *District 5, Montgomery County Council, Maryland*; PETER SHAPIRO, *Chairman, Prince George's County Council, Maryland*; PATRICIA TICER, *District 30, Senate of Virginia*; ELEANOR TOWE, *Vice Chairman, Loudoun County Board of Supervisors, Virginia*; MARIAN VAN LANDINGHAM, *45th District, Virginia House of Delegates*; and MARY MARGARET WHIPPLE, *District 31, Senate of Virginia*.

Mr. BARTON. Does the gentleman from Kentucky wish to make an opening statement?

Mr. WHITFIELD. Mr. Chairman, I notice we have ten witnesses and four of them are from local communities, that can talk to us about the practical effects that this policy has on them, so I will waive.

Mr. BARTON. The gentleman defers and will get an additional 3 minutes in his questioning.

Does Mr. Cox wish to make an opening statement?

Mr. COX. Thank you, Mr. Chairman, and thank you also for convening this important hearing. While the issue before us today does not concern California directly, the broader implications of how the Federal Government implements laws intended to improve America's environmental quality are of importance to all Americans.

The heavily litigated recent history of the bump-up policy is a rich illustration of why it is so important that the Federal Government spend less time dictating how to localities how to clean up their environment, and more time focusing on the goals that States and localities must achieve and on incentives for achieving them.

The policy that we are studying today is part of an overall joint Federal/State effort that, when fully implemented in 2004-2005, will result in the reduction of approximately 1 million tons of nitrous oxides in affected States each year, but there is a problem with a piece of it.

In 1998, the Clinton Administration issued a guidance memorandum on bump-up as a proposed interpretation of the Clean Air Act. EPA stated that it would consider extending an attainment date for that area that was affected by transport from either an upwind area in the same State that had a later attainment date,

or an upwind area in another state. The extension would only be available if the downwind area had adopted all necessary local measures and he submitted an approvable attainment plan. In addition, the downwind area would need to provide for implementation of the local measures as expeditiously as practicable, but no later than the date by which the upwind reductions needed for attainment would be achieved.

The Federal Register Notice on the attainment date extension policy also included a review of congressional intent concerning classification of areas and transported pollution. It indicated that while Congress had not fully reconciled different transport provisions, Congress had indicated that upwind areas should be responsible for preventing or interfering with attainment in downwind areas. Thus, EPA indicated it was filling in a gap in the statutory framework.

It stated that the EPA believes that Congress, had it addressed this issue, would not have intended downwind areas to be penalized by being forced to compensate for transported pollution by adopting measures that are more costly and onerous and/or which would will become superfluous once upwind areas reduce their contribution to the pollution problem.

This is not the first time that the implementation of rules conceived under different contexts has produced anomalous results. California has been struggling for years to cope with the 2-percent oxygenate requirement for its fuels, an initiative with which compliance seemed reasonable when first conceived, but which became an expensive mess in practice.

The EPA thus far seems unable to allow California any flexibility in how we achieve clean air. The goal of clean air should be more important than rigid stipulations regarding how that clean air is achieved. Ingenuity and advanced technology, not government mandates, will lead to a more pristine environment. The wide gulf between what EPA and the courts' reading of our 13-year-old statute think the Federal Government must do on the bump-up policy indicates that Congress may need to update this law.

Mr. BARTON. The gentleman's time has expired.

Mr. COX. That is an excellent reason for this hearing, and I thank the chairman for convening it.

Mr. BARTON. We thank the gentleman. Does the distinguished gentleman from California, Mr. Waxman, wish to make an opening statement?

Mr. WAXMAN. I do, Mr. Chairman.

Mr. BARTON. The gentleman is recognized for 3 minutes.

Mr. WAXMAN. Mr. Chairman and my colleagues, today we examine an EPA policy regarding the 1-hour ozone standard. This policy has determined the classification status of a handful of areas in the United States, namely, Beaumont/Port Arthur, Texas; Baton Rouge, Louisiana; Atlanta, Georgia; Portland, Maine; and Washington, DC. Clearly EPA's policy is a violation of the Clean Air Act. Three courts have determined this, and EPA will not dispute it today. We can all agree that EPA has acted illegally. Amazingly, not only has EPA lobbied Congress to overturn these lawsuits and codify their illegal approach, they want to extend the illegal policy

to the entire country and apply it to the new 8-hour ozone standard as well.

The effects of such a law would be sweeping and, on its face, makes no sense for the Nation. The air pollution problems faced by Texas are different than those faced by Georgia, and those problems are different than the problems faced by Maine. Allowing every area in the country that has an ozone transport issue, no matter how small, to receive a waiver of the Clean Air Act ignores the pending implementation of the 8-hour ozone standard. The policy would also punish other areas of the country that have successfully acted to clean up the air.

There are many factual questions we need to have answered if this subcommittee is to fully understand the air pollution challenges faced by these areas. There are technical questions about crafting effective strategies to clean up these areas. There also appears to be a number of factual disputes between today's witnesses, and I hope EPA will be more forthcoming than it has been on its other legislative proposals.

Since today's hearing is slated as a hearing on reauthorization of the Clean Air Act, I would hope that we would develop a thorough record. Some of the questions that I hope to have answered include if the vast majority of ozone exceedances in Atlanta are attributable to local sources of air pollution and additional local reductions will be required to attain the 8-hour ozone standard, why should Atlanta consider doing less than so many other cities in the United States?

In California, we have learned that refineries emit far more air pollution than EPA has assumed. Recent data shows that refineries and chemical plants in Texas and Louisiana may be suffering from the same problem. How do we effectively address these sources of pollution?

And, finally, what are the impacts of adopting EPA's illegal policy into statute and applying it to the entire country? I do not believe anyone has fully analyzed that.

Air pollution is an enormous problem in our cities. It is within our ability to address this problem, but it takes leadership and, unfortunately, delay is not leadership.

Mr. BARTON. That concludes the gentleman's statement?

Mr. WAXMAN. Yes, Mr. Chairman.

Mr. BARTON. Does the gentleman from Illinois, Mr. Shimkus, wish to make an opening statement?

Mr. SHIMKUS. Mr. Chairman, I will just submit mine for the record.

[The prepared statement of Hon. John Shimkus follows:]

PREPARED STATEMENT OF HON. JOHN SHIMKUS, A REPRESENTATIVE IN CONGRESS  
FROM THE STATE OF ILLINOIS

Good morning, Mr. Chairman, thank you for holding this timely hearing.

If the Clean Air Act process has shown us anything over the last decade, it is that measuring and predicting pollution is a very inexact science. We learned that when pollution is measured in a city or region, it may actually come from other areas. The projections that the government, both local and federal, make about future pollution have been wrong in many cases. The result is a constant changing of the rules and laws to meet clean air goals and an uncertainty for community leaders and businesses about steps should be taken. A county may think they are on the road to attainment, and only later realize that they have fallen far short.

EPA has provided a good amount of flexibility for regions to meet our clean air goals and has worked closely with these regions on formulating plans to meet those goals. Some times that flexibility has achieved the desired results. Other times it has resulted in a patchwork of environmental laws that are confusing and complex, like the 45 different blends of gasoline we have in this country. At the heart of all this is our responsibility, as legislators and regulators, to find a balance between a clean environment and a strong economy.

This “bump up” issue is very important to me because I come from and represent Madison County, IL, a county that has been in non-attainment in the past, and will likely be in non-attainment in the future even if Clear Skies is passed. Usually a “bump up” from “moderate” to “serious” will cost a region hundreds of millions of dollars in penalties and lost federal funding.

In January of this year Madison County, as part of the St. Louis region, was bumped up from “moderate” non-attainment to serious “non-attainment” for the one-hour ozone standard, despite significant air quality improvements over the last few years. But at the same time, based on future projections, the region was ruled to be in attainment—which is a little confusing to the average person, like me. Later in the spring, EPA made it official and designated the St. Louis region as being in attainment. This was in large part due to the efforts of the states of Illinois and Missouri, working together, with the business community instead of against them to achieve clean air goals. But the region faces an uncertain future because of legal challenges to EPA’s ruling and when EPA comes out with the eight-hour ozone standard next April.

I am glad that Mr. Holstead is here today to give us a little better understanding of how this “bump-up” policy is supposed to work and what we can expect in the future.

Again, thank you for having this hearing today Chairman Barton. I yield back the balance of my time.

Mr. BARTON. The gentleman defers, and will have an additional 3 minutes.

Does the gentleman from Maine wish to make an opening statement?

Mr. ALLEN. Mr. Chairman, I do.

Mr. BARTON. The gentleman is recognized for 3 minutes.

Mr. ALLEN. Thank you, Mr. Chairman. Last summer southern Maine suffered two severe heat waves, with winds from industrialized areas to our south and west. As a result, we suffered five periods of unhealthy air in violation of the 1-hour ozone rule in Kennebunkport, Maine, near the southern end of our state. These dirty air days were caused by pollution emitted in upwind areas that blew into our state. The further one got into Maine, the cleaner the air became.

By EPA’s own analysis, 98 percent of the emissions leading to unhealthy air days in Maine originate outside our State borders—98 percent. For this reason, I have great sympathy for witnesses here today who describe pollution transported into their areas. The citizens of my State are also frustrated to have to endure human health problems caused by more polluting regions of the country. But I encourage people from other nonattainment areas to learn something from our experience in Maine.

As we approached our 1996 deadline to attain healthy air, Maine concluded that Portland would not attain the standard even if we reduced our emissions to zero. We suffered from such a severe transport problem that local efforts could not possibly bring us into attainment, no matter how significant our efforts.

At first, our former Governor complained that the Clean Air Act was flawed. Some State policymakers even advocated changing the Act to alleviate our burden, as I expect witnesses representing non-attainment areas will do today. But Maine’s policymakers did not

give up on attaining healthy air for the State citizens. Instead, we used the Clean Air Act, filing a Section 126 petition against upwind sources. Our State knew that it could not solve our problem at the local level, so it used the Act to work toward a more comprehensive solution to the NO<sub>x</sub> transport problem. Other northeastern States followed our lead.

As a direct result of the 126 petition, EPA initiated the NO<sub>x</sub> SIP call which, when this Administration finally implements it in 2004, will help us attain the 1-hour standard. The Northeast is addressing its ozone problem through the NO<sub>x</sub> SIP Call. Furthermore, the State of Maine, EPA and environmental groups are in active ongoing negotiations, which we also recommend, to reduce local emissions and avoid bump-up. Even in a situation where 98 percent of our problem comes from out-of-state, we are willing to clean up our own house. Until other nonattainment areas take similar steps, I do not believe that Congress should exempt them from the requirements of the Clean Air Act.

Also, I expect this hearing to demonstrate that States need more tools to go after upwind sources that risk the health of their citizens. Section 126 is currently the most effective tool nonattainment areas have at their disposal. Maine has used it effectively, yet, the Administration's so-called Clear Skies Initiative would ban Section 126 actions for at least 10 years. The Administration's position, in my opinion, is simply indefensible.

Mr. BARTON. We thank the gentleman. Does the gentleman from California, Mr. Radanovich, wish to make an opening statement?

Mr. RADANOVICH. No, Mr. Chairman.

Mr. BARTON. The gentleman defers and will have an additional 3 minutes.

Does the gentleman from Ohio, Mr. Strickland, wish to make an opening statement?

Mr. STRICKLAND. I defer, Mr. Chairman.

Mr. BARTON. He gets an additional 3 minutes. Seeing no other member of the subcommittee present, we do have a distinguished member of the full committee and a subcommittee chairman, Mr. Upton. Does he wish to make an opening statement?

Mr. UPTON. Yes, Mr. Chairman. I would ask unanimous consent that I make a brief statement, and I also have a full statement I would like to insert into the record, and questions for the witness for the record as well.

Mr. BARTON. The gentleman is recognized for 3 minutes.

Mr. UPTON. Thank you, Mr. Chairman. I very much appreciate you allowing me this opportunity. I support clean air and clean water. I grew up on the shores of Lake Michigan. But as required by the Clean Air Act, on July 15 the Michigan Department of Environmental Quality sent the EPA its 8-hour ozone attainment and nonattainment area recommendations. In my district, virtually every county along the Lake Michigan shore is forced to list their counties as moderate nonattainment areas which, if the EPA agrees, would involve stringent emissions reduction requirements that will be very burdensome on individuals, families, and undermine economic growth and development.

I don't know if you have heard of Mackinac Island, but Mackinac Island has I think two vehicles there, an ambulance and a fire



truck. Bicycles and horses are on the balance of the island. You could impose the Mackinac Island standards in every one of my counties, shut down every plant and factory, tell people that they can't mow their grass or light their charcoal burners, and those counties, because of Milwaukee, Chicago and Gary, Indiana, would still be not in compliance. I don't think that that is right, and the Michigan Air Quality Division chief and our Governor has indicated the same as well.

About the only thing I think that you could do is perhaps build a giant fan and send that air over our district to someplace else, and I would like to work with the chairman to try and see some accommodation because of the transient air problem that we have in all of west Michigan. I yield back the balance of my time.

[The prepared statement of Hon. Fred Upton follows:]

PREPARED STATEMENT OF HON. FRED UPTON, A REPRESENTATIVE IN CONGRESS FROM  
THE STATE OF MICHIGAN

Mr. Chairman, thank you for permitting me to sit with the Subcommittee today as you examine an issue relating to the treatment under the Clean Air Act of areas affected by overwhelming ozone transport. As an individual who grew up along the shores of Lake Michigan, I value clean air, clean water, and a healthy environment. I support the Clean Air Act, but we are facing a very difficult and I think very unfair situation in my district due to transient ozone. This hearing will afford me the opportunity to lay out our problem and look at alternatives for addressing it.

As required by the Clean Air Act, on July 15th, the Michigan Department of Environmental Quality sent the EPA its 8-hour ozone standard attainment and non-attainment area recommendations. In my district in Southwest Michigan along the shores of Lake Michigan, the Department was forced to list Berrien, Cass, and Allegan counties as moderate non-attainment areas, which, if the EPA agrees, would involve stringent emissions reductions requirements that will be burdensome on individuals and families and undermine economic growth and development.

These counties are on the list not because of anything going on in the counties, but because they are heavily affected by transient ozone coming across Lake Michigan from Chicago; Gary, Indiana; and Milwaukee. My counties could all adopt MacKinac Island's ban on autos and they wouldn't be in compliance. We could shut down all the factories and douse all the backyard grills and we still wouldn't be in compliance. That's not just my evaluation, that's what Michigan's Air Quality Division chief has stated publicly. There is widespread acknowledgement from the EPA itself and other scientific sources that for these counties, incoming ozone and precursors are sufficient to cause ozone violations even in the complete absence of local emissions.

When we amended Clean Air Act in 1990, I don't think the EPA or we were aware of the extent to which interstate transport is a serious and widespread contributor to ozone non-attainment. As you know, and as Administrator Holmstead will testify, the agency has tried through regulation to address what is fundamentally an irrational and unintended consequence of the law. Communities such as those in my district will be forced to implement costly, burdensome controls at considerable cost to themselves, their economic growth and development, and jobs knowing full well that they will still not be in compliance. This just simply cannot stand, Mr. Chairman. I would like to work with you and my colleagues on this Subcommittee and the full Committee to correct this serious oversight in the current Clean Air Act.

Mr. BARTON. Seeing no other members present, we will now welcome our Administration witness, The Honorable Jeffrey Holmstead. Your statement is in the record in its entirety, and we are going to allow you to summarize it, say, in 7 minutes—is that possible?

Mr. HOLMSTEAD. I will do it even faster than that.

Mr. BARTON. The gentleman is recognized. Welcome to the subcommittee again.

**STATEMENT OF HON. JEFFREY HOLMSTEAD, ASSISTANT ADMINISTRATOR FOR AIR AND RADIATION, ENVIRONMENTAL PROTECTION AGENCY**

Mr. HOLMSTEAD. Thank you, Mr. Chairman and members of the subcommittee, and thank you especially for giving me the opportunity to appear before you today to discuss EPA's attainment date extension policy.

Over the last decade, we have learned that long-range transport of air pollution is a more serious and widespread contributor to ozone pollution than anyone previously had understood. We now know, for example, that pollution transported from many miles away has prevented a number of cities from meeting EPA's 1-hour ozone standard on time.

As we learned more about the transport of ozone pollution, we began at the agency to focus on reducing pollution at a regional level, and we have also begun to focus on the need to ensure that cities are not unfairly penalized because of pollution from upwind sources that they cannot control.

To address this issue, EPA in 1998 issued a rule to reduce the regional transport of nitrogen oxides, NO<sub>x</sub>, which is a key contributor to ground-level ozone pollution. This rule, which is generally known as the NO<sub>x</sub> SIP Call, requires 19 States and the District of Columbia to significantly reduce their NO<sub>x</sub> emissions by 2004. I would just note as an aside that President Bush' Clear Skies Act is based on this type of regional approach and would go far beyond the NO<sub>x</sub> SIP Call in reducing the amount of pollution that is transported from one area to another.

When EPA issued the attainment date extension policy, the agency knew that this NO<sub>x</sub> SIP Call, along with other state-issued emissions reductions, would bring many downwind cities into attainment with the 1-hour ozone standard. However, as a number of you have noted, there was a significant timing problem. Many downwind areas were required to meet the ozone standard years before the upwind reductions took effect. At the time, the only way an area could receive more time to meet the standard was by being bumped-up to a higher nonattainment classification. For example, a serious nonattainment area could be bumped-up to severe, thereby moving its deadline for meeting the 1-hour standard from 1999 to 2005. However, this type of reclassification came at a significant price.

A bump-up triggers a number of additional local pollution requirements in downwind cities, and for many cities these additional local controls wouldn't help them meet the ozone standard any sooner than they would meet it as a result of the NO<sub>x</sub> SIP Call.

The previous Administration believed, and we agree, that an area should not be forced to require expensive controls because of upwind pollution when much more cost-effective controls on that transported pollution would bring the area into attainment just as quickly.

With that view in mind, EPA issued in 1998 its attainment date extension policy. The policy allowed certain qualifying areas to seek a later attainment date without having to be reclassified or bumped-up.

Mr. BARTON. Something happened to your microphone there.

Mr. HOLMSTEAD. I hope that wasn't Mr. Waxman.

Mr. BARTON. He wants to hear what you have to say, as do all of us, not just him.

Mr. HOLMSTEAD. To qualify for an attainment extension, a downwind nonattainment area had to, first, demonstrate that an upwind area with a later attainment date or an upwind State subject to the NO<sub>x</sub> SIP Call was significantly contributing to its nonattainment problem. So that was the first requirement; Second, it also had to have an enforceable plan to meet the standard no later than the time the upwind controls were required; Third, it had to implement all local emission controls required by the Clean Air Act for the area's nonattainment classification; and Fourth, it had to implement any additional reasonably available controls that would help the area meet the standard sooner than it could do with upwind controls alone.

This policy created a fair and more cost-effective way for these areas to achieve the 1-hour ozone standard just as quickly as they could have met it if they had been reclassified.

Since issuing the policy, EPA granted attainment extensions to seven areas. Environmental groups filed legal challenges against the policy in five of those seven areas, and in three of these cases the courts found that the Clean Air Act does not authorize the policy. Because of these court rulings, EPA has withdrawn attainment date extensions and we are moving to bump-up the areas subject to litigation. Because of the court cases, we do not intend to apply the attainment date extension policy to any other areas of the country.

Upwind reductions are still necessary for several areas to achieve attainment, and it is likely that EPA will have to bump-up additional 1-hour nonattainment areas because of transport. We continue to believe that this is not the most effective way to achieve clean air, and we continue to believe that the attainment date extension policy makes sense.

Again, thank you for the opportunity to testify, and I would be pleased to answer any questions you may have.

[The prepared statement of Hon. Jeffrey Holmstead follows:]

PREPARED STATEMENT OF JEFF HOLMSTEAD, ASSISTANT ADMINISTRATOR, OFFICE OF AIR AND RADIATION, U.S. ENVIRONMENTAL PROTECTION AGENCY

#### INTRODUCTION

Mr. Chairman and Members of the Subcommittee: Thank you for the invitation to provide information on EPA's attainment date extension policy for areas affected by pollution transport, and the impact of recent court decisions on this policy.

Over the last decade, we have learned a great deal about "transported" pollution. We know that pollution is often transported great distances—often across state boundaries. We also know that a number of cities have not been able to meet Clean Air Act deadlines for complying with the 1-hour ozone air quality standard because they are significantly affected by pollution from upwind sources located in other cities or other states. In most cases, these upwind sources are required to reduce their emissions under EPA interstate ozone transport rules or state clean air plans. These reductions will allow many downwind cities to meet the ozone standards, but these cities still face a timing problem: Under the Clean Air Act, they have compliance deadlines that are earlier than the dates by which the upwind sources are required to reduce their emissions—the very emissions that are in large part responsible for poor air quality in the downwind areas.

In order to address this problem, EPA adopted its “attainment date extension policy” in 1998 and granted qualifying downwind cities additional time to meet the standard. To qualify for an extension, the cities had to meet a number of requirements, including a showing that they had imposed on their local sources all the reasonably available controls that would result in meeting the standard sooner.

For the reasons set forth below, we continue to believe the attainment date extension policy, which was issued during the Clinton Administration, makes sense from a policy perspective. The courts have determined, however, the Clean Air Act does not provide legal authority for the policy. As a result, EPA is taking steps to comply with the court decisions in areas affected by the litigation, and is not able to apply the policy in other areas affected by upwind transport of pollution.

Mr. Chairman, in the remainder of my testimony, I will review in more detail the policy, its history and rationale, and how recent court decisions have affected both EPA’s policy and areas affected by upwind pollution more generally.

#### CLEAN AIR ACT REQUIREMENTS

When Congress amended the Clean Air Act in 1990, many areas of the country had not met the 1-hour ozone standard EPA set in 1979. As a result, Congress established a new framework and new minimum requirements for ozone nonattainment areas.

The revised Act called for ozone areas to be classified according to the severity of their air quality problems—marginal, moderate, serious, severe, or extreme. Under this structure, an area with a more serious pollution problem is subject to more stringent control requirements and is allowed more time to meet the ozone standard. The Act set the following deadlines for meeting the 1-hour standard: 1993 for marginal areas; 1996 for moderate areas; 1999 for serious areas; 2005 or 2007 for severe areas; and 2010 for extreme areas.

The Act established specific consequences for areas that fail to meet the standard on time. A marginal, moderate or serious area must be reclassified—or “bumped up”—to a higher classification and must meet the requirements of that new classification. Depending on the classification, those requirements could include: enhanced inspection and maintenance for motor vehicles; reformulated gasoline; and controls on smaller pollution sources. (See Appendix for list of requirements.) A severe or extreme area is subject to stationary source fees and certain other requirements, rather than reclassification.

#### TRANSPORT AND ATTAINMENT DEADLINES

During the 1990s, it became clear that interstate transport is a more serious and widespread contributor to ozone nonattainment than previously understood. Both ozone and nitrogen oxides (which react with VOC to form ozone) can travel long distances.

A number of areas found it difficult or impossible to attain the standard on time because of interstate transport, even though they had implemented the local control measures required for their classification.

Based on a determination that transport was significantly contributing to ozone nonattainment in the eastern United States, EPA in 1998 issued an interstate transport rule known as the NO<sub>x</sub> SIP call. The rule required 22 states (currently 19 states, due to litigation) and the District of Columbia to significantly reduce their NO<sub>x</sub> emissions. This rule will dramatically reduce the interstate transport of ozone and will help many areas to meet both 1-hour and 8-hour ozone standards.

Despite this action, several cities still faced problems because of two deadline inconsistencies:

- First, the compliance date for upwind controls required by the NO<sub>x</sub> SIP call (May 2004) is later than the attainment dates for moderate and serious areas (1996 and 1999, respectively).
- Second, upwind areas classified as severe have later attainment dates, but pollution from those areas can affect downwind moderate or serious areas, which have earlier deadlines for meeting the standard. Houston, for example, has a 2007 attainment date. Houston emissions adversely affect air quality in Beaumont, which originally had a 1996 attainment date.

#### THE ATTAINMENT DATE EXTENSION POLICY

These timing problems led EPA to develop a policy to assist areas significantly affected by transport by allowing those areas to take credit for future controls required of upwind areas. The Agency issued that policy, “Extension of Attainment Dates for Downwind Transport Areas,” July 16, 1998, and later published it in the

Federal Register. The policy provided guidance on extending attainment dates for moderate and serious ozone nonattainment areas that were significantly affected by transported pollution.

The extension policy was designed to ensure that areas significantly affected by transport are not required to implement costly local control measures that will not result in meeting the 1-hour ozone standard sooner. Without the attainment date extension policy, several downwind cities would have been required to adopt additional local controls specified in the Clean Air Act in order to receive a later attainment date. EPA took the position that requiring these additional controls on local sources was not the best solution when: 1) upwind sources significantly affected an area's ability to meet the 1-hour ozone standard; 2) the affected area already had adopted measures to control its local share of the problem; and 3) the area would meet the 1-hour ozone standard through required reductions from upwind sources.

To qualify for an extension under this policy, a nonattainment area was required to:

- Show that it was affected by transport from (1) an upwind area in the same state with a later attainment date and that significantly contributes to the downwind area's nonattainment problem, or (2) an upwind area in another state that significantly contributes to the downwind area's nonattainment problem (i.e. states subject to the Nox SIP call).
- Adopt all local measures required of the area's classification and any additional measures needed to demonstrate attainment.
- Submit an approvable attainment demonstration, including the necessary adopted local measures, showing that the area would attain no later than the time upwind controls must be in place (i.e., by the compliance date of the NO<sub>x</sub> SIP call, or by the attainment date for the upwind area).
- Implement all adopted measures as expeditiously as practicable and no later than the time the upwind reductions needed for attainment will be achieved.

The policy was designed to ensure that the air quality standard would be met. It provided the possibility of an extension only when statutory or regulatory provisions—the NO<sub>x</sub> SIP Call rule, or the upwind city's attainment date—require that upwind reductions would be achieved by a date certain.

EPA approved attainment date extensions for seven areas: Metropolitan Washington (including the District of Columbia and parts of Virginia and Maryland); St. Louis, MO-IL; Atlanta, GA; Beaumont-Port Arthur, TX; Baton Rouge, LA; Greater Connecticut (Hartford); and Western Massachusetts (Springfield).

#### LITIGATION AND STATUS OF POLICY

Environmental groups filed legal challenges to EPA's policy in all of the seven areas except Greater Connecticut and Western Massachusetts. Federal Courts of Appeals ruled that the Clean Air Act does not provide legal authority for the policy in cases involving Metropolitan Washington (D.C. Circuit), St. Louis (7th Circuit) and Beaumont-Port Arthur (5th Circuit). Following those rulings, EPA requested and received voluntary remands of the attainment date extension in cases involving Baton Rouge and Atlanta.

In light of the court rulings regarding EPA's legal authority for the policy, EPA does not intend to apply the policy to any other areas in the country. EPA has been fully complying with the court decisions by withdrawing attainment date extensions and moving to bump up the areas subject to the litigation.

However, EPA continues to believe the purposes of the policy are legitimate for the reasons I have stated above. Transport continues to occur between 1-hour ozone nonattainment areas such as Houston and Beaumont-Port Arthur, and between Washington and Baltimore. Upwind areas in other states also continue to affect downwind nonattainment areas such as Atlanta, and upwind reductions still are necessary for some areas to meet the standard. We believe pollution transport is likely to be an issue in implementation of the 8-hour standard as well.

#### STATUS OF EXTENSION POLICY AREAS

EPA already has taken several regulatory actions in response to the court decisions. Following is the current status of each of the five cities:

- **St. Louis:** The most recent air quality data have demonstrated that the St. Louis-East St. Louis metropolitan area is meeting the 1-hour ozone standard. On May 12, 2003, EPA redesignated the area as an attainment area.

As required by the 7th Circuit decision, EPA issued a notice January 30, 2003, bumping St. Louis from "moderate" to "serious." However, the reclassification is no longer in effect because of the redesignation to attainment. Missouri and Illinois are no longer required to submit a new 1-hour SIP with "serious" area control measures

for St. Louis because the area met the standard and was redesignated before the deadline for the state to submit the new control measures.

The Sierra Club in July filed petitions for review in the 7th and 8th Circuits challenging the St. Louis redesignation.

- **Metropolitan Washington, D.C.:** EPA published a notice on January 24, 2003, determining that the area had failed to attain the 1-hour standard as of November 1999 and that the area had been reclassified as “severe” by operation of law. EPA also published a final rule on April 17, 2003, providing conditional approval of the area’s 1-hour severe area attainment SIP and 1996-99 rate-of-progress plans (now required as a result of the court decision).

The Sierra Club filed petitions for review of the conditional approval and the reclassification. The petition on the bump up takes issue with the deadlines for submitting certain additional severe area SIP elements but not with the reclassification itself.

- **Beaumont-Port Arthur:** On June 19, 2003, EPA published a proposed rule to reclassify Beaumont-Port Arthur as “severe” or, in the alternative, “serious.”

In response to a request by the South East Texas Regional Planning Commission, EPA provided a 30-day extension of the comment period to August 20, 2003.

- **Baton Rouge:** Because of the 5th Circuit decision in the Beaumont-Port Arthur case, EPA on April 24, 2003, issued a final rule finding that the Baton Rouge area did not attain the 1-hour ozone standard by its 1999 deadline, and provided notification that the area is reclassified to “severe” by operation of law.

- **Atlanta:** As a result of other adverse court decisions, EPA voluntarily requested vacatur of EPA’s approval of the Atlanta attainment plan that relied on the attainment date extension. The 11th Circuit Court of Appeals granted that motion in an order dated June 16, 2003. EPA expects in September to determine whether Atlanta attained the ozone standard by its 1999 deadline, and if not, provide notification that Atlanta is reclassified as “severe” by operation of law.

The additional statutory requirements resulting from bump-up to “serious” or “severe” are shown in the list of requirements in the Appendix to this testimony. The actual impact on an area may be less than the list of requirements implies, because some areas have previously adopted some of the listed measures as part of their attainment demonstrations.

#### FUTURE IMPACT OF COURT DECISIONS ON DOWNWIND AREAS

Mr. Chairman, you also asked me to address the impact of the court rulings on downwind nonattainment areas in the future.

The federal courts have been very clear: The Clean Air Act provides no authority for extending an area’s statutory attainment date based on pollution transport without bumping up the area to a higher classification, which triggers additional local control requirements. This means that any ozone nonattainment area classified under subpart 2 that misses its attainment date must be bumped up within six months of the attainment date, even if transport contributes to its pollution problem.

There is one exception: the Act does provide for up to two one-year extensions for an area that is very close to meeting the standard.

We do not anticipate that many additional 1-hour ozone areas are likely to seek relief from the Act’s bump-up provisions because of pollution transport problems, although this issue might arise in a few areas. Two possible examples are Portland, Maine; and Dallas.

The President recently proposed legislation known as the Clear Skies Act that, among other things, would further reduce interstate transport of ozone and NO<sub>x</sub> (an ozone precursor) from the power sector through a cap-and-trade program similar to the acid rain program. Clear Skies would further reduce regional ozone in the East beginning in 2008. These reductions are beyond the levels required under the NO<sub>x</sub> SIP call. The Clear Skies reductions would enable several additional areas to meet the 8-hour standard without imposing any additional local controls. A number of other areas would find it easier to meet the 8-hour standard because of the additional reductions in power plant emissions that would be required under Clear Skies. However, the Agency has not made a determination that such reductions are warranted under the transport provisions of the Act. In order to evaluate this issue, the Agency intends to investigate the extent, severity and sources of interstate ozone transport that will exist after the existing transport rules are implemented in 2004. Prompt action to reduce interstate pollution transport would minimize the extent to which interstate transport could interfere with areas meeting their attainment dates for the 8-hour standard. Even so, there could be 8-hour areas with early attainment dates that are earlier than the compliance date for upwind facilities in

the same state or other states. Timely identification and control of sources causing pollution transport are necessary if states and EPA are to minimize this problem.

Mr. Chairman, thank you for the opportunity to testify. I would be happy to answer any questions from you and members of the subcommittee.

#### APPENDIX

##### *Moderate Area Requirements*

- Attainment demonstration
- 15 percent volatile organic compounds (VOCs) reduction plan (first six years)
- Basic I/M
- VOC reasonably available control technology (RACT) rules for control technique guideline (CTG) categories and major stationary sources (100 tons per year)
- NO<sub>x</sub> RACT rules for certain major combustion sources
- New source review (NSR) major source thresholds (100 tpy) and offset ratio (1.15 to 1)

##### *Serious Area Requirements*

- Requirements for moderate areas, plus
- Enhanced I/M
- Enhanced ambient monitoring
- Attainment demonstration with photochemical grid modeling
- Contingency Measures (for failure to meet 15 percent plan)
- 3 percent rate of progress (ROP) plan to attainment year
- Clean fuels program
- Vehicle miles traveled (VMT) demonstration
- Stage II gasoline vapor recovery
- NSR major source thresholds (50 tpy) and offset ratios for serious areas (1.2 to 1)
- Major source thresholds (50 tpy) for RACT and Title V permits

##### *Severe Area Requirements*

- Requirements for serious areas, plus
- Reformulated gasoline
- VMT growth offsets
- Major source fees for failure to attain
- NSR major source thresholds (25 tpy) and offset ratios for severe areas (1.3 to 1)
- Major source thresholds (25 tpy) for RACT and Title V permits

Mr. BARTON. Thank you, Mr. Holmstead, and we apologize for the microphones. The chairman recognizes himself for the first 5 minutes of questions.

Mr. Allen, the Congressman from Maine, indicated that they have a transport problem in his state, and that they have been working to solve it. He didn't indicate that he wished that there might be a codification of the policy that is under question.

My understanding is that Portland was classified as a moderate nonattainment area under the Clean Air Act in 1990, and that they were supposed to be in compliance by 1996, but they are not in compliance. Is that true or not true, or do you know?

Mr. HOLMSTEAD. Off the top of my head, I don't know the answer to that question.

Mr. BARTON. Could you get us the information and whether they were able to get in compliance. My understanding is that they are not in compliance, but they haven't been sued, that they are obviously working in good-faith, which they are to be commended on, but that they could be sued and they could be penalized fairly severely, or bumped-up into a more severe nonattainment status.

Mr. HOLMSTEAD. My staff informs me that you are correct, that they still are in nonattainment, and have not met the attainment policy at this point, although we have not yet moved to bump them up.

Mr. BARTON. Okay. In your written statement, you indicated that EPA continues to believe, and I quote, "that the attainment date extension policy makes sense from a policy perspective." While court cases have invalidated what seems to me to be a common-sense policy, it would now logically mean that if EPA continues to believe that that extension policy makes sense from a policy perspective, that Congress should explicitly codify or legislate so that there is an extension policy. Do you agree with my assessment, and what do you think of—if you are allowed to make a statement—on legislating in this area?

Mr. HOLMSTEAD. I can say that we, as my statement indicates, continue to believe that this makes good sense, and that we would support codification of the attainment date extension policy.

Mr. BARTON. Okay. Are there areas of the country that are likely to be bumped-up, say, in the next year or so, if Congress doesn't do something in this area?

Mr. HOLMSTEAD. Yes, I believe that there are some additional areas that would likely be bumped-up. I could provide that information to you for the record.

Mr. BARTON. If you could do that, that would be appropriate. And if an area is moved into a more severe nonattainment area, doesn't that, in fact, reduce the flexibility about solutions that EPA has in working with the State and local governments—in other words, the higher the classification, the more severe the classification, the less flexibility is in exerting a remedy to the nonattainment status?

Mr. HOLMSTEAD. The real issue is that when you are bumped-up to the next highest classification, then additional mandatory requirements in that area take effect—in some cases, regardless of whether they actually would help that area to reach attainment any sooner.

Mr. BARTON. And my last question, do you agree or disagree that the more sophisticated we get in monitoring, i.e., the better able we are to collect actual data on the ground, the more possible it is to discern where the pollution is occurring? In other words, the more monitoring stations we have that are actually collecting data, not just computer models that are postulating, you can more reasonably ascertain where the pollution is coming from today than you could, say, 10 or 15 years ago, is that true or not true?

Mr. HOLMSTEAD. Yes, that is absolutely correct.

Mr. BARTON. So if a region comes in and says, "We are in nonattainment, we understand that, and we have got a program in place that is trying to improve the air quality—in fact, from local sources we think we are reducing the emissions—but there is not much we can do about that area that is 2-300 miles from us, we can't control them"—I guess to be colloquial, the local governments that are coming in and saying, "We need some help because we can't control beyond our territorial jurisdiction," they actually have data to back that up.

Mr. HOLMSTEAD. I think that is right. And as we talked about just last week, one of the things that we are trying to accomplish is this dramatic kind of regional reduction in pollution under the Clear Skies Act because of this very problem. I think back in 1990, as you well remember, there was some understanding of transport, but by no means as sophisticated as we have now. We really are



focusing on the need to reduce pollution at a regional level, not just at a local level.

Mr. BARTON. We know a lot more than we knew 13 years ago, and our data-collection ability is much more comprehensive than it was 13 years ago, so there is every reason to look at bringing the statute up-to-date in this area.

Mr. HOLMSTEAD. I would agree with that, yes.

Mr. BARTON. I would now recognize the gentleman from Virginia for 5 minutes.

Mr. BOUCHER. Thank you, Mr. Chairman. Good morning, Mr. Holmstead, I would like to welcome you here this morning. I would just like to confirm with you two elements of the policy that was adopted for granting extensions during the time of the Clinton Administration, the policy which was later invalidated by various courts of appeal.

First of all, would you confirm that the extensions under the previous policy were only granted if the community that is seeking the extension, the downwind community, would be in compliance itself were it not for the pollution coming from the upwind community?

Mr. HOLMSTEAD. I don't think we have expressed it in quite that way, but I think that is correct. The way the policy works is when we know that upwind sources are reducing their pollution, that if the area takes those into account, those reductions, and plus takes all the additional local measures it needs to take to meet attainment, then it can take advantage of the policy.

So the idea is not to let local governments off the hook. It is to let them take account of things we know are happening upwind. If they show that with those upwind reductions they have taken all the local measures that they need to reach attainment, then they can qualify.

Mr. BOUCHER. Well, this is an important distinction, and I was under the impression that as the policy was applied during the Clinton Administration, the only time an extension would be granted was when the downwind community had modeling data or other evidence sufficient to show that they were not the source of the nonattainment problem, that it was entirely the upwind community that was the source of the problem, and that the downwind community would, in fact, be in compliance were it not for the ozone being transported in from somewhere else. Does that not correctly state the previous policy?

Mr. HOLMSTEAD. Again, I was just trying to confer with my staff. I think as a practical matter, that is correct. We have just expressed it in a somewhat different way.

Mr. BOUCHER. That is the effect of the policy.

Mr. HOLMSTEAD. Yes, it is.

Mr. BOUCHER. It is important, I think, to establish that principle.

Mr. HOLMSTEAD. It only does apply when there is a real transported problem.

Mr. BOUCHER. Well, I understand that, but you could have a transported problem adding to a locally originated problem, and if the local community, because of its own local sources of pollution, would not be in compliance, then as I understand the extension policy, at least as it existed in the prior Administration, the local

community, the downwind community, would not qualify for the extension.

Mr. HOLMSTEAD. As a practical matter, that is correct.

Mr. BOUCHER. Okay, thanks. Now, let us move on to another principle. When you grant an extension under that policy, let us confirm that the timing of the extension is for only so long as is necessary to bring the upwind community itself into compliance.

Mr. HOLMSTEAD. Again, that is correct. The extension is only until the time that those upwind sources will be controlled.

Mr. BOUCHER. Okay. Now, the question I have for you is, you have indicated to the chairman—and I was frankly pleased to hear you say this—that you would support a codification of the ability of EPA to grant extensions in accordance with the previous policy. And I would assume that you are therefore endorsing these two principles that we have just established, and that those would be a part of any codification that we might choose to adopt. Is that correct?

Mr. HOLMSTEAD. That is correct, yes.

Mr. BOUCHER. Okay. I just have one more question, Mr. Holmstead. Can you tell us how many communities would qualify for the extension, as we have just described it, under the existing 1-hour standard? And then can you also tell us how many communities around the country would qualify for the extension when the transition to the 8-hour standard is complete? And if you don't have that information today, it is very relevant for our consideration, and I would appreciate you supplying it. Do you have it today?

Mr. HOLMSTEAD. I don't have it today, but we would be happy to provide that for the record.

Mr. BOUCHER. Thank you very much, Mr. Holmstead. Thank you, Mr. Chairman.

Mr. BARTON. The gentleman from Kentucky is recognized for 8 minutes.

Mr. WHITFIELD. Thank you, Mr. Chairman. Mr. Holmstead, thanks for being with us today. I also am glad to hear that you do support the codification of the ability for EPA to grant extensions in these situations, and I think probably most members probably feel that way.

I notice that in Los Angeles, for example, I guess right now they are at a severe level, and if they do not come in compliance within the allowed time, what happens in that situation?

Mr. HOLMSTEAD. This is very esoteric. There is all these classifications. Los Angeles is actually extreme, which is the highest classification. Severe is the next level down. In those two categories, if a city is classified as either extreme or severe and they do not meet their attainment date, at that point the Clean Air Act requires that they begin to impose fees on the major sources, on the significant sources of solution. So in that case, the penalty is not a bump-up, it is the imposition of these pollution fees which turn out to be, I believe, about \$7,000 a ton pollution. So, effectively, at that point, a kind of a tax is imposed on the sources of pollution within that city.

Mr. WHITFIELD. And are these the so-called Section 185 penalty fees?

Mr. HOLMSTEAD. That's correct, yes.

Mr. WHITFIELD. And do we have any idea what the maximum penalty could be for Los Angeles at \$7,000 per ton? Do you have any idea what that could be?

Mr. HOLMSTEAD. Off the top of my head, we could certainly calculate that. I suspect it would be a very big number.

Mr. WHITFIELD. Well, I was reading the Mayor of Baton Rouge's testimony, and he indicated in his testimony that Baton Rouge has exceeded the levels only one or 2 days out of the last 3 or 4 years, and he indicated that if they are bumped-up from serious to severe, that they would be required, I believe, to use reformulated gasoline. Is that true?

Mr. HOLMSTEAD. That is correct.

Mr. WHITFIELD. And he said that that would be at a cost—an estimate of \$72 million, I believe. And then he said that if they were not able to meet the attainment requirements under the severe classification, that the section 185 penalties could be in the neighborhood of \$100 million I guess per year.

Mr. HOLMSTEAD. I am not familiar, but that doesn't sound out of the—that could certainly be correct. And, again, one of the things that I think you are pointing out is it seems a little counterintuitive that we are required to bump them up to severe when, in fact, they have just about taken care of their problem. So, with a little bit more time, we think they will solve their problem, and they seem to be definitely headed in the right direction.

Mr. WHITFIELD. I can't imagine that Congress intended that a city would be required to spend \$172 million—and that is not including monitoring equipment and other things—when they have exceeded the guidelines only one or 2 days out of a 3-year period of time. There is something that doesn't seem right about that kind of a system.

I was also curious, are there cities or communities around the country today that are paying these 185 penalty fees?

Mr. HOLMSTEAD. Not at this point. And, again, that is because the areas that are classified as severe or extreme had a much longer time to come into attainment, and so we are not yet at the point where those fees would be imposed. And I think even for Baton Rouge, it would be a number of years before that fee would be imposed.

Mr. WHITFIELD. Was that like the year 2010, is that what we are talking about?

Mr. HOLMSTEAD. This is a very complicated area, so I am delighted to have Lydia Wegman sitting behind me, who knows the answers to all of these questions. We will first face that issue in 2005, and then 2007, and then additional attainment dates come along. So the point in time at which we may face that issue is not that far away.

Mr. WHITFIELD. So 2005, 2006. And Los Angeles would be probably subject to those fines in 2005 or 2006.

Mr. HOLMSTEAD. I believe their attainment date is much later because they are the only extreme area in the country. In 1990, the Congress gave them more time to come into attainment—2010, I am told.

Mr. WHITFIELD. 2010.

Mr. HOLMSTEAD. Yes.

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

Mr. BARTON. Thank the gentleman from Kentucky. I believe the gentleman from California, Mr. Waxman, is recognized for 5 minutes for questions.

Mr. WAXMAN. Thank you, Mr. Chairman. Mr. Holmstead, for us to evaluate the request from EPA, we need to have a complete record, so I want to ask your cooperation in helping us assemble that record.

First of all, I would like to submit for the record of the committee a report from the environmental integrity project entitled "Accidents Will Happen." This report analyzes emissions resulting from startup, shutdown, and malfunctions at refineries and chemical plants in Port Arthur, Texas. According to the report, these facilities are releasing hundreds of tons of unpermitted pollution and technology is available to address the problem.

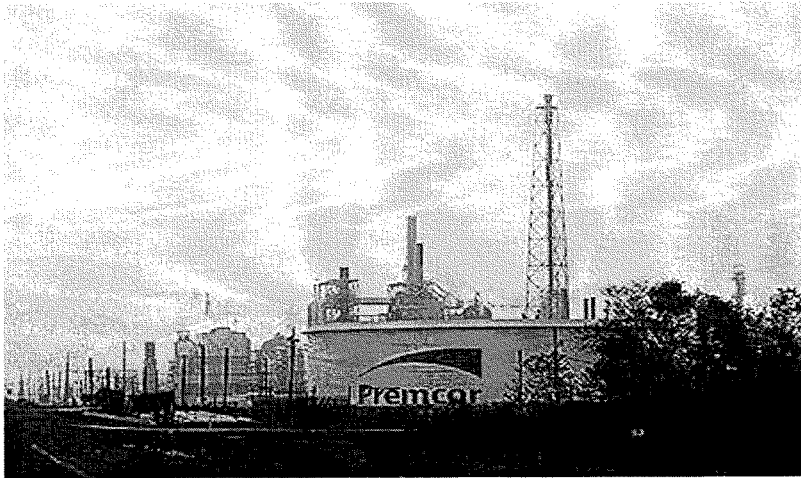
I would also like, Mr. Chairman, to submit for the record correspondence to Mr. Holmstead from the environmental community on this issue.

[The Information follows:]

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## Accidents Will Happen

POLLUTION FROM PLANT MALFUNCTIONS, STARTUPS, and SHUTDOWNS IN  
PORT ARTHUR, TEXAS



## ACCIDENTS WILL HAPPEN



"Accidents Will Happen" analyzes emissions resulting from startup, shutdown, and malfunctions at refineries and chemical plants in Port Arthur, Texas, and the problems associated with pollution from such unpermitted emissions. The specific plants addressed in this Report include Atofina Petrochemicals, Inc., BASF Fina Petrochemicals, Chevron Phillips Chemical Co., Motiva Enterprises, and The Premcor Refining Group, Inc.

The Environmental Integrity Project (EIP) gratefully acknowledges the investigative reporting of Erin Koenig of The Examiner in Beaumont, Texas, who drew attention to the data which led to this Report.

EIP also wishes to thank Kelly Haragan of Public Citizen and Neil Carman of the Sierra Club for their valuable comments and suggestions towards the production of this Report and Denny Larson of the Refinery Reform Campaign and the Port Arthur Bucket Brigade for providing information from their air sample analyses.

Additionally, we would like to acknowledge the staff of the Beaumont Office of the Texas Commission on Environmental Quality for their assistance in locating and copying documents requested for this Report.

Last but not least, Hilton Kelley, Director of the Community In-power and Development Association in Port Arthur and a member of the Refinery Reform Campaign, should be recognized for having the courage to fight for cleaner air for his community.

Eric V. Schaeffer and Huma Ahmed  
The Environmental Integrity Project

## ACCIDENTS WILL HAPPEN

**Introduction**

On January 21<sup>st</sup> of this year, a brand new BASF-Atofina ethylene plant in Port Arthur, Texas, reported that "a surging of hydrocarbon flow tripped out the C2/C3 compressor," which forced the company to route the hydrocarbon feed flow to a flare.<sup>1</sup> Over the course of three days, the flare released into the atmosphere over 65 tons (130,805 pounds) of hazardous volatile organic compounds (VOCs).<sup>2</sup> Earlier that month, the aging Premcor refinery nearby released 208 tons (416,492 pounds) of sulfur dioxide (SO<sub>2</sub>), nearly 25 tons (49,710 pounds) of VOCs, and over 2 tons (4,516 pounds) of hydrogen sulfide in a week due to "an unexpected inability to transfer sour fuel gas" to its sulfur recovery unit.<sup>3</sup>

Unfortunately, these accidents are apparently a way of life in Port Arthur, a city of 58,000 people located on the Gulf Coast less than a hundred miles east of Houston, where a cluster of refineries and chemical plants crowd the fencelines of residential neighborhoods. Documents obtained from the Texas Commission on Environmental Quality (TCEQ) show that in the first seven months of 2002, accidents and equipment startups, shutdowns, or maintenance at five Port Arthur plants and refineries, including Atofina Petrochemicals Refinery Inc., BASF Fina Petrochemicals L.P., Chevron Phillips Chemical Co., Motiva Enterprises, L.L.C., and the Premcor Refining Group, Inc., released almost 725 tons (1,449,069 pounds) of SO<sub>2</sub>, nearly 10 tons (19,927 pounds) of hydrogen sulfide, 844 tons (1,688,077 pounds) of VOCs, nearly 42 tons (83,426 pounds) of benzene, a probable human carcinogen, and over 57 tons (115,483 pounds) of carbon monoxide. For example:

- On February 13, 2002, Atofina Petrochemicals refinery reported a release of almost 5 tons (9,716 pounds) of VOCs, approximately 70 tons (139,205 pounds) of SO<sub>2</sub>, and over 6 tons (12,250 pounds) of carbon monoxide.
- On March 19, 2002, Premcor's refinery released nearly 60 tons (119,431 pounds) of SO<sub>2</sub>, 1,274 pounds of hydrogen sulfide, and almost two and a half tons (4,842 pounds) of VOCs.
- On April 7, 2002, Motiva Enterprises, L.L.C., refinery reported the release of nearly 4 tons (7,462 pounds) of SO<sub>2</sub> resulting from a partial shutdown of the delayed coking unit.
- On May 21, 2002, BASF Fina Petrochemicals, L.P., chemical plant released over 5 tons (10,699 pounds) of benzene and nearly 65 tons (129,757 pounds) of VOCs.

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- On June 20, 2002, the Chevron Phillips chemical plant reported a release of over 22 tons (44,575 pounds) of VOCs because of a "faulty power card in the DCS system" which caused a "loss of various unit controls including the inadvertent closing of the Hydrogen supply valve."<sup>4</sup>
- On July 24, 2002, a fire at a hydrotreater unit at Motiva Enterprises, L.L.C., occurred when hydrocarbons leaking from an exchanger were ignited.<sup>5</sup> As a result, the refinery released over 4 tons of VOCs (8,636 pounds) and almost 2 tons (3,969 pounds) of SO<sub>2</sub>.

Table A provides a month-by-month summary of SO<sub>2</sub>, hydrogen sulfide, VOCs, benzene, and carbon monoxide emissions from accidents, shutdowns, startups, and maintenance activity from the five Port Arthur plants. Table A, however, does not include other pollutants--such as nitric oxide--also released during the same period.

#### Emissions May Be Underestimated

The summaries provided in this Report are based on data submitted by the five plants to the Beaumont office of the TCEQ. Company reports may underestimate emissions for three reasons:

- (1) Companies are only required to report releases above certain amounts under both federal and state law. For example, companies in Port Arthur must report the release of carbon monoxide only if more than 5,000 pounds is emitted in a twenty-four hour period.<sup>6</sup> Port Arthur companies sometimes report smaller releases, but often do not, as they are not required to do so.
- (2) When a malfunction occurs, gases are typically routed to a flare, where they are burned off, until the problem can be fixed. Company emission reports usually assume that the flare is operating at maximum efficiency, destroying 98-99% of emissions through combustion. But those same reports sometimes state that the flare is smoking or that opacity is poor, which indicates that combustion is incomplete (and therefore not operating at 98-99% efficiency) as a result, the flare may be releasing more than reported estimates of pollution into the atmosphere.
- (3) Some reports do not state the amount of pollution released at all, but simply note that the reportable quantity has been exceeded.

#### How Port Arthur's Pollution Can Affect the Public's Health

Monitoring of benzene and other hazardous chemicals in the air that Port Arthur residents breathe is scarce. However, a recent "bucket sample" taken on July 13, 2002, using U.S. Environmental Protection Agency (EPA) approved protocols, revealed benzene levels of 6.77



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parts per billion (ppb) at one sampling location, and 15 ppb at another site.<sup>7</sup> Both readings exceed the levels of concern for EPA Region 6 health-based screening thresholds.<sup>8</sup>

The unpermitted release of over 886 tons of smog-forming VOCs is of special concern for Port Arthur, as the community is a non-attainment area that does not meet health-based standards for ozone. (Ozone is formed when nitrogen oxides and VOCs react with oxygen molecules in the presence of sunlight.) High levels of ozone in the atmosphere can result in several known health effects, including irritation of the respiratory system, reduction of lung capacity, aggravation of asthma, and inflammation and damage of the lung lining. Scientists also suspect that ozone may aggravate chronic lung diseases, such as emphysema and bronchitis.<sup>9</sup>

In addition to elevating the risk of cancer, lung disease, and other ailments associated with long-term exposure to the pollutants released from these Port Arthur facilities, the release of high volumes of pollution in a short period of time can trigger acute health effects such as asthma, nausea, depression of the nervous system, heightened cardiac sensitivity, and heart attack. For example, exposure to high concentrations of benzene (2,000 ppm) can depress the nervous system and cause death, while lower concentrations (1,000 ppm) may cause nausea, headaches, heart arrhythmia, anemia, and blood cancers such as leukemia.<sup>10</sup> While BASF-Atofina released almost 28 tons of benzene in May, no public data is available to determine whether benzene levels increased in surrounding neighborhoods.

**Reporting Requirements: How Do I Find Out What Is Being Released in My Neighborhood?**

Unlike some communities, Port Arthur does not have a system for notifying residential neighborhoods when accidents occur or what is being done to stop them. Texas law now requires individual plants to send upset reports, usually by fax, to TCEQ's Region 10 Beaumont Field Office, which is responsible for inspecting local plants and tracking upset events and emissions. Information contained in an individual refinery upset report, which includes the pollutants released and the amount, can be obtained by making a personal visit to the Beaumont office, located about twenty miles outside of Port Arthur. Alternatively, an individual can request that TCEQ make copies of the faxed reports and mail them to the resident. However, TCEQ will

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not pull individual company reports for specific dates from the file. Instead, upon receiving a request, TCEQ will make a copy of the company's entire file. This file contains all upset reports for the year, as well as other miscellaneous items. Charges for copies of files can run anywhere from \$25 to \$200 – too much for Port Arthur residents to pay to get information about pollution released in their own backyard.<sup>11</sup>

All accidental releases, as well as many that result from maintenance or shutdown activity of hazardous chemicals above a specified amount, must also be reported to the federal government's National Response Center within twenty-four hours. Such reports are available online to those who have internet access.<sup>12</sup> However, as Table B indicates, over two-thirds of the incidents reported to the state could not be found on the National Response Center's website.<sup>13</sup>

The incidents listed in Table B include both releases that result from accidents and those that result from startup or shutdown of a unit for regularly scheduled repairs. While federal guidance requires that unanticipated emissions from accidents should always be reported, releases from startups and shutdowns do not have to be reported if the releases are subject to federally enforceable limits or pollution controls and are part of a plan approved by the permit authority. It is not always clear from company reports, however, whether startup or shutdown releases meet these exemptions or whether the shutdown was a planned activity or part of the emergency response to an accident. Premcor apparently decided not to report one release to EPA on the theory that it did not exceed 1972 emission limits from a "grandfathered unit," although EPA guidance issued in April of 2001 makes clear that such releases should be reported.<sup>14</sup>

**"Unavoidable" Violations: Did the Facility Meet Its Burden of Proof?**

Why should pollution of this magnitude be treated as "business as usual" under the Clean Air Act? Following the Exxon Valdez disaster, Congress established strict liability for any spills of oil or hazardous chemicals in our waterways, regardless of whether the spill was triggered by an accident. Clean Air Act regulations, however, excuse the release of thousands of pounds of even

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a cancer-causing pollutant like benzene if it is beyond the reasonable control of the plant operator and meets other specific conditions.

The emissions surveyed in Table A reflect releases that result from a sudden breakdown of process or control equipment, as well as, from regularly scheduled startup, shutdown, or maintenance activities needed to cope with predictable wear and tear. Regardless of the cause, EPA considers these emissions illegal, as they generally exceed established permit limits. At the same time, EPA and states generally do not seek penalties for these releases, so long as they are beyond the control of the operator.

But this "affirmative defense" does not provide companies with a free pass. Even where penalties are excused, EPA and state agencies retain the authority to order plant operators to investigate and fix the underlying cause of the accident by, for example, installing better pollution control equipment. Moreover, to avoid penalties, a company has the burden of proof to show that the accident could not have been prevented and that all steps were taken to minimize emissions.

For instance, in cases involving a startup or shutdown, the defendant must prove that "the periods of excess emission that occurred during startup and shutdown were short and infrequent and could not have been prevented through careful planning and design."<sup>15</sup> In addition, the excess emissions cannot be "part of a recurring pattern indicative of inadequate design, operation, or maintenance."<sup>16</sup> Most importantly, the defendant must show that "all possible steps were taken to minimize the impact of the excess emissions on ambient air quality."<sup>17</sup>

To make use of the affirmative defense for malfunctions, the defendant carries the burden to prove that:

The excess emissions were caused by a sudden, unavoidable breakdown of technology, beyond the control of the owner or operator;... [t]he excess emissions (a) did not stem from any activity or event that could have been foreseen and avoided, or planned for, and (b) could not have been avoided by better operation and maintenance practices;...[and] [t]he excess emissions were not part of a recurring pattern indicative of inadequate design, operation or maintenance.<sup>16</sup>

EPA has warned that accidents that should have been anticipated and prevented will not be excused under the Clean Air Act.

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Are accidents as frequent and severe as those found in Port Arthur unavoidable? In addition, should EPA or TCEQ exercise their authority to require companies to improve air monitoring and build better backup pollution controls? The following section answers these questions.

**Improved Technology and Work Practices Can Eliminate Pollution from Accidents, Startups, and Shutdowns**

The Port Arthur experience shows that equipment malfunctions unfortunately have become a part of everyday life for large, complex manufacturing operations like refineries and petrochemical plants. Facilities reported an average of twenty-one excess emission incidents a month for five of the largest refineries and chemical plants in Port Arthur. On average, between January and July 2002, each plant experienced at least one "unavoidable" emission a week. For residents of Port Arthur, that means that hardly a day goes by without at least one unpermitted release of hazardous pollutants in excess of permit limits set by the Clean Air Act. While occasional incidents related to true emergency situations are to be expected from any source, the amount and frequency of such occurrences in Port Arthur deserve special attention. With proper plant maintenance and the replacement of outdated plant equipment, many of these emission releases could be eliminated, which could significantly improve Port Arthur air quality.

Volatile organic compounds vary widely in their toxicity and include probable carcinogens like benzene and ethylene. The flaring system in widespread use at today's petrochemical plants generally do not include adequate flow gas meters or VOC analyzers needed to accurately determine which specific chemical pollutants are being released and in what quantities. Even more disturbing is evidence that flares do not destroy 98-99% of VOCs like ethylene or benzene as is commonly reported.

For example, a recent study published in the Journal of the Air and Waste Management Association (JAWMA) explained that although "it is assumed that flaring achieves complete combustion with relatively innocuous byproducts such as CO [carbon monoxide] and H<sub>2</sub>O," in actuality, "flaring is rarely successful in the attainment of complete combustion."<sup>19</sup> According to the study, flaring seldom achieves full combustion "because entrainment of the air into the region

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of combusting gases restricts flare sizes to less than optimum values.<sup>20</sup> In addition, the study showed that optimum efficiency is also affected by wind speed as "combustion efficiencies decreased rapidly as wind speed increased from 1 to 6 m/sec [meters per second]. As wind speeds increased beyond 6 m/sec, combustion efficiencies tended to level off at values between 10 to 15%."<sup>21</sup> The study reported that the mean combustion efficiencies for flaring activity were less than 70%, significantly less than the 98-99% assumed efficiency.<sup>22</sup> In addition, a 2001 staff report for the Texas Natural Resource Conservation Commission (now TCEQ) noted that "investigations identified a broad scale lack of good engineering practice and Environmental Management practices."<sup>23</sup> The report concluded that "[i]ndustry must embrace the use of good engineering practice and Environmental Management practices in control of their events and in estimating the associated emissions."<sup>24</sup>

Fortunately, alternatives exist to relying on outdated flaring systems that will provide more complete combustion and that are at the same time both safe and affordable. An important first step is better management of the flow of raw materials to avoid overwhelming production units and triggering shutdowns or emergency upsets. As described in an EPA Enforcement Alert published in October 2000,

[R]egular switching between high and low sulfur crude may cause fluctuations of the acid gas feed to the [Sulfur Recovery Plants]. This can create operational problems for the SRP and/or its pollution control equipment, resulting in a perceived need to flare. These upsets should be addressed through improved operational control systems, improved and frequent training of operators, and continued optimal performance of the SRP, **not by bypassing or flaring acid gas and sour water stripper gas.**<sup>25</sup>

Because accidents are inevitable, facilities should incorporate a variety of practices and technologies to minimize the effects of an accidental release. For instance, facilities could recycle VOCs back into the manufacturing process through a closed-loop system; add temporary storage capacity for all waste gases normally flared; and build redundancies and backup systems, including triple backup or redundant systems for electronic controls or major compressor units and other sensitive equipment that can fail due to false electronic glitches.

A consent decree reached between EPA and BP Amoco serves as a good example of how pollution from flaring can be reduced by improving plant operations and installing backup

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controls. Through the consent decree, a BP Amoco facility in Toledo, Ohio, was able to reduce flaring incidents from 16 to 3, and reduced SO<sub>2</sub> emissions from 180 tons to 49 tons a year – compared to the 660 tons of SO<sub>2</sub> released from the Atofina and Premcor plants alone. Included within the consent decree are requirements to diagnose the root causes of malfunction and emergency releases. Once diagnosed, repeated releases for the same cause are seen as predicted releases and are no longer considered true malfunctions or emergencies. At this point, the facility must implement corrective measures, including operational and facility practice improvements, to prevent future occurrences.

Similar equipment and operational changes should be implemented by other sources in order to reduce flaring incidents to only those that are truly accidental as defined by the New Source Performance Standards (NSPS). Companies can improve backup pollution controls used when equipment goes down, substituting "tail gas units" that are much more efficient at destroying hazardous pollutants than the flares on which Port Arthur companies now rely. Sources have no excuse for not incorporating these practices into their manufacturing processes when they can stop the continued unpermitted release of air pollutants from accidents, as well as, startup, shutdown, and maintenance activities.

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**Conclusion**

Accidents will happen even at the best run plants, but they do not need to become a way of life. Four actions should be taken, based on experience in other communities, to make sure that neighborhoods get better information, companies comply with the law, and the frequency and severity of accidents are reduced:

- (1) *Better reporting of emissions:* Port Arthur residents should not have to travel to TCEQ's Beaumont office or incur copying charges for hundreds of pages of paper to find out after the fact about the release of pollutants in their own backyards. A "reverse 911" program piloted in Wurtland, Kentucky, requires plants to notify residents immediately after an accident has occurred, explain what is being done about it and whether precautions should be taken. EPA should investigate whether companies have violated federal "right-to-know" requirements by failing to report upset and shutdown emissions to the National Response Center, which provides online access to company reports.<sup>26</sup>
  
- (2) *Monitor air quality around Port Arthur plants:* Both EPA and TCEQ need to improve fence-line monitoring in Port Arthur to better understand the impact of these large releases on pollutant levels in the neighborhoods surrounding the plants. Responding to a request at a town meeting of Port Arthur residents, Congressman Nick Lampson has asked EPA to make its mobile monitoring truck – the Toxic Atmospheric Gas Analyzer (TAGA) – available to sample the air at various sites. TAGA truck data has been used in other communities to determine the best location for fixed monitoring stations that can provide real-time data on an ongoing basis. Monitoring activity should, where possible, be timed to take samples when malfunction or shutdown elevates emissions from nearby plants.
  
- (3) *Enforce the law that requires accident prevention:* EPA needs to investigate the pattern of "malfunctions" in Port Arthur, and take enforcement action to require better equipment or maintenance programs to eliminate pollution from accidents. Both EPA and TCEQ

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should exercise their authority to require better alternatives to flaring, like closed-loop recycling and backup systems for electronic controls that malfunction on major units. EPA has negotiated settlements with other refiners to install state-of-the-art controls that capture and destroy pollutants that would otherwise be released through accidents, and to require accidents that occur repeatedly to be diagnosed and prevented.<sup>27</sup> Port Arthur residents have asked Congressman Lampson to request an investigation by EPA's top experts on refinery malfunctions.

- (4) *Close the loophole for unpermitted releases:* Current law needs to be tightened to increase liability for polluters that accidentally release large amounts of cancer-causing chemicals like benzene, which make smog worse in areas that already fall short of health-based standards. A Senate hearing chaired by Senator Joseph Biden threw the spotlight on this loophole in the Clean Air Act, which has plagued communities like those near the Sunoco Marcus Hook refinery in Delaware.<sup>28</sup> Polluters are expected to pay when their accidents release oil or chemicals into our water. We ought to demand the same accountability when the same kinds of chemicals are released into the air, where they may be even more threatening to the public's health, and degrade the quality of life in towns like Port Arthur.



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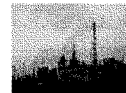


TABLE A

UPSET EMISSIONS FOR ATOFINA, BASF CORP., CHEVRON PHILLIPS CHEMICAL CO., MOTIVA ENTERPRISES, and PREMCOR REFINING in PORT ARTHUR, TEXAS REPORTED TO TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (FORMERLY TEXAS NATURAL RESOURCE CONSERVATION COMMISSION) JAN-JULY 2002

Emissions Measured in Pounds

		Sulfur Dioxide	Hydrogen Sulfide	Hazardous Substances/ VOCs*	Benzene	Carbon Monoxide
ATOFINA	JAN	76,667	854	438	-	2,097
	FEB	160,448	1,709	70,754	78	17,020
	MAR	13,355	145	1,306	90	2,843
	APR	2,400	26	18,074	-	3,955
	MAY	61,576	671	4,098	-	1,145
	JUNE	115,945	2,653	27,036	18	54,160
	JULY	151,148	1,639	16,787	92	3,464
BASF	JAN	-	-	374,099	10,284	-
	FEB	-	-	128,084	-	-
	MAR	-	-	5,968	-	-
	APR	-	-	81,222	-	-
	MAY	-	-	514,783	56,006	-
	JUN	-	-	9,624	4,375	-
	JULY	-	-	39,109	5,428	-
CHEVRON	JAN	-	-	28,920	705	-
	FEB	-	-	37,966	184	-
	MAR	-	-	434	32	-
	APR	-	-	-	-	-
	MAY	-	-	-	-	-
	JUN	-	-	61,164	322	13
	JULY	-	-	14,946	-	19,599
MOTIVA	JAN	4,263	-	233	-	149
	FEB	15,216	126	2,198	-	1,108
	MAR	3,041	17	442	-	853
	APR	8,988	97	2,278	-	1,000
	MAY	81,324	817	7,697	12	4,345
	JUN	278	3	877	-	489
	JULY	16,584	337	11,150	-	1,386
PREMCOR	JAN	496,165	7,017	70,915	-	2
	FEB	-	1,066	47,280	-	-
	MAR	119,507	1,270	85,062	-	-
	APR	-	-	203	-	-
	MAY	115,563	1,240	922	-	970
	JUNE	-	-	21,783	2,740	-
	JULY	6,601	240	2,225	268	-
<b>TOTAL</b>		<b>1,449,069</b>	<b>19,927</b>	<b>1,688,077</b>	<b>83,426</b>	<b>115,483</b>

Figures obtained from final upset reports from TCEQ (formerly TNRCC)

\*Emissions of benzene, a recognized VOC, are not included in this column, but are instead listed as a separate entry.

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TABLE B

DATA NOT REPORTED TO NATIONAL RESPONSE CENTER\*  
Emissions Measured in Pounds

	DATE OF UPSET	SO <sub>2</sub>	Hydrogen Sulfide	HAZ/ VOCs Includes emissions of Ethylene, Propylene, Toluene, Butanes, and other pollutants as identified	BENZENE	CO	
ATOFINA PETRO-CHEMICALS INC.	01/03/02	2,446		338 (VOCs)			
	02/05/02			58,257 (VOCs)		12,707	
	02/13/02			1,333 (VOCs)			
	02/13/02	139,206	1,479	9,716 (VOCs)			
	02/24/02	17,925	194				
	02/26/02			1,410 (VOCs)			
	03/27/02			411 (VOCs)			
	03/27/02**			133 (VOCs)			
	03/09/02			762 (VOCs)			
	04/24/02	18,000					
	05/25/02			1,594 (VOCs)			
	05/10/02			2,500 (VOCs)			
	05/05/02	51,369					
	06/28/02			1,885 (VOCs)			
				122 (VOCs)			
	06/01/02			300	20,909 (VOCs)		32,336
	07/03/02			1,107			
07/06/02	150,450	1,631		16,056 (VOCs)		3,190	
07/09/02				674 (VOCs)			
	07/30/02	698					
BASF FINA PETRO-CHEMICALS	01/03/02				576		
	01/15/02			7,866 (Propylene)			
	01/21/02			74,178 (Ethylene), 56,627 (Propylene), 112,492 (Ethylene), 73,887 (Propylene), 493 (Propane), 10,604 (Butylene), 2,172 (Butane), 5,220 (Butadiene), 8,190 (Pentane), 6,900 (Hexane), 2,773 (Nonane), 9,924 Toluene, 2,052 (Xylene), 499 Styrene, 222 (Decane)		9,708	
	01/25/02						
	02/05/02			15,956 (Ethylene)			
	02/06/02			20,426 (Ethylene)			
	02/13/02			37,389 (Propylene)			
	02/20/02			29,325 (Ethylene)			
	02/22/02			17,623 (Ethylene), 4,203 (Propylene)			
	02/25/02			15,639 (Ethylene)			
03/19/02			5968 (Ethylene)				

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	DATE OF UPSET	SO <sub>2</sub>	Hydrogen Sulfide	HAZ/ VOCs	BENZENE	CO
BASF FINA PETRO-CHEMICALS (cont.)	04/08/02			36,924 (Butadiene)		
	05/30/02			991 (Toluene)	750	
	05/21/02			5,752 (Butadiene), 41,269 (Ethylene), 28,483 (Propylene), 10,936 (Toluene), 9,026 (Pentane), 7,604 (Hexane), 2,261 (Xylene), 11,686 (Butylene), 6,495 (Propane), 2,394 (Butane), 551 (Styrene), 244 (Decane), 3,056 (Nonane)	10,699	
	05/12/02			49,252 (Butylene), 23,252 (Butadiene), 72,649 (Ethylene), 38,924 (Propylene), 44,204 (Toluene), 26,186 (Pentane), 30,736 (Hexane), 9,119 (Xylene)	43,242	
	05/10/02			386 (Butadiene), 151 (Xylene)	717	
	05/08/02			153 (Butadiene), 45,058 (Ethylene), 34,168 (Propylene), 14 (Propane), 311 (Butylene), 64 (Butane), 240 (Pentane), 202 (Hexane), 60 (Xylene), 291 (Toluene), 81 (Nonane), 15 (Styrene), 6 (Decane)	284	
	05/03/02			8,513 (Ethylene)		
	07/06/02			9832 (Ethylene)		
	07/08/02			18,133 (Ethylene)		
	CHEVRON PHILLIPS CHEMICAL CO.	1/6/2002			809 (Butadiene), 1,073 (Butane), 23,295 (Ethylene), 151 (Acetylene), 326 (Pentane), 393 (Propane), 1,273 (Propylene)	673
01/12/02				1,415 (Ethylene)		
02/03/02				149 (Toluene)		
02/14/02				325 (Ethylene)		
02/18/02				11,414 (Propane), 325 (Ethylene), 24,588 (Propylene), 325 (Methyl Acetylene), 325 (Propadiene)		
03/07/02				157 (Ethylene)		
03/06/02				185 (Ethylene)		
06/17/02				16,032 (Ethylene), 288 (Acetylene)		
06/22/02				149 (Toluene)		
06/20/02				117 (Butadiene), 119 (Butane), 26,970 (Ethylene), 102 (Acetylene), 5,649 (Propane), 11,618 (Propylene)		
MOTIVA ENTERPRISES	07/08/02			5,118 (Ethylene)		
	01/11/02					
		3,669				
	01/21/02	594				
	02/05/02	681, 724, 599, 1,030, 590				
	02/05/02**	761		151 (Isobutane)		
	02/12/02			222 (Isobutane), 106 (n-Butane)		
02/27/02	1,076					

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	DATE OF UPSET	SO <sub>2</sub>	Hydrogen Sulfide	HAZ/ VOCs	BENZENE	CO
MOTIVA ENTERPRISES (cont.)	02/27/02**	9,755	106	224 (Propylene)		
	03/31/02			223 (Isobutane)		
	03/25/02	3,029				
	04/07/02	7,462				
	04/12/02	137		148 (Propylene)		
	05/15/02					
	05/13/02	73,633	799	274 (Propane), 78 (Isobutane), 350 (n-Butane), 36 (Isopentane)		3,990
	05/08/02	7,455				
	05/08/02*			42 (Methane), 34 (Ethane), 71 (Propane), 53 (Butane), 11 (Pentane)		
	05/01/02			2746 (Ethylene)		
	06/23/02	278		145 (Propane), 41 (Isobutane), 174 (nButane)		
	06/10/02			45 (Propane), 465 (Isobutane)		
	07/08/02			117 (Propane), 418 (Isobutane), 440 (nButane)		
	07/12/02	12,615		7 (Methane), 5 (Ethane), 6 (Ethylene), 306 (Propane), 232 (Propylene), 473 (Butanes), 234 (Butene)		
PREMCOR REFINING GROUP, INC.	07/24/02	3,969	243	8,636 (Hydrocarbons)		
	01/02/02	416,472	4,516	49,728 (VOCs)		
	01/13/02	14,531	155	1,868 (VOCs)		
	02/12/02			5,247 (Propane)		
	02/19/02		1066	42,033 (Propane)		
	03/11/02			80,000 (Propane/Butane Mix)		
	03/14/02			236 (VOCs)		
	03/19/02			4826 (VOCs)		
	05/11/02	49,674 500	529			
	05/07/02	65,389				
	05/04/02			457 (VOCs)		
	06/28/02			19,033 (VOCs)		
	07/01/02	4,796		2,044 (VOCs)		
	07/15/02	804	240			

\* Information collected from Final Emissions Reports submitted to the Texas Commission on Environmental Quality (formerly Texas Natural Resource Conservation Commission) and the National Response Center. The corresponding reportable quantities for the pollutants listed in the table are 500 pounds for SO<sub>2</sub>, 100 pounds for Hydrogen Sulfide, 100 pounds for Hazardous Substances/ Volatile Organic Compounds, 500 pounds for Benzene, and 5,000 pounds for CO.

\*\* Represents a separate event which took place on the same day.

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APPENDIX A  
Pollutant Descriptions and Health Effects

According to recent health studies, pollutants such as those released by refineries and chemical plants in Port Arthur can cause serious respiratory problems and exacerbate cases of childhood asthma. Toxic air pollutants and smog-causing compounds such as nitrogen oxides, sulfur dioxide and volatile organic compounds are linked to cancer and even death.

Information taken directly from Agency for Toxic Substances and Disease Registry (ATSDR) Toxic Profiles at [www.atsdr.cdc.gov/toxprofiles](http://www.atsdr.cdc.gov/toxprofiles) and the Environmental Health Center, a division of the National Safety Council, at [www.nsc.org/ehc/indoor/carb\\_mon.htm](http://www.nsc.org/ehc/indoor/carb_mon.htm)

**Sulfur Dioxide-** Exposure to very high levels of sulfur dioxide can be life threatening. Exposure to 100 parts of sulfur dioxide per million parts of air (100 ppm) is considered immediately dangerous to life and health. Burning of the nose and throat, breathing difficulties, and severe airway obstructions occurred in miners who breathed sulfur dioxide released as a result of an explosion in a copper mine.

Long-term exposure to persistent levels of sulfur dioxide can affect your health. Lung function changes were seen in some workers exposed to low levels of sulfur dioxide for 20 years or more. However, these workers were also exposed to other chemicals, so their health effects may not have been from sulfur dioxide alone. Asthmatics have also been shown to be sensitive to the respiratory effects of low concentrations of sulfur dioxide.

Animal studies also show respiratory effects from breathing sulfur dioxide. Animals exposed to high concentrations of sulfur dioxide showed decreased respiration, inflammation of the airways, and destruction of areas of the lung.

Children who live in or near heavily industrialized areas where sulfur dioxide occurs may experience difficulty breathing, changes in the ability to breathe deeply, and burning of the nose and throat. It is not known whether children are more vulnerable to these effects than adults. However, children may be exposed to more sulfur dioxide than adults because they breathe more air for their body weight than adults do.

Long-term studies surveying large numbers of children indicate that children who have breathed sulfur dioxide pollution may develop more breathing problems as they get older, may make more emergency room visits for treatment of wheezing fits, and may get more respiratory illnesses than other children. Children with asthma may be especially sensitive even to low concentrations of sulfur dioxide, but it is not known whether asthmatic children are more sensitive than asthmatic adults.

**Hydrogen Sulfide-** Hydrogen sulfide is considered a broad-spectrum poison, meaning it can poison several different systems in the body.

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Breathing very high levels of hydrogen sulfide can cause death within just a few breaths. There could be loss of consciousness after one or more breaths.

Exposure to lower concentrations can result in eye irritation, a sore throat and cough, shortness of breath, and fluid in the lungs. These symptoms usually go away in a few weeks. Long-term, low-level exposure may result in fatigue, loss of appetite, headaches, irritability, poor memory, and dizziness.

Because it is heavier than air, hydrogen sulfide tends to sink, and because children are shorter than adults, they may be more likely to be exposed to larger amounts than adults in the same situations.

The Occupational Safety and Health Administration (OSHA) has established an acceptable ceiling concentration of 20 parts per million (20 ppm) in the workplace, with a maximum level of 50 ppm allowed for 10 minutes if no other measurable exposure occurs.

The National Institute of Occupational Safety and Health (NIOSH) recommends a maximum exposure level of 10 ppm.

**Hazardous Substances/VOCs** – VOC's contribute significantly to ground level ozone, a principal component of smog, which can cause significant health and environmental problems.

Examples of VOC's:

**Hexane**- The only people known to have been affected by exposure to n-hexane used it at work. Breathing large amounts caused numbness in the feet and hands, followed by muscle weakness in the feet and lower legs. Continued exposure led to paralysis of the arms and legs. If removed from the exposure, the workers recovered in 6 months to a year.

In laboratory studies, animals exposed to high levels of n-hexane in air had signs of nerve damage. Some animals also had lung damage. In other studies, rats exposed to very high levels of n-hexane had damage to sperm-forming cells.

**Toluene**- Toluene may affect the nervous system. Low to moderate levels can cause tiredness, confusion, weakness, drunken-type actions, memory loss, nausea, loss of appetite, and hearing and color vision loss. These symptoms usually disappear when exposure is stopped.

Inhaling high levels of toluene in a short time can make you feel light-headed, dizzy, or sleepy. It can also cause unconsciousness, and even death.

High levels of toluene may affect your kidneys.

**Xylene**- Xylene affects the brain. High levels from exposure for short periods (14 days or less) or long periods (more than 1 year) can cause headaches, lack of muscle coordination, dizziness, confusion, and changes in one's sense of balance. Exposure of people to high levels of xylene for short periods can also cause irritation of the skin, eyes, nose,

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and throat; difficulty in breathing; problems with the lungs; delayed reaction time; memory difficulties; stomach discomfort; and possibly changes in the liver and kidneys. It can cause unconsciousness and even death at very high levels.

Studies of unborn animals indicate that high concentrations of xylene may cause increased numbers of deaths, and delayed growth and development. In many instances, these same concentrations also cause damage to the mothers. We do not know if xylene harms the unborn child if the mother is exposed to low levels of xylene during pregnancy.

**Benzene-** Benzene is a colorless liquid with a sweet odor. Benzene evaporates into air very quickly and dissolves slightly in water. It is made mostly from petroleum sources. Brief exposure to very high levels of benzene in air (10,000-20,000ppm) can result in death. Lower levels (700-3,000 ppm) can cause drowsiness, dizziness, rapid heart rate, headaches, tremors, confusion, and unconsciousness.

Benzene may produce problems related to blood. People who breathe benzene for long periods may experience harmful effects in the tissue that form blood cells, especially the bone marrow. These effects can disrupt normal blood production and cause a decrease in important blood components. A decrease in red blood cells can lead to anemia. Reduction in other components in the blood can cause excessive bleeding. Blood production may return to normal after exposure to benzene stops. Excessive exposure to benzene can be harmful to the immune system, increasing the chance for infection and perhaps lowering the body's defense against cancer.

Benzene can cause cancer of the blood-forming organs. The Department of Health and Human Services (DHHS) has determined that benzene is a known carcinogen. The International Agency for Cancer Research (IACR) has determined that benzene is a human carcinogen. Long-term exposure to relatively high levels of benzene in the air can cause cancer of the blood-forming organs. This condition is called leukemia. Exposure to benzene has been associated with development of a particular type of leukemia called acute myeloid leukemia (AML).

Exposure to benzene may be harmful to the reproductive organs. Some women workers who breathed high levels of benzene for many months had irregular menstrual periods. When examined, these women showed a decrease in the size of their ovaries. However, exact exposure levels were unknown, and the studies of these women did not prove that benzene caused these effects. It is not known what effects exposure to benzene might have on the developing fetus in pregnant women or on fertility in men. Studies with pregnant animals show that breathing benzene has harmful effects on the developing fetus. These effects include low birth weight, delayed bone formation, and bone marrow damage.

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**Carbon Monoxide-** Carbon monoxide (CO) is an odorless, colorless gas that interferes with the delivery of oxygen in the blood to the rest of the body. It is produced by the incomplete combustion of fuels.

Carbon monoxide interferes with the distribution of oxygen in the blood to the rest of the body. Depending on the amount inhaled, this gas can impede coordination, worsen cardiovascular conditions, and produce fatigue, headache, weakness, confusion, disorientation, nausea, and dizziness. Very high levels can cause death.

The symptoms are sometimes confused with the flu or food poisoning. Fetuses, infants, elderly, and people with heart and respiratory illnesses are particularly at high risk for the adverse health effects of carbon monoxide.



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## APPENDIX B

## Texas Administrative Codes

*(Note: These excerpts from the Texas Administrative Code reflect those that were in effect at the time of the incidents discussed in this Report. Recent revisions to the Texas Administrative Code which went into effect on September 12, 2002, have not been included in this Appendix but are available on the web at <http://info.sos.state.tx.us/pub>.)*

## § 101.1 Definitions

§101.1(66) (E)(iii)-Beaumont/ Port Arthur (BPA) ozone non-attainment area. Classified as a Moderate ozone non-attainment area. Consists of Hardin, Jefferson, and Orange Counties.

## §101.1(82) list Reportable Quantities

§101.1 (102) Upset- An unscheduled occurrence or excursion of a process or operation that results in an unauthorized emission of air contaminants.

## §101.6 Upset Reporting and Recordkeeping Requirements

§101.6(a)(1) As soon as practicable, but not later than 24 hours after discovery of an upset, the owner or operator shall:

- (A) determine if the upset is a reportable upset; and
- (B) notify the commission's regional office for the region in which the facility is located and all appropriate local air pollution control agencies if the upset is reportable.
- (2) The notification for reportable upsets...shall identify:
  - (A) the cause of the upset, if known;
  - (B) the processes and equipment involved;
  - (C) the date and time of the upset;
  - (D) the duration or expected duration of the upset;
  - (E) the compound descriptive type of the individually listed compounds or mixtures of air contaminants...

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(F) the estimated quantities for those compounds or mixtures...

(G) the actions taken or being taken to correct the upset and minimize the emission.

(b) The owner or operator of a facility shall create a final record of reportable and nonreportable upsets as soon as practicable, but no later than two weeks after the end of an upset.

§101.7 Maintenance, Startup, and Shutdown Reporting, Recordkeeping, and Operational Requirements.

(a) All pollution emission capture equipment and abatement equipment shall be maintained in good working order and operated properly during normal facility operations. Emission capture and abatement equipment shall be considered in good working order and operated properly when operated in a manner such that the facility is operating within air emission limitations established by permit, rule, or order of the commission or as authorized by TCAA, §382.0518(g).

(b) The owner or operator shall notify the commission's regional office for the region which the facility is located and all appropriate local air pollution control agencies at least ten days prior to any maintenance, start-up, or shutdown which is expected to cause an unauthorized emission which exceeds the reportable quantity in any 24-hour period. If notice cannot be given ten days prior to any start-up, shutdown, or maintenance which is expected to cause an unauthorized emission that will equal or exceed a reportable quantity in any 24-hour period, notification shall be given as soon as practicable prior to maintenance, start-up, or shutdown. Any maintenance, start-up, or shutdown, for which there was no notification under this

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subsection was submitted, which results in unauthorized emissions that equal or exceed a reportable quantity, or any maintenance, start-up, shutdown which exceeds the estimates submitted under the notification requirements of this subsection shall be considered a reportable upset and subject to §101.6 of this title (relating to Upset Reporting and Recordkeeping Requirements).

## § 101.11. Demonstrations

(a) Upset emissions are exempt from compliance with air emission limitations established in permits, rules, and orders of the commission, or as authorized by TCAA, § 382.0518(g) if the owner or operator complies with the requirements of § 101.6 of this title (relating to Upset Reporting and Recordkeeping Requirements) and satisfies all of the following:

- (1) the unauthorized emissions were caused by a sudden breakdown of equipment or process, beyond the control of the owner or operator;
- (2) the unauthorized emissions did not stem from any activity or event that could have been foreseen and avoided and could not have been avoided by good design, operation, and maintenance practices;
- (3) the air pollution control equipment or processes were maintained and operated in a manner consistent with good practice for minimizing emissions;
- (4) prompt action was taken to achieve compliance once the operator knew or should have known that applicable emission limitations were being exceeded;
- (5) the amount and duration of the unauthorized emissions and any bypass of pollution control equipment were minimized;
- (6) all emission monitoring systems were kept in operation if possible;
- (7) the owner or operator's actions in response to the unauthorized emissions were documented by, contemporaneous operation logs, or other relevant

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evidence;

(8) the unauthorized emissions were not part of a recurring pattern indicative of inadequate design, operation, or maintenance; and

9) unauthorized emissions do not cause or contribute to a condition of air pollution.

(b) Emissions from any maintenance, start-up, or shutdown are exempt from compliance with air emission limitations established in permits, rules, and orders of the commission, or as authorized by TCAA, § 382.0518(g) if the owner or operator complies with the requirements of § 101.7 of this title (relating to Maintenance, Start-up and Shutdown Reporting, Recordkeeping, and Operational Requirements) and satisfies all of the following:

(1) the periods of unauthorized emissions from any maintenance, start-up, or shutdown and could not have been prevented through planning and design;

(2) the unauthorized emissions from any maintenance, start-up, or shutdown were not part of a recurring pattern indicative of inadequate design, operation, or maintenance;

(3) if the unauthorized emissions from any maintenance, start-up, or shutdown were caused by a bypass of control equipment, the bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

(4) the facility and air pollution control equipment were operated in a manner consistent with good practice for minimizing emissions;

(5) the frequency and duration of operation in maintenance, startup, or shutdown mode resulting in unauthorized emissions was minimized;

(6) all emissions monitoring systems were kept in operation if possible;

(7) the owner or operator's actions during the period of unauthorized emissions from any maintenance, start-up, or shutdown were documented by

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contemporaneous operating logs, or other relevant evidence; and

(8) unauthorized emissions do not cause or contribute to a condition of air pollution.

(c) Smoke generators and other devices used for training inspectors in the evaluation of visible emissions at a training school approved by the commission are not required to meet the allowable emission levels set by the rules and regulations, but must be located and operated such that a nuisance is not created at any time.

(d) Equipment, machines, devices, flues, and/or contrivances built or installed to be used at a domestic residence for domestic use are not required to meet the allowable emission levels set by the rules and regulations unless specifically required by a particular regulation.

(e) Sources emitting air contaminants which cannot be controlled or reduced due to a lack of technological knowledge may be exempt from the applicable rules and regulations when so determined and ordered by the commission. The commission may specify limitations and conditions as to the operation of such exempt sources. The commission will not exempt sources from complying with any federal requirements.

(f) The owner or operator has the burden of proof to demonstrate that the criteria identified in subsection (a) of this section for upsets, or in subsection (b) of this section for maintenance, start-up, or shutdown occurrences are satisfied for each occurrence of unauthorized emissions. The executive director or any air pollution program with jurisdiction may request documentation of the criteria in subsections (a) and (b) of this section at their discretion. Satisfying the burden of proof is a condition to unauthorized emissions being exempt under this section.

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## ENDNOTES

<sup>1</sup> Data used for this report was obtained from company reports on file at the Beaumont office of the Texas Commission on Environmental Quality. Most of the records were initially obtained by Erin Koenig, a reporter with the Texas newspaper, The Examiner, but the information has been subsequently checked and confirmed by reviewing both initial and final reports held by the TCEQ Region 10 Beaumont Field Office. Recent phone conversations with TCEQ Beaumont investigators indicated that BASF recently filed amended reports that made changes to releases reported for several events from January to May 2002. These amended reports were obtained by EIP and used to calculate reported releases from the BASF Plant. However, it is important to note that these amended reports are not located in the public file for BASF at the TCEQ office. This raises concern for area residents who should be able to obtain accurate and specific information on reported releases in their neighborhoods. BASF Fina Petrochemicals, L.P. January 21, 2002, Upset or Maintenance (U/M) Notification Form for Reportable Events, (Amended Report), Acct. No. JE-0843-F received at TCEQ, Beaumont Office on June 17, 2002.

<sup>2</sup> The new BASF plant includes a multi-point flare system (several hundred miniature flares located 5-6 feet above the ground) designed to achieve better destruction of pollutants than larger traditional flares. But reports so far for this year suggest serious start-up problems with the new system.

<sup>3</sup> Premcor Refining Group, Inc., January 2, 2002, Initial Upset Notification Report, Acct. No. JE-0042-B, received at TCEQ, Beaumont Office on January 2, 2002 (No final report for this event was submitted to TCEQ.).

<sup>4</sup> Chevron Phillips Chemical Co., June 20, 2002, Upset/Maintenance Notification Report, Acct. No. JE-0508W, received at TCEQ, Beaumont Office on July 2, 2002.

<sup>5</sup> Motiva Enterprises, L.L.C., July 24, 2002, Upset Maintenance (U/M) Notification Form for Reportable Events, Acct. No. JE-0095-D, received at TCEQ, Beaumont Office on Aug. 7, 2002.

<sup>6</sup> Federal reporting requirements for certain pollutants are set at lower limits for the Beaumont Port Arthur area than for other areas that are in attainment for ozone. Butene, ethylene, propylene, acetaldehyde, toluene, nitrogen oxide, and nitrogen dioxide all have a reportable quantity limit of 100 pounds for the Port Arthur Beaumont area. (In attainment areas, the reportable quantity is set at 5,000 pounds. 40 CFR pts. 355 and 370 (1998); 40 C.F.R. tbl. 302.4 (1997).)

<sup>7</sup> Members of the Port Arthur Bucket Brigade, a community group of concerned residents, use buckets containing plastic tedlar bags designed with vacuum-triggered valves to collect grab air samples in their neighborhoods. The bucket brigade focuses mainly on the southwestern part of Port Arthur. Samples are then sent to an EPA-approved lab for scientific analysis. Samples cited were taken on July 13, 2002, at Austin and Gulf Roads, and Savannah and Gulf Roads in Port Arthur.

<sup>8</sup> The use of ground-level monitoring did detect dangerous levels of benzene from flaring in the city of Odessa, another Texas city. Using a TCEQ real-time ambient air monitor (auto-GC analyzer), monitoring for ground level impacts from flaring in Odessa in July, 2000, detected high concentrations of benzene well above state health levels giving 5-minute and 1-hr averages for benzene and 55 other VOC pollutants. The benzene was detected along with ethylene, propylene and acetylene, which were being flared from the olefins unit at the olefins flare about 1/4-1/2 mile south of the monitor. Conversation with Neil Carman, Sierra Club (Oct. 3, 2002).

## ACCIDENTS WILL HAPPEN



<sup>9</sup> Environmental Protection Agency, Smog--Who Does It Hurt? What You Need to Know about Ozone and Your Health, at <http://www.epa.gov/airnow/health/smog1.html#1> (last modified Sept. 19, 2002).

<sup>10</sup> California Office of Environmental Health Hazard Assessment, Determination of Acute Reference Exposure Levels for Airborne Toxicants (March 1999), at [http://www.oehha.ca.gov/air/acute\\_rels/pdf/71432A.pdf](http://www.oehha.ca.gov/air/acute_rels/pdf/71432A.pdf) (last visited Oct. 10, 2002).

<sup>11</sup> The TCEQ Beaumont office cannot provide information for a specific event or date specified by the caller. TCEQ works through a bonded copier and, at the caller's request, will send out the entire file for a specific refinery for copying. This file includes all the upset reports for the current year. Estimates of \$25-\$200 reflect actual copying costs incurred during the production of this Report. New state regulations which went into effect on September 12, 2002, will require facilities to submit future upset reports electronically through an on-line reporting system. However, the on-line reporting system, which will become operational on January 1, 2003, will only require electronic reporting of final upset emission reports. These reports often are not filed by facilities until at least two weeks after the end of the event in question and many times are not submitted until several weeks after the actual event took place. Additionally, in some cases, facilities have only filed initial reports without providing a follow-up final report. Because electronic reporting of initial reports will not be required until January 1, 2004, it is unclear what effect the electronic reporting system will have on the availability of information regarding events where only initial reports are filed.

<sup>12</sup> National Response Center at <http://www.nrc.uscg.mil/nrchp.html> (last visited Oct. 3, 2002). NRC data only includes reports of initial notification. Updated and more accurate information regarding releases is not collected by NRC.

<sup>13</sup> Reporting requirements are set by federal community right to know laws, including the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), 42 U.S.C. §§ 9601-9675 (2002) and Emergency Planning and Community Right-to-Know Act (EPCRA), 42 U.S.C. §§ 11001-11050 (2002). See Guidance on the CERCLA §101(10)(H) Federally Permitted Release Definition for Certain Air Emissions, 67 Fed. Reg. 18,899 (Apr. 17, 2002); Guidance on the CERCLA §101(10)(H) Federally Permitted Release Definition for Clean Air Act "Grandfathered" Sources, 67 Fed. Reg. 19,750 (Apr. 23, 2002) [hereinafter Grandfathered Sources Guidance]. Guidance materials are also available on EPA's website at <http://www.epa.gov/fedrgstr/EPA-WASTE/2002/April/Day-17/f9322.htm>.

<sup>14</sup> Grandfathered Sources Guidance, *supra* note 12.

<sup>15</sup> State Implementation Plans (SIPs): Policy Regarding Excess Emissions During Malfunctions, Startup, and Shutdown from Steven A. Herman, EPA Assistant Administrator for Enforcement and Compliance Assurance, and Robert Perciasepe, EPA Assistant Administrator for Air and Radiation, to Regional Administrators, Regions I-X (September 20, 1999), available at <http://www.epa.gov/ttn/oarpg/t1/memoranda/excem.pdf> (last visited October 3, 2002).

<sup>16</sup> *Id.*

<sup>17</sup> *Id.*

<sup>18</sup> *Id.*

<sup>19</sup> D.M. Leاهر, K. Preston and M. Strosher, Theoretical and Observational Assessments of Flare Efficiencies, 51 Journal of the Air & Waste Management Association 1610 (Dec. 2001).

## ACCIDENTS WILL HAPPEN



<sup>20</sup> Id.

<sup>21</sup> Id.

<sup>22</sup> Id.

<sup>23</sup> Memorandum re: Summary of Significant Events from March 1, 2000 through December 31, 2000 for the Gulf Coast Upset Maintenance Pilot Project from Michael Freer, Air Liaison, Gulf Coast Upset/Maintenance Coordinator, to TNRCC Commissioners (Jan. 10, 2001).

<sup>24</sup> Id.

<sup>25</sup> EPA Office of Regulatory Enforcement, "Frequent, Routine Flaring May Cause Excessive Uncontrolled Sulfur Dioxide Releases," 3 Enforcement Alert 9 (Oct. 2000) [hereinafter Enforcement Alert] (emphasis added).

<sup>26</sup> Ten counties surrounding the Wurtland, Kentucky, DuPont plant will be a part of this pilot notification program. More information about the settlement agreement reached with Wurtland can be found at <http://www.epa.gov/Region4/oeapages/00press/000801.htm>. United States v. E.I. duPont de Nemours, et. al No. CD-2000-16 (E.D. KY).

<sup>27</sup> Enforcement Alert, supra note 24 (citing United States v. B.P. Exploration Co. Consent Decree, C.A. No. 3:97CV7790 (N.D. Ind. entered May 5, 1999).

<sup>28</sup> New Source Review Policy, Regulations, and Enforcement Activities: Hearing Before the Senate Comm. on Environment and Public Works and the Senate Comm. on the Judiciary, 107<sup>th</sup> Cong. (July 16, 2002) (testimony of Eric Schaeffer, Director, Environmental Integrity Project, Rockefeller Family Fund), available at [http://www.senate.gov/~epw/Schaeffer\\_071602.htm](http://www.senate.gov/~epw/Schaeffer_071602.htm) (last visited Oct. 11, 2002).



March 19, 2003

John Peter Suarez  
Assistant Administrator  
Office of Enforcement and Compliance Assurance  
1200 Pennsylvania Avenue, NW  
Mailcode 2201A  
Washington, DC NW 20460

Jeffrey Holmstead  
Assistant Administrator  
Office of Air and Radiation  
1200 Pennsylvania Avenue  
Mailcode  
Washington, DC NW 20460

Dear Messrs. Suarez and Holmstead:

We are writing to ask that the Environmental Protection Agency take action to stop air pollution from repeated accidents, startups, shutdowns and repairs at refineries, chemical plants, and other facilities.

Under the Clean Air Act, federal and state rules excuse emissions from accidents or plant maintenance even if they are unpermitted, but only when such events are rare and cannot be avoided through careful design and operation. The attached summary of emission reports filed by just six facilities in Port Arthur, Texas, documented 322 such incidents in 2002, releasing a combined total of over 7.5 million pounds of sulfur dioxide, volatile organic compounds, and carcinogens like benzene and butadiene.

The sudden, unannounced increase from these pollution episodes leave nearby residents literally gasping for breath, and may explain why some studies find asthma attacks occur more frequently near some refining operations. Many communities that bear this burden are, like Port Arthur, on the frontlines of environmental justice, as they include many people of color or living on moderate incomes.

During accidents or maintenance activities, waste gases are typically routed to flaring systems for destruction. Recent data from researchers in Canada, California, and Texas suggest that some flares may be poorly operated, release much more pollution than the amounts reported in Port Arthur and at other sites, and contribute more substantially than had been assumed to the failure to meet air quality standards in major metropolitan areas. We appreciate EPA's attempts to measure air quality in Port Arthur at the end of January, but the sudden, unanticipated nature of accidental emissions call for a more systematic approach.

The prior Administration had finally begun to take action to curb excess pollution from too frequent accidents, by requiring companies to install modern pollution controls and reduce their reliance on flaring, and to diagnose and correct the conditions that led to repeated accidents. Unfortunately, that enforcement initiative seems to have come to a standstill in the past year. We hope that EPA will respond to the attached questions from the Environmental Integrity Project, and clarify that accidents and shutdowns that occur as frequently as they do in Port Arthur are not allowed under the Clean Air Act, and that EPA will enforce the law. We ask that you also consider whether the open burning of hazardous waste gases through flaring is as effective as companies now assume.

By taking vigorous action on this matter, you can show communities like Port Arthur that they are not forgotten, and that "accidental" pollution does not have to become a way of life.

Sincerely,

Paul Billings  
American Lung Association  
Washington, DC

Elizabeth Thompson  
Environmental Defense  
Washington, DC

John Walke, Esq.  
Natural Resources Defense Council  
Washington, DC

Vickie Patton  
Environmental Defense  
Boulder, CO

Andy Igrejas  
National Environmental Trust  
Washington, DC

James Wyerman  
20/20 Vision  
Washington, DC

Neil Carman, Ph.D.  
Lone Star Chapter  
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Jim Marston  
Environmental Defense  
Austin, TX

Katy Hubener  
Blue Skies Alliance  
Duncanville, TX

Luke Metzger  
Texas Public Interest  
Research Group  
Austin, TX

Robin Schneider  
Texas Campaign for the  
Environment  
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Ilan Levin, Esq.  
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Anne Rolfes  
Louisiana Bucket Brigade  
New Orleans, LA

Tiffany Schauer  
Our Children's Earth  
San Francisco, CA

Joanne Rossi  
Community/Labor  
Refinery Tracking Committee  
Philadelphia, PA

Joseph Otis Minott, Esq.  
Clean Air Council  
Philadelphia, PA

Vivian Stockman  
Ohio Valley Environmental Coalition  
Huntington, WV

Joan Marie Silke  
Good Neighbor Committee  
Of South Cook County  
Chicago, IL

Mike Schade  
Citizens Environmental Coalition  
Buffalo, New York

Bob Shavelson  
Cook Inlet Keeper  
Homer, AK

Vickie Goodwin  
Powder River Basin Council  
Douglas, WY

Earl Mouton, Jr.  
Mossville Environmental  
Action Now  
Westlake, LA

Ralph Sattler  
Communities for a  
Safe Environment  
Martinez, CA

Mable Mallard  
Right to Know Committees  
Philadelphia, PA

Beatrice Miringu  
Ohio Citizen Action  
Toledo, OH

John Blair  
Valley Watch  
Evansville, IN

Kathy Andria  
American Bottom Conservancy  
East St. Louis, IL

Ted Schettler, MD  
Science & Environmental  
Health Network  
Boston, MA

Louis Zeller  
Blue Ridge  
Environmental Defense League  
Glendale Springs, NC

Jason and Jessica Boltman  
Salt Lake City, UT

March 19, 2003

Mr. John Peter Suarez  
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Mr. Jeffrey Holmstead  
Assistant Administrator  
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Washington, DC 20460

Dear Messrs. Suarez and Holmstead:

Attached you will find an inventory of air emissions in 2002 caused by malfunctions, startups, shutdowns, and maintenance activities at the Atofina, Motiva, and Premcor refineries, and the BASF-Atofina, Chevron Philips and Huntsman chemical plants in Port Arthur, Texas. Together, these six facilities reported 322 such events in 2002, which released a combined total of nearly 1,500 tons of sulfur dioxide, more than 1,700 tons of smog-forming volatile organic compounds (including 150 tons of the carcinogens benzene and butadiene) and 350 tons of carbon monoxide. The flares used to control emissions in such cases were reported to be smoking at least 85 times in 2002, which may indicate poor destruction of pollutants and higher emissions than the amounts reported. The data is based on reports the companies submitted to the Texas Council on Environmental Quality (TCEQ), as required when emissions from such events exceed amounts permitted by law.

We are writing to ask that EPA determine whether the severity and frequency of these episodes in Port Arthur violate the Clean Air Act., and to take appropriate enforcement action when they do.

**Emissions from Startup, Shutdown, Maintenance, and Malfunctions (SS/MM)  
Should be the Exception, Not the Rule**

When emissions from such events violate permit limits, they are excused from enforcement only when they meet the following conditions outlined in EPA's "Policy on Excess Emissions During Startup, Shutdown, Maintenance, and Malfunctions."

1. To the maximum extent practicable, the air pollution control equipment, process equipment, or process were maintained and operated in a manner consistent with good practice for minimizing emissions;
2. Repairs were made in an expeditious fashion when the operator knew or should have known that applicable emissions limitations were being exceeded. Off-shift labor and overtime must have been utilized, to the extent practicable, to ensure that such repairs were made as expeditiously as practicable;
3. The amount and duration of the excess emissions (including any bypass) were minimized to the maximum extent practicable during periods of such emission.
4. All possible steps were taken to minimize the impact of the excess emissions on ambient air quality; and
5. The excess emissions are not part of a recurring pattern indicative of inadequate design, operation or maintenance. Malfunctions are defined as "sudden and unavoidable" events that could not have been avoided by better operation and maintenance, while emissions from scheduled shutdowns are excused only for events that are "could not have been prevented through careful planning and [where] bypassing of control equipment was unavoidable to prevent loss of life, personal injury, or severe property damage."

Federal and state law also requires emissions from such events to be reported within 24 hours. Section 101.22 of the Texas State Implementation plan under the Clean Air Act imposes other limitations, such as making clear that these excess emission events will not be excused if they, "cause or contribute to an exceedance of the National Ambient Air Quality Standards (NAAQS) increments, Prevention of Significant Deterioration (PSD) increments, or a condition of air pollution."

We ask that you review the attached data and other relevant information to determine whether these conditions are in fact being met by refineries and chemical plants in Port Arthur. We would also appreciate your response to the following questions:

**Emissions from SS/MM Events Must Not Cause or Contribute to an Exceedance of Federal Air Quality Standards or a Condition of Air Pollution**

1) The Beaumont/Port Arthur area falls short of meeting federal ozone standards, and is expected to be downgraded to a “serious” or “severe” nonattainment area following a recent ruling by the U.S. Fifth Circuit. Last year, over 1,700 tons of ozone-forming volatile organic compounds were released from the six Port Arthur plants from repeated malfunctions, as well as startup, shutdown and maintenance events. While not all of these compounds were released during the warmer months of ozone season, a malfunction at the BASF plant resulted in a continuing release of butadiene and benzene in July and August, and other facilities had periodic upsets during the summer.

- Does EPA consider the release of substantial quantities of unpermitted emissions from a malfunction in an ozone nonattainment area to contribute to a violation of air quality standards or to a condition of air pollution?
- Will EPA consider stricter limitations on emissions from malfunctions, as well as startups, shutdowns, and maintenance, when the State Implementation Plan for the Beaumont-Port Arthur Area is revised to comply with the new ozone nonattainment designation?

**Plant Design Must Anticipate and Avoid Unnecessary Shutdown**

2) Emissions from startup, shutdown, malfunction or maintenance (SSM/M) events are not excused where they could have been anticipated and avoided through careful design. The BASF plant released more than 30 tons of benzene and butadiene and 170 tons of volatile organic compounds from leaks at a cooling tower that were discovered June 4<sup>th</sup> and not fully corrected until late December. BASF claimed in its report that moving faster to shut down the unit for repairs would have resulted in even higher emissions.

Does the obligation to anticipate and avoid malfunctions include designing equipment so that it can be repaired quickly, especially if substantial quantities of carcinogens are being released?

**Breakdowns Must Not Show Recurring Pattern**

3) Emissions from startup, shutdown, malfunction or maintenance (SSM/M) events must not reflect a “recurring pattern indicative of inadequate design, operation, or maintenance.”

- Do the repeated breakdowns at the following units suggest that this condition is not being met at Port Arthur plants?
  - a) Atofina Petrochemical reports malfunctions and related maintenance

shutdowns of the C-200 sour gas compressor on twelve separate occasions in 2002 (January 22, February 4, February 19, March 27, April 19, June 19, July 8, August 14, August 28, September 21, September 27, and November 3). Together, these incidents released over 450 tons of sulfur dioxide and nearly 10,000 pounds of hydrogen sulfide last year.

b) BASF reported a fire in the Charge Gas Compressor on September 25 last year, caused by a seal with “severe wear and tear, probably due to a series of start-ups and shutdowns that have occurred over the past 10 months.” The event released nearly 15 tons of butadiene and benzene, along with more than 60 tons of other volatile organic compounds.

c) The Huntsman chemical plant reported no fewer than ten malfunctions or repairs of its cyclohexane unit last year (3/4, 4/21, 5/6, 7/2, 7/3, 7/6, 7/18, 12/6, and 12/13). These events released over a ton of benzene emissions, more than 8 tons of other volatile organic compounds, and two tons of carbon dioxide.

d) The Regenerative Thermal Oxidizer at Premcor malfunctioned nine times in 2002, (3/14, 4/19, 5/5, 6/30, 6/20, 7/13, 7/18, 11/22, and 12/3), releasing 3,500 pounds of benzene.

#### **Flares Used for Pollution Control Must Meet Emission Limits**

- 4) Port Arthur companies, like many others, rely on flares for the destruction of waste gases during startup, shutdown, malfunction or maintenance (SSMM) events. According to federal and state law, these flares must be properly designed, operated, and maintained, and meet specific opacity restrictions to limit smoke, particulate matter and other pollution. The attached data indicates that Port Arthur plants report that flares smoked during more than a quarter of the SS/M events in 2002, and most of these incidents appear to violate opacity restrictions
  - Does this frequency provide evidence that “air pollution control equipment” is not “maintained and operated in a manner consistent with good practice for minimizing emissions” as EPA’s policy requires?
- 5) The Atofina refinery reports that its North and South flares smoked or violated opacity restrictions 23 out of the 35 times they were in use in the second half of 2002. The “LOU” flare at Huntsman smoked 16 of the 22 times it was in use during the SS/MM events in 2002, in five cases for three hours or more and in one event for an entire day.
  - Are these repeated incidents evidence of a “recurring pattern of inadequate design, operation or maintenance” of flare emission control systems at the Atofina and Huntsman plants?

- 6) Port Arthur plants uniformly report that 98 to 99% of pollutants are destroyed during flaring. Yet EPA's own technical analysis warns that, "The efficiency of a flare in reducing VOC emissions can be variable. For example, smoking flares are far less efficient than properly maintained flares." And a recent Canadian study found that flames were much less efficient at destroying pollutants in wind speeds above 12-13 miles per hour. As discussed above, flares smoke frequently at Port Arthur plants, and meteorological data from the National Oceanic and Atmospheric Administration show that maximum windspeeds in the Beaumont/Port Arthur area reached 20 m.p.h. or higher on 160 days last year, and 25 m.p.h. or higher on 53 days.
- Is it reasonable to assume that 98% to 99% of pollutants are destroyed when flares smoke heavily and/or wind speed is high? Does EPA have plans to monitor actual flare emissions as Canadian researchers did?

#### **Plants Must Make Extraordinary Efforts to Minimize Emissions During Upsets**

- 7) Facilities are required to minimize emissions during SS/MM events by making extraordinary efforts to minimize their duration, including using shift work and overtime labor. But a review of Port Arthur plants reveal that many such events stretch for weeks, creating a loophole for additional pollution well beyond allowable permit limits. For example, the BASF plant took 33 days to diagnose and repair a leak at a cooling tower discovered on April 8, 2002, during which nearly 10 tons of the carcinogen butadiene was released to the atmosphere, and more than 6 months to correct a cooling tower leak discovered on June 4<sup>th</sup>. The Atofina refinery released more than 100 tons of sulfur dioxide, volatile organic compounds, and other pollutants during a 29 day shutdown in November to "depressure and deinventory process units."
- Are these examples consistent with the requirement to make extraordinary efforts at repair? Can EPA verify whether shift work or overtime were used during such events? Is this the kind of "short" shutdown that EPA had in mind when excusing permit violations during such events?

#### **Excess Emissions Must be Promptly Reported to USEPA and State Agencies**

- 8) Companies must report emissions that violate permit limits to both the TCEQ and USEPA's National Response Center within 25 hours of their occurrence. A report by the Environmental Integrity Project in September of 2002 identified specific emissions from SS/M events that were apparently not reported to EPA's National Center as required. For example, BASF appears to have reported virtually none of these events to the National Response Center during 2002. The Premcor refinery also decided not to report at least one release from a "grandfathered" plant, despite clear EPA guidance to the contrary.
- Does EPA plan to take action to determine whether the failure to report these and other incidents to the NRC violate federal reporting requirements? Will



EPA evaluate whether Port Arthur failed to report additional SSM events to either TCEQ or the NRC as required?

**Emission Inventories Should Include Pollution from Startups, Shutdowns, Maintenance, and Malfunctions**

- 9) As the attached demonstrates, emissions from SSS/M events can be substantial. Effective 2003, the Texas SIP requires that pollution from such events be included in the emission inventories that EPA requires states to develop every year.
- Does EPA currently require other states to include SSM emissions in their annual inventories of emissions from industrial sources?

Thank you for your review of the attached information, and we look forward to your reply to our questions.

Sincerely,

Eric Schaeffer  
Executive Director  
Environmental Integrity Project

**Environmental Integrity Project  
2002 Port Arthur Emission Events by Company (in lbs)**

Company	Total Upsets/ Releases	Releases Where Opacity Was Exceeded	Releases with Smoke	SO <sub>2</sub>	H <sub>2</sub> S	CO	NOx	Total VOCs <sup>1</sup>	Benzene Compounds	Butadiene	Ethylene	Unidentified VOCs	Other VOCs
Atofina	73	35	35	1,830,078	22,239	232,000	33,443	638,491	1,823		5,423	630,490	755
BASF	38	6	6				42,894	1,909,821	129,262	112,825	629,044		1,038,691
Chevron	55	5	5			399,680	76,581	516,475	19,558	22,340	317,041	1,460	156,076
Huntsman	50	22	22			46,116	8,834	110,211	8,820	1,534	34,560		65,297
Mohiva	56	7	7	169,660	2,825	22,956	10,185	30,009	237	350	8,954		20,468
Premcor	50	9	9	1,096,993	14,657	1,448	1,833	244,440	3,691			111,815	128,934
<b>2002 Totals:</b>	<b>322</b>	<b>84</b>	<b>84</b>	<b>3,096,931</b>	<b>39,731</b>	<b>702,200</b>	<b>173,770</b>	<b>3,449,447</b>	<b>163,391</b>	<b>137,049</b>	<b>995,022</b>	<b>743,765</b>	<b>1,410,221</b>

<sup>1</sup>Total VOCs equals the sum of Benzene, Butane, and Propane Compounds, Unidentified VOCs, and Other VOCs.  
Red Type/Grayed Out: No Final Notification. Initial reports not followed with a final report are counted as final under Texas air rules.

Mr. BARTON. Mr. Waxman, if you will share those with our counsel, our presumption is that we will put them in the record, but we obviously reserve the right to examine them before we do.

Mr. WAXMAN. I have no problem with that, Mr. Chairman. We will submit that to you and you can examine it, and we would like to have it in the record.

Mr. Holmstead, I would like to request of you that you provide your response to the letter for the record, and I would like to ask if you would be willing to do that.

Mr. HOLMSTEAD. I am not familiar with——

Mr. WAXMAN. This is a letter that was sent to you and presumably you are going to send a response to them, and we would like to have that sent to us.

Mr. HOLMSTEAD. Absolutely. When we send a response, we will provide that to you. And we agree, by the way, that the issue of startup and shutdown emissions is something that we really need to focus on. And I think, in fact, we are focusing on that, but I think that is an excellent point.

Mr. WAXMAN. It is my understanding that there have been similar problems with facilities in Baton Rouge. Mr. Holmstead, would you provide EPA's analysis on the role these facilities and their unpermitted releases play in the failure to attain clean air standards in Port Arthur and Baton Rouge, and we would like that for the record.

Mr. HOLMSTEAD. To the extent that we have that analysis, we would be happy to provide it.

Mr. WAXMAN. With regard to Atlanta, the subcommittee has received testimony that Atlanta will need to adopt additional control measures in order to attain the 8-hour ozone standard. If that is the case, it is apparent that Atlanta needs to be doing more, not less, to address its pollution problems.

Mr. Holmstead, has the EPA modeled what additional controls are necessary for Atlanta to attain the 8-hour standard?

Mr. HOLMSTEAD. That is, as I think you know, ordinarily what the local and State governments do. So what we analyzed is how much cleaner their air would be because of certain Federal actions such as the non-road diesel rule coupled with Clear Skies. So what we can say is that they would be much closer to attainment than they are today because of these Federal actions. Exactly what additional local controls are necessary is not something that the Federal Government would normally do.

Mr. WAXMAN. And if the local government did such modeling, would they submit it to EPA?

Mr. HOLMSTEAD. They would at the time that they prepared their SIP, but we do not yet—as I think you know, the way the Clean Air Act works is we have to do nonattainment designations in April of next year, and then the States have 3 years to submit their SIP to us, and we have up to 18 months to approve them. So, we won't see that modeling for several years still.

Mr. WAXMAN. Well, we would like to have whatever you have in your files in that regard. I want to also request that you submit for the record EPA's analysis of what controls will be necessary in each of the areas discussed here today to attain the 8-hour standard. And, finally, we would like to ask you to submit for the record

EPA's analysis of each area's pollution contribution from regional and local sources. This information submitted to us will help give us a more complete record so we can evaluate the issues before us, and we would appreciate your cooperation.

Thank you very much, Mr. Chairman, yield back my time.

Mr. BARTON. We thank the gentleman, and if we get those documents, we will try to review them during the hearing.

The gentleman from Illinois is recognized for 8 minutes.

Mr. SHIMKUS. Thank you, Mr. Chairman. Mr. Holmstead, good to see you again. Let me start with where we left off last week, I guess, or 2 weeks ago.

How might enactment of Clear Skies legislation affect the current and future situation with bump-up under Title I?

Mr. HOLMSTEAD. As I indicated earlier, Clear Skies dramatically reduces this regional pollution, especially throughout the eastern United States. I don't recall the exact numbers, but I think that what we show is 70 or 80 percent of the counties that are now out of attainment, would come into attainment without any additional local controls. So to some extent, it just takes that issue completely away for most of the communities, and it is only some of the major urban areas that have the most serious problems that would continue to be in nonattainment beyond 2010. So, the obvious answer is by reducing this regional pollution it makes the problem go away for most areas.

Now, the other thing that we have tried to do in Clear Skies is recognize this issue about the so-called bump-ups. And if an area has met certain requirements, then they could avoid a bump-up the way the Clear Skies Act is structured, but the most important thing is it just solves the nonattainment problem for the vast majority of areas in the United States, especially in the eastern United States.

Mr. SHIMKUS. And as I remember the map, I mean, that was pretty significant as far as—I think they were in red—and I asked that to be called up. Obviously, I am from southwestern Illinois or the metro east portion of St. Louis community, and even with Clear Skies the counties of Madison and St. Claire right across the river, still will be in the projection, still be in nonattainment, and still would be under whatever the restrictions are.

So, I was interested in the comments of Mr. Boucher because there is refinery capability in those two counties, but there is also obviously the transport issue from the St. Louis metropolitan area, hence, part of the confusion over the attainment status of the region today with not being in but being considered—for the common layman, it is pretty hard to figure out the terminology. So we will keep working that.

I want to move on to a question. In the past, did EPA provide guidance to States and local agencies on how to comply with the ozone standard based upon information that would be considered obsolete or less than state-of-the-art today?

Mr. HOLMSTEAD. I think the answer to that is probably yes. I don't want to single out any specific policy, but it is just—as I think everybody who works in this area knows, we have learned a lot in the last 20 years. The approaches that we would recommend

to States and local governments, and the approaches they adopt, have become more sophisticated.

Mr. SHIMKUS. And I want to follow up on that because as part of the chairman's line of questioning on technology, and I have been a big proponent in following legislation in the past on a piece of legislation we tried to address in the last Congress on the Gas Act because of the 45 different fuel standards around the country, fuel is one of—and I talked about this last week and, of course, learned a lot about the differences—but the reality is I continue to tell people if I fly into my airport of St. Louis and drive to the northern part of my district, which is Springfield, Illinois, you in essence go through three different fuel blend areas for the same regular unleaded fuel because of the then-known technology to meet the standards imposed.

So I would submit that the EPA, in not moving forward, not changing, not using new science, has some responsibility for where we are at today, and especially in the energy debate, Mr. Chairman, the fuel price spikes that we have addressed, and inability to move fuel from one area to another region, and the like.

Let me ask another line of questions to deal with the controversial Subpart 2. What technical or specific cost-benefit analysis did EPA perform with respect to the specific control measures contained in Subpart 2?

Mr. HOLMSTEAD. I am not aware that the agency did any specific analysis on each of those. As I think you know, Subpart 2 was adopted by Congress in 1990, and so I am sure we provided some advice during that process, but I am not aware that we have any specific cost-benefit analysis of that.

Mr. SHIMKUS. No cost-benefit, maybe some general technical information, but—so you would probably make the assumption then that Subpart 2 was really almost the political give-and-take compromise aspect of the movement of legislation?

Mr. HOLMSTEAD. Well, there was a lot of thinking that went into it but, in the end, of course, it is the product of that sort of political give-and-take. And, clearly, in general terms, it works fairly well, but there may be some specific things that aren't ideally suited for certain areas. I think that is probably fair to say.

Mr. SHIMKUS. And severe areas under Subpart 2 employ a 25-ton definition for major sources. What types of and sizes of businesses are we talking about when we address that standard?

Mr. HOLMSTEAD. It doesn't take much to be a 25-ton source. You could be talking auto body shops. I suppose at that level there could even be a large bakery or something that would be a 25-ton source.

Mr. SHIMKUS. What we would consider small businesses?

Mr. HOLMSTEAD. Certainly, yes.

Mr. SHIMKUS. Would that also affect agricultural sources?

Mr. HOLMSTEAD. Again, as you well know, this is very complicated. It has to do with whether their emissions are considered fugitive emissions or point source emissions. And so, typically, you wouldn't pick up a lot of agricultural sources unless they had onsite a big engine, a big pump or something. So, again, I can't answer definitively because it would depend source-by-source, but you wouldn't pick up probably a lot of agricultural sources.

Mr. SHIMKUS. If you could—and I don't care formal-wise or informal-wise—just give me an analysis on the agricultural impact on the 25-ton limit, I would—of the Subpart 2, I would appreciate that.

And I would just then end by thanking you for coming. I think my colleagues need to realize that, as the chairman says, we have got new science, we have got new technology, we have got new abilities, and hopefully working together we can move to a better, more sustainable, cleaner environment that helps protect jobs and economic development and the like. And I think we are moving in the right direction, and so I appreciate the chairman having this hearing.

And, Mr. Chairman, I will yield back my time, which is 5 seconds over.

Mr. BARTON. We will excuse you for that. Mr. Allen is next in line, if he wishes to ask questions.

Mr. ALLEN. If I am next in line, I will go. Thank you, Mr. Chairman.

Mr. Holmstead, in your testimony you state that during the 1990's it became clear that interstate transport is a more serious and widespread contributor to ozone and nonattainment than previously thought. That State seems to me just to be an example of how difficult it is to predict future air emissions problems, would you agree with that?

Mr. HOLMSTEAD. We certainly continue to learn over time. I think we are much better than we were, especially on ozone where we have really been studying for quite a while now.

Mr. ALLEN. Hopefully we will be better in 15 years than we are today.

Mr. HOLMSTEAD. I hope so, yes.

Mr. ALLEN. Two weeks ago, in front of this subcommittee, you went so far to guarantee—guarantee—that the Clear Skies proposal would bring all nonattainment areas in the northeast into attainment. And based on this guarantee—your word—you asked us to agree with you that Section 126 of the Clean Air Act is unnecessary.

It seems to me you can't possibly guarantee that Clear Skies will bring Portland, Maine into attainment. I just don't understand how you could make that statement.

So the question is, why—why did the Administration insist on altering Section 126 of the Clean Air Act, if you are right that Clear Skies will bring every area in the northeast into attainment, then Section 126 would die by default. But if you are wrong, then States would have no recourse, at least no recourse through 126.

Mr. HOLMSTEAD. First of all, whenever I use the word "guarantee," I try to make sure I think very carefully about what I say, and I don't believe I said every part of the northeast because I think our modeling shows that there would be some areas—I think Philadelphia continues to—is very close to the standard, but doesn't quite get there.

I think I can reiterate my guarantee for Portland, Maine. Even though we may continue to learn, we know a lot about air pollution, and we are confident enough in our modeling that for Portland, Maine Clear Skies would solve the problem.

The reason that we have looked—and, again, we are not eliminating Section 126. Section 126 would remain available for all other sources, other than plants that are actually covered by the legislation. The idea is that in exchange for these very tight additional controls, these sources would get regulatory certainty at least for a period of time. And so the idea is because we are getting the same type of emission reductions and we are getting it much more quickly, that we can agree to suspend 126, period, while we let these controls come in.

Mr. ALLEN. But if you are wrong—I mean, just take the point of view of the northeast, let's just call it New England for the moment. If you are wrong, and areas are out of attainment, then—and States don't have Section 126 recourse—the States don't have the ability to generate this issue and put it on your doorstep in the way that we did with the Section 126 petitions in the northeast, which led ultimately to the NO<sub>x</sub> SIP Call.

What you are really saying is, trust the EPA. You are removing a tool that the States have today, and saying, well, we should just trust the EPA to protect us over the next 10 years. And you can understand why perhaps some States aren't very comfortable with that.

Mr. HOLMSTEAD. I have heard this concern a lot, that you are removing our tools. And I guess two of the things that I have been saying are, first, even if Maine and every other State in New England submitted 126 petitions today, we would not be able to get any greater emission reductions than we are getting under the President's proposal. So, again, the States haven't submitted those petitions we're well ahead in terms of the timing there.

The other important thing to remember is these 126 petitions are based on the same kind of models that we are using under Clear Skies. The question and the way we analyze 126 petitions is not just where were we today, but what will be the case out over the future. So, it is not really that different from what we have today. And, again, I think all of our folks feel like this is a much more effective environmental approach and one that remains in place.

Mr. ALLEN. I understand what you believe, I do get that. But you can understand why others who don't have the same faith in Clear Skies, see a loss of power, a loss of a vehicle that is now extraordinarily useful for States around the country to assert their own claims when they have that chance.

With that, I yield back, Mr. Chairman.

Mr. BARTON. Do you wish to comment on his last comment?

Mr. HOLMSTEAD. Only again to say that what we have looked at here is not the number of provisions or regulatory tools. What we are trying to look at is the most effective way to reduce emissions as quickly as possible.

Mr. BARTON. The gentleman from Ohio, Mr. Strickland, is recognized for 8 minutes.

Mr. STRICKLAND. I will only take a few minutes, Mr. Chairman, thank you very much.

Mr. Holmstead, thank you for being here today. As we move into the 8-hour ozone attainment process, can you tell me what, if any, provisions may be made available to smaller or rural communities that will be struggling to reach this attainment under the new 8-

hour standard? I brought this issue up when you were here before a few weeks ago.

I am concerned that economic development for these rural communities may be hampered under this 8-hour standard. Could you respond to that, please?

Mr. HOLMSTEAD. There are some specific provisions in the Clean Air Act that are designed to help small businesses, and we have been, I think, very supportive of those efforts to reach out and to help people that would otherwise face problems.

I hate to sound like Johnny One-Note, but I have become sort of a Johnny One-Note, because the more I look at all of these data, if Congress passes some sort of multi-pollutant legislation. You have heard our presentation about Clear Skies. I am not familiar specifically with your district, and I would be happy to go back and look, but I am quite sure that other than some major urban areas, that just solves all of the problem. And that is one of the reasons we have been so supportive of Clear Skies. So, we think that sort of focusing, especially in rural areas where there is very little locally produced pollution, that the way to do it is just to clean up these major sources that really do contribute to nonattainment throughout the whole region. So that is what, obviously, I would urge you to do.

Now, within the current Act, we would look at ways that we could provide support and other mechanisms, but the current Act is fairly prescriptive. It doesn't give us a lot of flexibility.

Mr. STRICKLAND. The reason I ask that question is that I do represent a region which stretches for 330 miles along the eastern and southern border of Ohio, along the Ohio River, with Pennsylvania, West Virginia and Kentucky being border States to my district.

Many seem to believe—and maybe my friend Mr. Allen is one of them, and he is a great guy and a good friend—but many seem to believe that my area, especially I think my area, and areas like the area that I represent, are a major source of the problem. And, of course, most of the large power plants in my district are located in small rural communities where there is great economic hardship. And so I feel internal conflict because I want to be concerned about and sensitive to the needs that someone like Tom Allen must deal with in their area, but I am also concerned about the problems that the coalminers and steelworkers and others may face in a district like mine.

I look at your testimony here, and you use this sentence. You say, "Timely identification and control of sources causing pollution transport are necessary if States and EPA are to minimize this problem."

I guess I would just ask, how certainly can we identify the sources of the transport problem? I mean, is it possible, for example, to say that pollution from the Ohio Valley is, in fact, affecting Portland, Oregon, or Boston, or some other city? How precisely are we able to track not only the source of the pollution, but the transportation aspect of the problem as well?

Mr. HOLMSTEAD. We actually have very sophisticated modeling so that we can actually trace—for instance, from Portland, Maine, or from Boston, or from a city in the Midwest, and using that modeling data we can trace it back to its source. And we also have—



I actually saw a presentation just a couple of weeks ago from some NASA satellites the track, and you can see visually where this comes from. I can't tell you that we know 100 percent of the sources, but at least for the major pollutants, for SO<sub>2</sub>, which is sulfur dioxide, and for nitrogen oxides, we know a great deal now, and are able to identify those sources, and that is I think collectively what we are all trying to do, is figure out an effective and fair way to deal with those, while at the same time addressing the concerns that you have about the economic impact and the impact on jobs.

Mr. STRICKLAND. Thank you, sir. Mr. Chairman, I yield back my time.

Mr. BARTON. The gentlelady from Missouri is recognized for 5 minutes.

Ms. MCCARTHY. Thank you, Mr. Chairman. Thank you very much for being here and sharing your wisdom with us on this important issue.

I wanted to visit with you a little bit about the St. Louis situation. I am curious, and as you know it sought successfully to get the bump-up extension. The Missouri delegation of congresspeople worked closely together on that.

But I am wondering with the invalidation by the 7th Circuit Court of Appeals and St. Louis now has demonstrated it can attain the 1-hour standard, and the question is whether or not the extension is needed, but if the bump-up is codified so this 1-hour standard becomes a substitute for actually encouraging conservation and responsible air quality planning, I would like you to elaborate on that because the St. Louis experience may have very well altered the structure of the Act. I think that is what this hearing is all about.

We want to encourage conservative and responsible air quality planning. We also want to be very sensitive to situations such as St. Louis had. But can you elaborate on what progress St. Louis is making toward not meeting that 1-hour standard, or is that going to become part of the norm of activity for the future, for communities like St. Louis?

Mr. HOLMSTEAD. St. Louis has been very aggressive in addressing local sources of air pollution, even though they were the recipient of the attainment date extension policy. And I think that is an example of how we would expect it to work and, in fact, how it would be required to work.

I think there is a misimpression that somehow, if you get the attainment date extension, then you are off the hook, and you are sitting there not doing anything. In fact, that is just not the case. A city in that situation still is required to meet all of their specific requirements under the Clean Air Act.

In addition, they are required to identify all other reasonably available control measures that could bring them into attainment any sooner. And we think that that experience is really the way that it should work. We shouldn't unjustly penalize a city that is affected by long-range transport, but we do need to ensure that they continue to take all of the steps that they need to take locally.

And I congratulate St. Louis because I think—again, this is one of those strange situations where we were waiting to see what the data said, and I think we were all relieved to find out that they

had met the standard for attainment. And so they have met the 1-hour standard. If it had one or two more exceedances, then we would have been required under the court order to bump them up to a higher classification.

So even though they were basically clean and almost there, we were on pins and needles thinking that we were going to have to bump them up and basically tell the world they were a severe non-attainment area, which isn't really a reflection of the kind of progress they had made.

Ms. MCCARTHY. And you would use that experience as a model as we go forward with legislation, so that other communities would be expected to uphold to that as they seek that 1-hour status or other kinds of relief under the existing law.

Mr. HOLMSTEAD. Yes, that is correct. We would, I think, codify these requirements. This policy strikes, I think, the right balance between requiring effective local controls and also effective upwind controls at the same time.

Ms. MCCARTHY. Mr. Chairman, just one more reason, Missouri is called the "Show Me" State. Thank you very much.

Mr. BARTON. Thank you.

Mr. WHITFIELD. Mr. Chairman.

Mr. BARTON. Mr. Whitfield.

Mr. WHITFIELD. I would ask unanimous consent to ask one more question.

Mr. BARTON. Without objection, so ordered.

Mr. WHITFIELD. Mr. Holmstead, during your answer responding to questions from Mr. Waxman, you referred to the non-road diesel rule, proposed non-road diesel rule. It is my understand—I want you to tell me if I am right or wrong—that even on the diesel engines being operated on the highways today, pursuant to that rule, that these engines are not in compliance with existing environmental laws, and that there is a fine imposed on every diesel engine sold that is used on the highway. Is that correct, or is that not correct?

Mr. HOLMSTEAD. No, that is not correct. I believe that all of the companies, except for maybe one, are selling engines now that meet the Clean Air standard, and I think even that one company has just announced that it has—or it is about to certify an engine that meets that standard. There were one or two companies that were paying penalties, but I believe that period has either ended or is coming to an end. So the vast majority are meeting the requirements.

Mr. WHITFIELD. Thank you, Mr. Chairman.

Mr. BARTON. Seeing no other members that haven't had an opportunity to ask questions, we are going to excuse you. But we are going to have a series of written questions that are somewhat technical in nature, that we are going to present to you, and there is a high degree of probability that the minority is going to have some additional written questions, and so we would ask that you and your staff be responsive very quickly to that.

Mr. HOLMSTEAD. We will respond as quickly as we can.

Mr. BARTON. We appreciate your attendance, and we are going to excuse you and ask our second panel to come forward at this point in time.

On our next panel we have The Honorable Bobby Simpson, Mayor-President of Baton Rouge/Parish of East Baton Rouge, Louisiana; we have The Honorable Carl Thibodeaux, who is a County Judge of Orange County, Texas; we have The Honorable Carl Griffith, who is a County Judge of Jefferson County, Texas; we have The Honorable Ralph Marquez, who is the Commissioner of the Texas Natural Resource Conservation Commission located in Austin, Texas; we have Dr. Ramon Alvarez, who is a scientist with the Environmental Defense Fund in Austin, Texas; we have Mr. Ronald Methier, who is the Chief of the Georgia Department of Natural Resources, Environmental Protection Division in Atlanta, Georgia; Mr. David Farren, who is an attorney for the Southern Environmental Law Center in Chapel Hill, North Carolina; Mr. David Baron, who is the Staff Attorney with Earthjustice here in Washington, and Mr. Samuel Wolfe, who is an Assistant Commissioner for Environmental Regulation in the New Jersey Department of Environmental Protection. And we have a distinguished Congressman also here, who is going to make some introductions as soon as everyone gets seated.

We apologize that our table is not long enough. We don't normally have this many panelists on one panel. We are going to welcome you gentlemen, and we are going to recognize the Honorable Richard Baker, the Congressman from Louisiana and a subcommittee chairman of the Financial Services Committee, who has been doing good work with Fannie Mae and Freddie Mac, to introduce some of his friends from Louisiana.

Mr. BAKER. Thank you, Mr. Chairman, for the courtesy of you have extended. I will be very brief, given the number of panelists you have on this segment of your hearing this morning.

We in Baton Rouge in south Louisiana are in a very unique position. We have a lot of green stuff. We have a lot of sunlight. And there will be days in the coming weeks of August when, if you took all the people, all the industry, all the cars, took all existence of any society out of south Louisiana, we could not meet the current standards for EPA ozone attainment.

We have too many trees, and too many hours of sunlight. In our history, we had an ozone belt east of the city—and I can bring up news articles where we used to advertise that as being a place for people to come for what ails you. Enjoy our ozone layer. We find that extraordinarily unique.

When you lay on top of that the fact that when we try to do things to improve our circumstance by enhancing traffic capacity, we are told by the EPA via the Department of Transportation, "We are not going to let you do that because you already have a non-attainment problem, and we don't want to do anything that would increase capacity," so the result is we sit on interstates bumper-to-bumper for longer hours so their tailpipe emissions help contribute to the already pre-existing ozone problem.

In addition, prevailing winds bring industrial discharge from the surrounding communities on top of the urban center. The end result is our Mayor, Mayor Bobby Simpson, has an almost impossible task of trying to enhance air quality given the current regulatory constraints, and to do those things which are logical. Mayor Simpson has been a tireless fighter in this battle, trying to bring com-

mon sense to resolution, and I am very pleased that the Mayor has been able to find time in his schedule to be here this morning, and I do hope, Mr. Chairman, that members of the committee will understand the severity of this problem and bring rational thought to the resolution. And it is a great honor and personal privilege for me to introduce the Mayor, who is not only a great mayor but a great friend of mine for many years. Thank you, Mr. Chairman.

Mr. BARTON. Thank you, Congressman Baker. Congressman Chris John, who is a member of this subcommittee, was in the audience earlier, and I know he would have wanted to introduce you, too, and Chairman Tauzin wanted to make sure that you are welcome. So you must be a very friendly and powerful man down in Baton Rouge because a lot of Louisiana congressmen want to be on your right side. We are glad to have you, and we are going to put your entire statement in the record, and ask you to summarize it in 5 minutes. So, welcome to the subcommittee.

**STATEMENTS OF HON. BOBBY SIMPSON, MAYOR-PRESIDENT OF BATON ROUGE/PARISH OF EAST BATON ROUGE, LOUISIANA; HON. CARL R. GRIFFITH, JR., COUNTY JUDGE, JEFFERSON COUNTY, TEXAS; HON. CARL K. THIBODEAUX, COUNTY JUDGE, ORANGE COUNTY, TEXAS; HON. R.B. RALPH MARQUEZ, COMMISSIONER, TEXAS NATURAL RESOURCE CONSERVATION COMMISSION; RAMON ALVAREZ, SCIENTIST, ENVIRONMENTAL DEFENSE FUND; RONALD METHIER, CHIEF, GEORGIA DEPARTMENT OF NATURAL RESOURCES, ENVIRONMENTAL PROTECTION DIVISION, AIR PROTECTION BRANCH; DAVID FARREN, ATTORNEY, SOUTHERN ENVIRONMENTAL LAW CENTER; DAVID S. BARON, STAFF ATTORNEY, EARTHJUSTICE; AND SAMUEL A. WOLFE, ASSISTANT COMMISSIONER FOR ENVIRONMENTAL REGULATION, NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION**

Mr. SIMPSON. Thank you, Mr. Chairman and members of the committee for the opportunity to speak with you today about the ozone nonattainment situation of the Baton Rouge area, and the consequences to our community of EPA's recent setbacks in courts concerning their transport policy and authority to extend attainment dates.

The Baton Rouge area is home to Louisiana State Government, a number of major petrochemical industries, two major universities, a major marine port, and a commercial jet airport. Our five-parish community consists of a population of over 600,000. Threading through this community is the Mississippi River, with its heavy marine traffic, a concentration of railway assets servicing our community, and a very busy east-west interstate highway.

Additionally, we have learned that at times we are affected by transport of air pollutions into our area from upwind sources. Thus, you can understand the challenges we face and our pride at being in attainment for all established National Ambient Air Quality Standards except for ozone, and for the progress we have made toward attainment of the ozone standard.

As a result of high ozone levels recorded in the 1980's, the Baton Rouge area was originally classified as a serious area under the provisions of the Clean Air Act Amendments of 1990. Since then,

the area has progressed significantly in mitigating its ozone problem.

Our ozone design value in 1999 was 126 ppb, only 2 ppb above the attainment criteria. We have only had one or two exceedance days in three of the last 4 years. If we were classified today according to the classification system of the Clean Air Act of 1990, we would be classified as marginal. Halfway through this summer's ozone season we find ourselves still with an opportunity to achieve attainment of the 1-hour ozone standard, as well as the more stringent 8-hour ozone standard.

Our area has met or exceeded planning requirements and actions required of EPA for nonattainment areas. However, we did not achieve attainment of the 1-hour ozone standard in 1999, as required by the Clean Air Act. By operation of the law under the Act, we were then to be bumped-up from our serious classification to that of severe.

In the Spring of 2000, the area availed itself of the opportunity of an extended attainment date under EPA's 1998 guidance on extension of attainment dates for downwind transport areas. In December of 2001, the Louisiana DEQ submitted a completed transport SIP package to EPA Region VI. This package included a demonstration that the area was affected by transport from the Houston area in southeast Texas, as well as the revised SIP, and attainment plan showing the area would attain the 1-hour ozone standard by November 2005. EPA approved all elements of the ozone attainment plan and the transport demonstration in October of 2002, and extended the attainment date for the Baton Rouge area to November 15, 2005.

It is important to note that the study conducted for the transport demonstration and approved by EPA concluded that transport of precursor emissions from southeast Texas contributes to daily maximum ozone concentrations in the Baton Rouge area. The contribution was quantified as ranging from 2 to 6 ppb, and under certain conditions as much as 10 ppb. Meteorological analysis conducted within the transport study indicated the potential for transport exists on approximately 10 to 30 percent of the Baton Rouge exceedance days. In their report, the researchers concluded that but for transport of ozone precursors from Houston, Baton Rouge would have attained the 1-hour standard in 1999.

With the Federal Court's ruling earlier this year that EPA lacked authority under the Clean Air Act to extend attainment dates, most of the planning and work that had been done for the Baton Rouge area under EPA's transport pollution became moot. As a result of the Court's ruling, EPA has now published a formal notice of failure to attain for the Baton Rouge area, and withdrawn the attainment date extension. Subsequently, the area has been reclassified or bumped-up from serious to a severe classification. With reclassification to severe, the Baton Rouge area will be tagged with a stigma of having a severe air quality problem, although monitored results show we have, at worse, a marginal problem. It is difficult to quantify this impact because it is manifest primarily in opportunities lost, many of which we may never know of.

It will become more difficult to recruit new business and employees to the area because of the perception of severe air quality prob-

lems. Even the citizens within our own community may be unnecessarily concerned about the health implications for their families, even though the air we breathe has considerably improved over the past decade.

With reclassification, the Baton Rouge area will also be confronted with a number of new requirements of the severe classification. These include reformulated gasoline, enforceable transportation control measures, redefinition of major source from 50 to 25 tons per year, increased offset requirements from 1.2-1.3 to 1, and Section 185 penalties to be imposed on major sources if the area fails to attain by the 2005 attainment date.

Local experts tell us that reformulated gasoline will cost consumers in the five-parish area somewhere between \$42 and \$72 million per year, and produce negligible ozone reduction benefits. The redefinition of major source down to 25 will affect about 40 to 50 previously unregulated businesses in our area. They will become subject to Title V permit applications.

Mr. BARTON. Mayor, could you summarize, you are about a minute over.

Mr. SIMPSON. Yes, sir. If the Baton Rouge area does not attain by November 15, DEQ must impose emission fees of \$5,000 on these businesses. Thus, I think you can understand the outrage we feel from the reclassification of area to severe.

Given these circumstances, I respectfully request that strong consideration be given to amending the Clean Air Act to give EPA the authority to extend attainment dates as was initially intended under the transport policy.

Further, I request that any amendment be made retroactive to accommodate areas such as Baton Rouge that already have been or soon will be bumped-up as a result of our recent court decisions.

Thank you once again for this opportunity to speak with you today about the Baton Rouge ozone nonattainment situation. Thank you.

[The prepared statement of Hon. Bobby Simpson follows:]

PREPARED STATEMENT OF BOBBY SIMPSON, MAYOR-PRESIDENT, CITY OF BATON  
ROUGE/PARISH OF EAST BATON ROUGE, LOUISIANA

1. INTRODUCTION

Thank you Mr. Chairman and Members of the Committee for the opportunity to speak with you today about the reclassification ("bump-up") provisions of Title I of the Clean Air Act and the consequences of their application to the Baton Rouge area. I have closely followed and been involved with the Baton Rouge ozone nonattainment issue for over a decade—first as a member of the Transportation Policy Committee of the Capital Region Planning Commission and, more recently, as Mayor-President of the City of Baton Rouge and East Baton Rouge Parish. I have worked closely with the Presidents of the other four parishes of the Baton Rouge Ozone Nonattainment Area on this issue. We all understand the importance of attainment of the National Ambient Air Quality Standards (NAAQS) for the health of our citizens and the vitality of our local economy. We have watched with pride the determined effort our community has made in improving our air quality and the progress we've made toward attainment of the ozone standard.

The Baton Rouge area is home to Louisiana state government, a number of major petrochemical industries, two major universities, a major marine port, and a commercial jet airport. Our 5-parish community consists of a population of over 600,000. Threading through our community is the Mississippi River with its heavy marine traffic, a concentration of railway assets servicing our community, and a very busy east-west interstate highway. Additionally, we've learned that at times we are affected by transport of air pollutants into our area from upwind sources. Thus, you

can understand the challenges we've faced and our pride at being in attainment for all established NAAQS except for ozone, and for the progress we've made toward attainment of the ozone standard.

Our ozone design value in 1999 was 126 ppb, only two (2) parts per billion above the attainment criterion. We've had only one or two exceedance days in three of the last four years. If we were reclassified today according to the classification system of the Clean Air Act Amendments of 1990, we would be classified as "marginal". Halfway through this summer's ozone season we find ourselves still with an opportunity to achieve attainment of the 1-hour ozone standard, as well as the more stringent 8-hour ozone standard.

Thus, you can understand the outrage we feel for the reclassification of our area to "severe". When we should be celebrating our progress and focusing on the final distance to attainment, it appears we are being punished with the "severe" classification stigma and distracted with the additional onerous and inappropriate requirements the classification brings. The reclassification to "severe" and accompanying requirements will bring us enormous cost and inconvenience, but will not measurably improve our air quality; nor will it advance the date for attainment of the ozone standard.

While I've been close to the Baton Rouge ozone nonattainment situation for a number of years, I must still rely on our trusted local air quality experts for information concerning the technical aspects of the ozone issue. These experts, both in the private sector and with the Louisiana Department of Environmental Quality (DEQ), have assisted with development of the information I am providing in this statement.

## 2. BATON ROUGE AREA OZONE PROGRESS

As a result of high ozone levels recorded in the late 1980s, the Baton Rouge area was originally classified as a "serious" area under the provisions of the Clean Air Act Amendments of 1990. Since then, the area has progressed significantly in mitigating its ozone problem. For example:

- The area's ozone season has declined from 12 months, where we might have an exceedance of the standard at any time during the year, to only the warmer summer months of May through September.
- Annual maximum ozone values have declined considerably.
- Numbers of days of exceedances experienced each year have declined from around 20 to only 1 or 2.
- Duration and intensity of episodes of elevated ozone have declined. Number of hours of exceedances in ozone episodes have declined from 4 or more to only 1 or 2.
- During the past four years, we have been, at times, 2 ppb or one exceedance day away from achieving attainment.
- At the end of 2002, our design value for the 8-hour ozone standard was 86 ppb, only two ppb away from attainment. Under EPA's proposed implementation plan, we would be classified as "marginal" under the more stringent 8-hour standard.
- At halfway through this summer's ozone season, we are still on track for possible attainment of both the 1-hour and 8-hour ozone standards.

## 3. FAILURE TO ATTAIN

Even before passage of the Clean Air Act Amendments of 1990, a Joint DEQ-Industry Ozone Technical Task Force (OTF) was established to work on the Baton Rouge area ozone problem. Over three million dollars was invested in monitoring, modeling, and research. Over the course of the early 1990's DEQ worked and complied with a plethora of EPA rulemaking and guidance flowing from the CAAA of 1990. Following EPA rules and guidance and using EPA's preferred scientific tools, DEQ and the OTF put together a comprehensive plan State Implementation Plan (SIP) to bring the Baton Rouge area into attainment for the 1-hour ozone standard by November 1999. This plan and all its supporting elements were submitted to EPA in August 1998. All the scientific tools employed during this process led very clearly to the conclusion that VOC emissions would have to be reduced to lower ozone levels and achieve attainment. The tools also showed a disbenefit (or ozone increase) if nitrogen oxides (NO<sub>x</sub>) reductions were made.

In its July 1999 federal register notice of formal approval of DEQ attainment SIP and supporting elements for the Baton Rouge area, EPA writes that it has determined that the State "adequately demonstrated the modeled control strategy would provide for attainment of the ozone NAAQS by the statutory attainment date". Further, they write that "Through photochemical grid modeling, the State has dem-

onstrated to the EPA's satisfaction that the VOC reductions in the 15% and Post-1996 plans (34.8 and 21.4 tons per day, respectively) are sufficient to demonstrate attainment of the ozone NAAQS by the statutory deadline."

The Baton Rouge area not only achieved the total 56.2 tons per day specified in the attainment plan, it achieved considerably greater reductions than called for in the plan. The total man-made VOC inventory in the five-parish Baton Rouge Ozone Nonattainment area in 1990 was 234 tons per day. By 1999, the area had reduced emissions to 143 tons per day—a decrease of over 91 tons per day. And yet we failed to attain.

Now, we find in the latest round of attainment planning using the latest scientific tools and guidance that we need a substantial reduction of NO<sub>x</sub> emissions (around 30%) to achieve attainment. Also employing these latest tools we find that if we reduced VOCs an additional 30% we would only get about a 1 ppb decline in ozone levels. In essence, we can't, and quite possibly could never, get to attainment with a VOC control strategy alone. We were set up to fail by EPA's imperfect understanding of the dynamics of ozone control strategies and consequent flawed guidance. Newer, scientifically superior modeling tools have now replaced the ones we employed.

The DEQ and the Baton Rouge community did everything they were directed to do and more. Yet, we failed to attain and are being reclassified to "severe" by operation of law. This is not a failure of the Baton Rouge community; this is the result of the application of imperfect planning tools and flawed guidance. But, it is the Baton Rouge community that will suffer the consequences of this failure.

#### 4. EXTENDED ATTAINMENT DEADLINE UNDER EPA'S TRANSPORT POLICY

In a May 10, 2000 letter from Governor Mike Foster to EPA Region 6 Administrator, Gregg Cooke, a request was made for an extension of the attainment date for the Baton Rouge area based on transported air pollution. EPA replied that in order for EPA to approve an extension of the attainment date based on transport, the State would have to:

1. Submit a formal demonstration that the Baton Rouge area's air quality is, in fact, affected by transport from an upwind area in another state that significantly contributes to Baton Rouge's continued nonattainment;
2. Submit an approvable attainment demonstration SIP showing the Baton Rouge area will attain the 1-hour ozone standard as "expeditiously as practicable", but no later than the statutory attainment date of the upwind nonattainment area;
3. Submit in the attainment demonstration SIP, as adopted measures, all additional local control measures needed for expeditious attainment;
4. Demonstrate that all applicable local measures required under the Baton Rouge's "serious" classification have been satisfied; and
5. Provide that all newly adopted control measures will be implemented as "expeditiously as practicable".

The Baton Rouge Ozone Task Force (OTF2) was formed in the late summer of 2000 to provide the Louisiana Department of Environmental Quality (DEQ) with assistance in complying with the requirements set forth by EPA in its 1998 Extension Policy guidance. Specifically, its goals were: (1) to provide technical and financial resources to support the development of sound, cost-effective emission control strategies to bring the Baton Rouge area into attainment for the ozone standard; (2) to engage the various stakeholders in the research, analysis, and decision-making processes for the Attainment Demonstration and SIP revision; and (3) to promote communication between DEQ, the regulated community, and the public. A steering committee (SC) provided oversight and direction to the OTF2 efforts.

The new ozone attainment demonstration was prepared through an open and collaborative process involving DEQ, EPA, and the OTF2. The Ozone Task Force was comprised of representatives of major stakeholders within the Baton Rouge community including local governments, planning agencies, Chamber of Commerce, commercial and industrial trade organizations, electric utilities, and environmental organizations. EPA was intimately involved throughout the entire process of SIP development, with staffers regularly attending the OTF2 Steering Committee meetings. There were also the regular SIP conference calls along with several meetings of DEQ and EPA staff to discuss SIP issues. Through the OTF2 SIP development process, the new attainment plan for Baton Rouge was developed using:

- A very open process with good participation
- A thorough examination of available control measures
- Considerable effort to assure good emissions inventories
- Sound modeling protocol



- Heavy modeling effort to test control strategies and model sensitivities and performance
- Judicious selection of control strategies, and
- A robust attainment demonstration

The concerted efforts of DEQ, the OTF2, and EPA produced a reasonable and scientifically sound plan that the Baton Rouge community felt would lead us to cleaner air and attainment of the ozone standard by 2005.

The requirement to demonstrate that the Baton Rouge area was affected by transported pollutants was met through research conducted by Science Applications International, Inc. (SAI), a nationally recognized meteorology and air quality research firm. SAI concluded from their research that “transport of ozone and precursor emissions from southeast Texas contributes to daily maximum ozone concentrations in the Baton Rouge area.” They quantified this contribution as ranging from 2 to 6 ppb, although under certain conditions the impacts could be as large as 10 ppb. Analysis of meteorological parameters for 5- and 10-year periods using a variety of techniques indicated the potential for transport exists on approximately 10 to 30 percent of the Baton Rouge exceedance days. In their report to DEQ, SAI concluded that given the design value of 126 (as in 1999) for Baton Rouge, “these results suggest that *but for* transport of ozone and precursor pollutants from Houston, Baton Rouge would have attained the 1-hour ozone standard in 1999.”

In an October 2, 2002 Federal Register notice, EPA approved the Baton Rouge Transport SIP and all its elements as well as the transport demonstration, and extended the attainment date for the Baton Rouge area to November 15, 2005.

Of course, as a result of litigation, EPA has conceded it did not have the authority under the Clean Air Act to extend attainment dates. This prompted EPA to request a remand of the attainment date extension for the Baton Rouge area, to publish a notice of the area’s failure to attain the standard, and to reclassify the area from “serious” to “severe”. The reclassification became effective on June 23, 2003.

#### 5. CONSEQUENCES OF THE “SEVERE” CLASSIFICATION ON THE BATON ROUGE AREA

With reclassification to “severe”, the Baton Rouge area will be tagged with a stigma of having a “severe” air quality problem, although monitored results show we have at worst a “marginal” problem. It is difficult to quantify this impact because it is manifest primarily in opportunities lost, many of which we may never know of. It will become more difficult to recruit new businesses and employees to the area because of the perception of severe air quality problems. Even the citizens within our own community may be unnecessarily concerned about the health implications for their families, even though the air we breathe now has considerably improved over the past decade.

With reclassification, the Baton Rouge area will also be confronted with a number of new requirements of the “severe” classification. These include: reformulated gasoline; enforceable transportation control measures; redefinition of major source from 50 to 25 tons per year (tpy); increased offset requirements from 1.2 to 1 to 1.3 to 1; and Section 185 penalty fees to be imposed on major sources if the area fails to attain by the 2005 attainment date.

#### *Reformulated Gasoline*

At 12 months following the effective date of reclassification (i.e. June, 2004), the five-parish Baton Rouge ozone nonattainment area becomes subject to year-round reformulated gasoline (RFG). Local fuel experts tell us that RFG will cost around an additional 10 to 15 cents per gallon. Using gasoline sales statistics for the 5-parish area it is estimated that RFG will cost Baton Rouge consumers an additional \$48 to \$72 million dollars per year. There will also be significant redistribution of sale of gasoline and convenience store items around the periphery of the nonattainment area.

Using the latest mobile emissions model, DEQ has estimated that RFG will result in a reduction in VOC emissions of a little under 2 tons per day. Although we are now employing a NO<sub>x</sub> control strategy, RFG provides negligible NO<sub>x</sub>-reduction benefits. Sensitivity analyses conducted during recent Urban Airshed Model suggests there would be no measurable ozone benefits from RFG. At \$24 to \$36 million per ton of VOC reduction and negligible ozone benefits, this presents an absurd cost-benefit ratio.

#### *Enforceable Transportation Control Measures*

The Clean Air Act requires “severe” areas to offset increases in emissions resulting from growth in vehicle miles traveled (VMT). Fortunately, an initial review by DEQ suggests that Baton Rouge may not have to implement mandatory transportation control measures to offset VMT growth.

### *Redefinition of Major Source*

The reclassification of the Baton Rouge area to “severe” will require the redefinition of major source from the present 50 tons per year (tpy) to 25 tpy. DEQ projects that this change will impact around 40 to 50 businesses in the 5-parish area. These previously unregulated businesses will become subject to having to submit Title V permit applications, monitoring and reporting of their emissions, and enforcement inspections by DEQ. This will represent a significant increase in the cost of business for these facilities, and may result in the closure of some. An initial analysis by DEQ suggests there will be little emissions reductions benefits that correlate with the requirement to submit Title V permit applications. There may be some later benefit associated with offset requirements if a business expands.

This addition of a new population of Title V permits is going to add significant new burdens to DEQ’s permit review and processing staffs.

### *Increased Offsets*

It is expected that the increased offset ratio will be required for all permits not deemed administratively complete prior to the effective date of the bump-up. The total fiscal impact of this requirement has not been estimated; however, because of the diminishing availability of offsets, this new requirement will undoubtedly affect the decisions on expansions and/or modifications to local industries.

### *Section 185 Penalty Fees*

If the Baton Rouge area does not achieve attainment by November 15, 2005, DEQ must impose emission fees of \$5,000 (1990 dollars adjusted for inflation—now around \$7,700) per ton of VOC and NO<sub>x</sub> emitted above 80% of an operating baseline from each major source. Using 2000 emissions data for the 5-parish area, it is estimated that the annual cost of the penalties to major sources will be about \$100 million. These annual penalty fees will continue until we achieve attainment.

The Baton Rouge Ozone Task Force looked at these “severe” measures during attainment planning and discarded them because they presented little benefit for the cost and inconvenience of implementation in the Baton Rouge area.

Reclassification of the Baton Rouge area will require reconstitution of DEQ’s SIP resources for analysis and planning related to accommodation of the new “severe” classification requirements. EPA has already specified that additional Urban Airshed Modeling will have to be done to reflect the new requirements. It could take anywhere from 6 to 12 additional months to complete analysis, modeling, and rule-making for the new “severe” SIP.

DEQ and the Baton Rouge Ozone Task Force working with EPA have developed and submitted a competent ozone attainment plan for the Baton Rouge area. Why jeopardize this work, impose the “severe” area requirements that are clearly inappropriate for the area, and delay the process that could already be improving air quality?

## 6. UNCERTAINTY

Discussions with EPA have revealed a large amount of uncertainty concerning requirements and timing of implementation of the new “severe” area requirements. Although other areas have been bumped-up in the past, Baton Rouge will apparently be the first into the chute following the reversal of EPA’s attainment date extension policy.

In EPA’s recently proposed implementation rules for the new 8-hour ozone standard it is proposed the 1-hour standard be revoked one year following attainment designations for the new standard (thus revocation in April, 2005). Should DEQ be required to work simultaneously on attainment planning for the 1-hour and the 8-hour ozone standards? Should DEQ be required to develop and submit the new “severe” SIP for the 1-hour standard when the standard might be revoked the following year?

The reconciliation of bump-up requirements for areas with previously extended attainment dates for the 1-hour ozone standard with the implementation of the new 8-hour ozone standard is going to be a regulatory nightmare for areas such as Baton Rouge.

## 7. CONCLUSION

In spite of a challenging emissions inventory and periodic influence of ozone and ozone precursors transported into the region, the Baton Rouge area has made good progress toward attainment of the 1-hour ozone standard. Through a collaborative process involving the major stakeholders within our community, a sound plan (transport SIP) has been developed to achieve attainment of the ozone standard by

November 15, 2005. The bump-up to a "severe" classification is expected to result in great cost and inconvenience to Baton Rouge area citizens, while providing negligible air quality benefits. Since the approved transport SIP had already planned for a November 2005 attainment date, the bump-up does nothing to shorten the time to attainment.

Given these circumstances I respectfully request that strong consideration be given to amending the Clean Air Act to give EPA the authority to extend attainment dates as was initially intended under the Transport Policy. Further, I request that any amendment be made retroactive to accommodate areas such as Baton Rouge that already have been, or soon will be, bumped-up as a result of the recent court decisions.

#### SUMMARY OF MAJOR POINTS

1. In spite of a challenging emissions inventory and periodic influence of ozone and ozone precursors transported into the region, the Baton Rouge area has made good progress toward attainment of the 1-hour ozone standard.

2. The Baton Rouge area came within 2 ppb of achieving attainment in 1999, and last year came within only one exceedance day of attainment. Nonetheless, it failed to achieve attainment by its attainment date prescribed in the Clean Air Act.

3. In the spring of 2000, the area availed itself to the opportunity of an extended attainment date under EPA's 1998 "Guidance on Extension of Attainment Dates for Downwind Transport Areas".

4. In December, 2001 the Louisiana DEQ submitted a completed Transport SIP package to EPA Region 6. This package included a demonstration that the area was affected by transport from the Houston area in southeast Texas as well as a revised SIP and attainment plan showing the area would attain the 1-hour ozone standard by November 2005.

5. EPA approved all elements of the ozone attainment plan and the transport demonstration in October, 2002.

6. As a result of the federal courts' reversal of EPA's authority to grant attainment date extensions, the Baton Rouge area was reclassified from a "serious" to a "severe" classification effective June 23, 2003. Since the area's approved Transport SIP had already specified attainment by November 2005, there was no change in attainment date for the area as a result of the reclassification.

7. The new "severe" area requirements imposed with the reclassification are ill suited for the Baton Rouge area. They are expected to produce negligible ozone reduction benefits, while inflicting enormous cost and economic development impacts on the area.

8. Considerable thought and research went into the development of EPA's transport policy. It was designed to accommodate situations, such as in Baton Rouge, where attainment efforts are impeded by influences of pollutants transported from upwind sources.

9. The Clean Air Act should be amended to give EPA the authority to implement its transport policy and extend attainment dates. Any such amendment of the Clean Air Act should be made retroactive to provide relief to areas such as Baton Rouge that had been granted approved attainment date extensions under the EPA transport policy and that have now been reclassified.

Mr. BARTON. Thank you, Mr. Mayor.

We now want to recognize The Honorable Carl Griffith, Jr., who is a County Judge in Jefferson County. His congressman, Congressman Nick Lampson, was here before the hearing to introduce him and the other Texans from that region to me. We also want to introduce State Representative Joe Disotel, who is with us in the audience. We are glad to have you up from Austin, appreciate your attendance at this hearing.

Mr. Griffith, your statement is in the record in its entirety, and we would ask that you summarize it in 5 minutes.

#### STATEMENT OF HON. CARL R. GRIFFITH, JR.

Mr. GRIFFITH. Mr. Chairman, I have listened with interest. This is the first time I have ever appeared before Congress, although I have been many times to Austin to appear, and it seems that a lot

of the issues are all the point of transport, they are about blue skies and upset emissions, and not about transport.

I do run as a Democrat, and it seems also to be a partisan issue, and this is not a partisan issue. This is about common sense.

Mr. BARTON. We are very bipartisan here, and we have lots of Democratic friends and my Democrats have lots of Republican friends, so you are among friends.

Mr. GRIFFITH. I hear that, but it seems a dividing line. But the bottom line is we are about 385,000 people, and we are to the east of Houston, Texas, about 70 miles.

Since 1990, the Clean Air Act was amended or enacted, and if you look at what Jefferson County in southeastern Texas, Orange County, Hardin County has done, you see as far as emission counts, we were showing 20 emission bumps every year in the early 1990's. We have seen them drop down to two. For the last 3½ years, there has been seven exceedances total in 3½ years. Of those 7, 6 of those were backtracked to transport from Houston. So, only one, that would put us marginal nonattainment. But under the current rules, we are going to be bumped-up to the same as Houston. It makes no sense. And it makes no sense to my colleague here, the Republican from Louisiana.

Marginal nonattainment, if it wasn't for these rules. And this needs to be taken back to common sense. Even as a cursory look at the other testimony that is going to come on the opposite side, we are not talking about whether transport is an impact or not, it is talking about whether they don't want to change the rules to allow for transport.

We are talking about putting small businesses out of business. I can't tell you, and I know Representative Disotel could tell you the area he represents, double-digit unemployment. And, yet, we continue to clean up the air, and will continue to do that, and we are not opposed to that, we actually embrace it, but use common sense to this approach.

There is only one monitor that continues to show exceedances in southeast Texas, and that monitor is in the southern part of the county, in Sabine Pass, Texas, way south of all the other monitors. All the industry is north of that monitor. Our prevailing winds are out of the southwest, and between southeast and southwest we continue to have those exceedances without having response. As you know, in the summertime our winds continue to come off the Gulf of Mexico. None of those emissions hardly are coming from industry. And they are spending hundreds of millions of dollars to clean up the air.

I am not going by this written testimony because it is here for you, and I am just trying to hit the main points. Moreover, the mandated new planning and control requirements imposed would result in beginning to reclassify under the 1-hour standard would carry forward to the 8-hour standard. According to EPA's recent 8-hour implementation proposal, despite Beaumont-Port Arthur's having an 8-hour ozone level that would classify as marginal nonattainment under the 8-hour standard, the area still be required to implement the more stringent planning and control strategies to serious or severe nonattainment because of the reclassification under the 1-hour standard.

The solution is—and I will wrap it up—the bottom line of the solution to this is to codify what the Clinton Administration did and said transport is an issue and without transport as an issue in our community, we would be in attainment, marginal nonattainment. We have got 45 percent more reductions to do between 2003 and 2005—45 percent more reductions in NO<sub>x</sub> emissions. And considering we have gone from 624 tons of emissions down to 371 today in the last 7 years, we are working diligently to try to clean up the air in southeast Texas.

[The prepared statement of Hon. Carl Griffith, Jr. follows:]

PREPARED STATEMENT OF HON. CARL R. GRIFFITH, JR., COUNTY JUDGE, BEAUMONT, TEXAS

#### INTRODUCTION

The Beaumont-Port Arthur-Orange (BPA) area of southeast Texas is a sparsely populated, mostly rural, area of less than 400,000 residents; although, a significant fraction of its nonagricultural economy is driven by oil refining and chemical manufacturing.

As a moderate ozone nonattainment area, BPA had a Clean Air Act deadline of November 1996 for attaining the 1-hour ozone standard.

Situated about 70 miles west of the BPA area is the Houston-Galveston severe ozone nonattainment area, which has a statutory attainment deadline of November 2007.

The amount of local ozone precursor emissions and the complexity of the ozone nonattainment situation in BPA are dwarfed by comparison with Houston-Galveston, which is the fourth largest city in the U.S. and 2nd to Los Angeles in terms of number of days per year when the 1-hour ozone standard is exceeded.

In 1999, three years after the statutory attainment deadline for BPA, the Texas Commission on Environmental Quality (TCEQ) demonstrated that emissions from Houston-Galveston, transported by eastward moving wind currents, were interfering with the BPA area's ability to achieve attainment.

#### CURRENT AIR QUALITY STATUS

Despite transported air pollution, the BPA area has made substantial progress toward attaining the ozone standards.

Due to effective planning and air quality management by the TCEQ; public awareness and participation through the South East Texas Regional Planning Commission; and costly emissions reductions programs implemented by local industry, the BPA region has seen dramatic improvements in its air quality since the passage of the 1990 Clean Air Act Amendments.

The number of days per year when ozone levels exceeded the level of the 1-hour standard at one or more of the area's monitoring sites has plummeted from about 20 in 1990 to an average of just 2 per year over the last three years—a decrease of 90%.

Only one of the region's six ozone monitors that violated the ozone standard in the early 1990's is still marginally nonattainment today.

That monitor, located at Sabine Pass near the Gulf of Mexico, in extreme southeastern Jefferson County, is the one most often impacted by air currents passing over the monitor from the Houston-Galveston area.

If not for this one monitor and the transported air pollution that it intercepts, the air quality improvements in BPA would be viewed as one of the major successes of the Clean Air Act.

Of the last seven days when ozone levels exceeded the level of the 1-hour ozone standard at Sabine Pass, six had wind conditions favorable for transporting polluted air from Houston-Galveston.

#### STATUS OF AIR QUALITY PLANNING AND CONTROLS

In partnership with the TCEQ, the BPA region has faithfully met or exceeded all the air quality planning and control requirements set forth by the 1990 Clean Air Act Amendments for an area of its nonattainment classification, including adoption of a plan, based on computer modeling, that provides for all the local emission reductions needed for attainment.

The attainment plan, based on the guidance EPA published in 1998 for areas affected by downwind transport, calls for an additional *45% reduction in local industry NO<sub>x</sub> emissions* to be made between 2003 and 2005 and also aligned the attainment date for the BPA area with that of Houston-Galveston to account for the longer period provided for by the Clean Air Act for Houston-Galveston to reduce its emissions.

The new NO<sub>x</sub> emission limits for industrial sources in the BPA area are as stringent as or more than the ones being implemented in any other area in the country having comparable air quality. No one should question whether industry in the BPA area is doing its fair share to clean up its contribution to the local ozone problem.

#### IMPACT OF RECENT COURT ACTION

The court's reversal of the attainment date extension portion of the BPA attainment plan means that EPA must reclassify the area to a higher nonattainment classification, either serious or severe, despite the area's air quality having actually improved markedly since the time when it was first classified as moderate nonattainment and regardless of whether the area would already be attaining the ozone standard but for emissions from Houston-Galveston.

Note that while reversing the attainment date extension, the court never questioned Texas' and EPA's technical analyses showing that upwind emissions were interfering with the BPA area's ability to attain the ozone standard or whether the local industry in BPA was doing its share to reduce its contribution to the local air pollution problem; neither did the court's petitioners.

Nevertheless, the court's action will impose, as a matter of law, new air quality planning and control requirements designed to address the more intractable air quality problems of serious and severe ozone nonattainment areas, regardless of whether such new local requirements would significantly improve air quality in BPA or help advance its attainment date, or whether the existing air quality plan calling for an additional 45% reduction in industrial source NO<sub>x</sub> emissions is already on track for attainment.

The mandated new requirements, which would mostly affect transportation and smaller businesses, will more than likely be ineffective, unnecessary, and are likely to erode public support for clean air.

In addition to mandating new costly and burdensome requirements, which may be ineffective and unnecessary, EPA has responded to the recent court action by proposing to advance the attainment deadline for BPA. The advanced deadline may be impossible to achieve, given the significant influence of upwind emissions on most high ozone days.

Moreover, the mandated new planning and control requirements imposed as result of being reclassified under the 1-hour standard would carry forward to the 8-hour standard. According to EPA's recent 8-hour implementation proposal, despite BPA having current 8-hour ozone levels that would classify it as *marginal* nonattainment under the 8-hour standard, the area will still be required to implement the more stringent planning and control requirements of a serious (or severe) area because of its reclassification under the one hour standard.

Of course, none of the aforementioned consequences of the recent court action addresses the principal cause of continued ozone nonattainment in the BPA area—transport of polluted air from an upwind area having a later attainment date.

In fact, the courts' actions leave EPA and the states with no remedy for addressing air pollution transport other requiring upwind areas having later attainment dates to accelerate implementation of emission controls, which would contradict Congress' intent in giving areas with more intractable air quality problems more time to achieve attainment.

#### THE SOLUTION

EPA, in adopting its 1998 policy on extending the attainment dates for areas affected by transport, sought to fill this gap in the statutory framework, which on the one hand provides longer attainment periods for areas with more intractable air quality problems, but on the other hand does not hold them responsible for air pollution problems downwind, and thus penalizes downwind areas for air pollution that is beyond its control.

In attempting to fill that gap, EPA sought to harmonize the attainment dates for upwind and downwind transport areas, without accelerating the deadlines for attainment provided for by the Act for the more complex or intractable air pollution problems.

EPA's 1998 policy provided a practical solution to the nonattainment problem in BPA and areas like it that are impacted by air pollution from an upwind area hav-

ing a later statutory attainment date; however, EPA's legal rationale for this common sense solution was voided by the courts; although the Seventh Circuit Court of Appeals in the St. Louis case recognized that the current statutory scheme may require downwind areas to implement expensive controls that may well not help achieve an earlier attainment deadline, but Congress would have to be petitioned to change the law to allow for better approaches to resolving such conflicts.

Congress can rectify the conflict in the Clean Air Act by codifying EPA's 1998 policy on attainment date extensions into law.

Congress should act swiftly in doing so in order for EPA to reaffirm its approval of Texas' attainment plan for BPA before finalizing its proposal to reclassify the area as serious or severe nonattainment.

Mr. BARTON. Thank you, Judge.

We now want to hear from another County Judge from your part of the country, the Honorable Carl Thibodeaux, who is a County Judge in Orange County, Texas. Your testimony is in the record, and we would ask that you summarize in 5 minutes, Judge.

#### STATEMENT OF HON. CARL K. THIBODEAUX

Mr. THIBODEAUX. Thank you, Mr. Chairman and committee members. In support of my colleague, Judge Griffith, here from Jefferson County, the key issue once again is the transport, but we need to look at the other areas as to what brought us to this point.

The Beaumont-Port Arthur-Orange area of southeast Texas is a great example of success in the Clean Air Act Amendments of 1990 but, unfortunately, is an example of some of its failures.

As my colleague brought up today, there has been most of our monitors that had been showing bad attainment areas have all been reduced down to one in the year 2002 and 2003. The lone remaining monitor is located in Sabine Pass, a town of about 1500 residents located in extreme southeastern Jefferson County, near the Gulf of Mexico. If it was not for this one ozone monitor, the Beaumont-Port Arthur-Orange area would be in attainment with the 1-hour ozone standard.

So, once again, we have proven that the transport issue has come into the picture. EPA's 1998 policy for extending attainment deadlines was a practical common-sense solution for States and local areas struggling to address transported air pollution in their ozone attainment plan.

The Houston-Galveston severe ozone nonattainment area, having an attainment deadline of 2007, is situated less than 70 miles to the west of the Beaumont-Port Arthur-Orange ozone monitors.

Houston, being the fourth largest city in the United States, it experiences more days per year having ozone levels in exceedance of the 1-hour standard than any area in the Nation, other than Los Angeles. The ozone attainment plan Texas recently developed for Houston is as tough or tougher in many respects to the ones being implemented in Los Angeles or anywhere else, and is being implemented as quickly as possible. Nevertheless, it will not be fully implemented until 2007.

So by kicking up the Beaumont-Port Arthur-Orange area to 2007, as my colleague said, does not make practical sense. We cannot ever reach the mark ahead of the Houston area because of the transportation issue. So now we are faced with—none of us in southeast Texas are against air quality, we are not against the health of our individual constituents. I am a registered pharmacist, which I have been in the health profession since I have gotten out

of college, so I have a definite concern with people's health, and I see it every day.

The key issue here that we need Congress to act to give the EPA the power to extend the nonattainment deadlines for these individual areas that have proven that it is the transport issue that has made it difficult for them to reach their attainment point. This is what I feel like the purpose of this hearing is, and it is very important.

The EPA, I think, has taken some very practical common sense measures to help remedy the problem, and Congress, I feel, should act to go ahead and give the EPA the power that the court said they did not have.

By putting heavier sanctions on these communities, which would have economic impact to the negative side, is not going to cause anyone or stimulate anyone to reach the attainment any sooner. We are planning to reach it by 2005, but putting sanctions on us will not change the plan that we have, and it would most certainly not expedite or speed up the process of getting the air clean, it would just be more detrimental to the economy and the small businesses that have to deal with it every day. And as my colleague said, in an area of high unemployment, we cannot afford anymore mandates or anymore rules and regulations that would prevent employment in our southeast Texas, but we will still continue to improve our air quality and monitor the situation, and do whatever we can in our power to remedy the situation and make the air our constituents breathe a lot better than it was in the past. Thank you, Mr. Chairman.

[The prepared statement of Hon. Carl K. Thibodeaux follows:]

PREPARED STATEMENT OF HON. CARL K. THIBODEAUX, COUNTY JUDGE, ORANGE,  
TEXAS

#### INTRODUCTION

The Beaumont-Port Arthur-Orange (BPA) area of southeast Texas is a fine example of one of the successes of the Clean Air Act Amendments of 1990 but also, unfortunately, a glaring example of one of its failures.

Since the passage of the 1990 amendments, the residents of southeast Texas have benefited from dramatic improvements in the region's air quality, which have come as the result of effective air quality planning and management by the Environmental Protection Agency (EPA) and the state of Texas; public participation through the South East Texas Regional Planning Commission; and expensive new emission controls installed by the region's industry.

*Southeast Texas demonstrates a success of the 1990 Clean Air Act Amendments* because, since the time of its passage, the number of days per year when ozone levels exceed the level of the 1-hour standard at one or more of the area's monitoring sites has dropped from about 20 to an average of just 2 per year, over the last three years—a decrease of 90%.

More importantly, perhaps, the number of monitors measuring violations of the ozone standard has dropped from 6 in the early 1990's to only 1 in 2002 and 2003, showing that the number of residents of southeast Texas potentially exposed to ozone levels in excess of the EPA standard has plummeted.

The lone remaining nonattainment monitor is located in Sabine Pass, a town of about 1500 residents located in extreme southeastern Jefferson County, near the Gulf of Mexico. If not for this one ozone monitor, the BPA area would be in attainment with the 1-hour ozone standard.

*Southeast Texas demonstrates a failure of the 1990 Clean Air Act Amendments* because the air currents on most of the high ozone days at Sabine Pass during the past several years were favorable for transporting polluted air from the Houston-Galveston severe ozone nonattainment area, which has a statutory attainment deadline of 2007, and the Act provided no means for accounting for the influence of this



transported air pollution, according to recent court decisions, on the ability of BPA to achieve attainment by its earlier statutory deadline.

#### EPA'S 1998 ATTAINMENT DATE EXTENSION POLICY

EPA's 1998 policy for extending attainment deadlines was a practical, common sense, solution for states and local areas struggling to address transported air pollution in their ozone attainment plans.

Southeast Texas was supportive of this policy when first announced by EPA in 1998, and still supports it today, despite the recent court actions.

No better example, than the BPA area exists, of a moderate ozone nonattainment area that is impacted by intrastate transport of air pollution from an upwind area having a more onerous air pollution problem and later statutory attainment deadline.

The Houston-Galveston severe ozone nonattainment area, having an attainment deadline of 2007, is situated less than 70 miles to the west of the BPA ozone monitors.

Houston is the 4th largest city in the U.S. and experiences more days per year having ozone levels in excess of the 1-hour standard than any area in the nation, other than Los Angeles. The ozone attainment plan Texas recently developed for Houston is as tough as or tougher, in many respects, to ones being implemented in Los Angeles, or anywhere else, and is being implemented as expeditiously as possible. Nevertheless, it will not be fully implemented until 2007, the deadline established by the 1990 amendments.

Computer modeling conducted by the Texas Commission on Environmental Quality (TCEQ) and research by other investigators shows that on days having wind conditions favorable for transporting polluted air from Houston-Galveston to BPA, ozone levels may climb to exceed the EPA standard, because of the Houston-Galveston emissions, thus, making it improbable for the BPA area to achieve attainment before Houston-Galveston's 2007 deadline for attainment.

EPA's 1998 attainment date extension policy addressed this problem by harmonizing the Houston-Galveston and BPA attainment deadlines, without accelerating the attainment schedule for Houston-Galveston, while also requiring that BPA address its contribution to the nonattainment problem as expeditiously as practicable.

Indeed, the plan Texas adopted for southeast Texas, while aligning the BPA attainment deadline with that of Houston, also required new emission limits on local industry NOx emissions that are as tough as or tougher than those of any other area in the U.S. having comparable air quality.

These new emission limits, to be phased in during 2003-2005, will reduce industry NOx emissions by an additional 45%. Clearly, local industry in BPA is doing its share to clean up the air.

#### IMPACT OF RECENT COURT ACTION

The court's reversal of the attainment date extension portion of the BPA attainment plan will have many adverse consequences but few apparent benefits to air quality.

Reclassifying the area to a higher nonattainment classification, either serious or severe, will impose, as a matter of law, new air quality planning and control requirements designed to address the more intractable air quality problems of serious and severe ozone nonattainment areas.

These mandated new requirements, which will mostly affect transportation and smaller businesses, will more than likely be ineffective, unnecessary, and are likely to erode public support for clean air.

Imposing these mandatory requirements while failing to account for the true cause of continued nonattainment in the BPA area may also erode public confidence in the EPA, TCEQ, and the regulatory process.

It is worthwhile to note that the Sabine Pass monitor, the lone monitor in southeast Texas continuing to show nonattainment, was installed and continues to be operated using funds voluntarily contributed to the South East Texas Regional Planning Commission by local industry.

The Sabine Pass monitor was purposely installed in a remote area of sparse population and no nearby emissions to measure the impacts of air pollution entering the region from upwind. This was done presuming that, through the collection of abundant data and application of good science, a better and more effective ozone attainment plan would be achieved for southeast Texas.

The recent court action prevents EPA, Texas, and the local area from addressing the true cause of continued noncompliance and provides industry with a strong disincentive for future proactive measures.

To add insult to injury, the mandated new planning and control requirements imposed as result of being reclassified under the 1-hour standard would carry forward to the 8-hour standard. According to EPA's recent 8-hour implementation proposal, despite the BPA area having current 8-hour ozone levels that would classify it as *marginal* nonattainment under the 8-hour standard, the area will have to continue to implement planning and control requirements as a serious (or severe) area because of the court mandated reclassification.

Of course, none of the aforementioned consequences of the recent court action addresses the principal cause of continued ozone nonattainment in the BPA area—transport of polluted air from an upwind area having a later attainment date.

In fact, the courts' actions leave EPA and the states with no remedy for addressing air pollution transport other requiring upwind areas having later attainment dates to accelerate implementation of emission controls, which may not be practicable and would contradict Congress' intent in giving areas with more intractable air quality problems more time to achieve attainment.

The Seventh Circuit Court of Appeals recognized the dilemma in its ruling on the St. Louis nonattainment reclassification case, and said that the mandatory control requirements of a bump-up may cost the area millions of dollars and still not help achieve the standard earlier, but, there was not a mechanism in the statute to allow for a common sense approach to such issues; only Congress could change the law to allow for that.

#### THE SOLUTION

EPA, in adopting its 1998 policy on extending the attainment dates for areas affected by transport, sought to fill this gap in the statutory framework, which on the one hand provides longer attainment periods for areas with more intractable air quality problems but on the other hand, does not hold them responsible for air pollution problems downwind, thus penalizing downwind areas for air pollution that is beyond its control.

In attempting to fill that gap, EPA sought to harmonize the attainment dates for upwind and downwind transport areas, without accelerating the deadlines for attainment provided for by the Act for the more complex or intractable air pollution problems.

EPA's 1998 policy provided a practical solution to the nonattainment problem in the BPA area, and areas like it, that are impacted by air pollution from an upwind area having a later statutory attainment date; however, EPA's legal rationale for this common sense solution was voided by the courts.

Congress can rectify, as suggested by the Seventh Circuit Court of Appeals, the conflict in the Clean Air Act by codifying EPA's 1998 policy on attainment date extensions into law.

Congress should act swiftly in doing so in order for EPA to reaffirm its approval of Texas' attainment plan for BPA before finalizing its proposal to reclassify the area as serious or severe nonattainment.

Mr. BARTON. Thank you, Judge Thibodeaux, and I hope the fact you took off your little State of Texas pin is not an indication of some sort of a protest.

Mr. THIBODEAUX. No, it fell off, Mr. Chairman, and I don't quite know exactly what happened. I think, as Judge Griffith said, I am a little nervous, too. It is the first time I have been in front of congressional members, and I have been in Austin many times.

Mr. BARTON. If you can handle Austin, you can handle Washington. We are pussy cats compared to those guys down there.

Mr. THIBODEAUX. I don't know if it was the nervousness, but something caused it to pop off, but I think it was just to get everybody's attention.

Mr. BARTON. We appreciate that.

We now want to hear from the Commissioner of the Texas National Resource Conservation Commission, the Honorable Ralph Marquez, who has been here before. Your statement is in the record in its entirety, Mr. Commissioner, and we are going to ask that you try to summarize in about 5 minutes.

**STATEMENT OF HON. R.B. RALPH MARQUEZ**

Mr. MARQUEZ. I will try to do that, Mr. Chairman.

Mr. Chairman, members of the subcommittee, thanks for inviting me. I have provided the subcommittee two examples of transport of pollutants. I will not try to describe the details of it, that will take quite a while, but for your reference we have two packets—actually, one packet, two portions. They are satellite imagery and air monitoring readings, and this came about because of a haze that moved into Texas and, as the haze moved in, we saw the air monitors begin to show high levels of ozone and fine particulate matter.

We analyzed the data and we started tracking backwards where that had come from. The data on the maps and the imagery speak for themselves. Let me take two points. First of all, we are not pointing the finger at any other part of the country as being the cause of Texas' problems. We are fully aware that there are a number of other situations in which Texas pollution moves the other way around and affects States north of us. So that is No. 1.

Second, this is a kind of pollution that can only be addressed on a very wide scale, and we believe that multi-pollutant strategy is a way to get at it and to make significant reductions across the eastern side of the country that will benefit everyone.

The second packet is a more specific example of transport, it is intra-state transport. This is from Houston to the Beaumont-Port Arthur area—

Mr. BARTON. Mr. Commissioner, could you suspend. I think what you are saying is important enough that we try to put some of this material up on the video screen, if it is possible. They need to know exactly which file, though, I believe, is that correct? We are not going to count this against your time.

Mr. MARQUEZ. That would be fine. We can begin. There are pictures here, they are pictures from satellite that show visible haze moving—

Mr. BARTON. Do we have what you just showed?

Mr. MARQUEZ. Yes, I believe you have that packet. I am being told that maybe that packet didn't come in electronically, so you may not have that one.

Mr. BARTON. Let us put back up one of those graphs, try No. 8, there was one that showed some orange—yes, that one right there. It gives an idea. You can see something moving around.

[Slide shown.]

Okay. Restart his clock at 5 minutes, and just leave that up. Go ahead, Commissioner.

Mr. MARQUEZ. What you see in this example is how pollution moving into the State of Texas, the yellow and orange, it is visibility measurements. The little numbers in boxes are the ozone, the 8-hour ozone numbers, as well as fine particulate matter. And as the haze goes by, you see more of a visibility reduction, as well as the numbers for ozone and fine particulates increasing. As you go, I believe on September 12 you see some very high numbers, unhealthy air. On September 13, the Houston area reached 144 ppb of ozone, that is an 8-hour standard. So you can see central Texas suffering from some very unhealthy air.

On September 13, Houston experienced one of the highest numbers we have seen for the 8-hour standard. You see a very broad area on September 14, all across southern Texas. Even in areas along the border have never experienced any air pollution problems, we were seeing very high numbers there.

And then on September 15 and September 16, you can see we have a tropical storm that essentially took all that haze back out, probably sent it back to the neighboring State of Louisiana, as a matter of fact, with some of our contributions added to it.

I will refer you to the last page of that packet, it is a table, and it shows in color—and this chart is color-coded based on the EPA classification of air quality—how the air had been clean before that haze moved in, what the numbers were during that episode, and as the haze moved out how the air returns to healthy standards. This is just one example of how significant the transport of pollutants can be and how widespread it is. It is not just one State or another, it is really a merry-go-round that may be going up from Texas and coming back from the Midwest and along the East Coast and past Georgia and Louisiana. I think we are doing it to each other.

And the only way to really bring this under control is going to be with a very rough policy of reducing emissions from significant major sources that contribute to transport—primarily, that is the Multi-Pollutant Strategy Program addressing power plants I think is very significant, but we need reductions consistent throughout the eastern U.S., and we need it soon.

Mr. BARTON. Does that conclude your testimony?

Mr. MARQUEZ. I will just point out one other example, and it is an intra-state of Houston to Beaumont. It is a bar chart, and I will just highlight what my friends here from south Texas said.

If you see the last exceedances, the last 23 exceedances over the last 5 years, 11 of those exceedances in the Beaumont-Port Arthur area were either caused by or influenced by transport from Houston. And actually the highest numbers of ozone were on the days where there was an impact from Houston. If you just look at the blue section, that is homegrown impact, and those numbers are very marginal. And as a matter of fact, they are coming down. And this is through 2002. The emission reduction program for the area really started taking place on May 1 of this year. Every one of those steps will be implemented by May 1, 2005. So we believe that as far as the local input, it will be under control. We just cannot guarantee that reduction from Houston will not continue to impact and put them out of attainment. Thank you very much.

[The prepared statement of Hon. Ralph B. Marquez follows:]

PREPARED STATEMENT OF RALPH B. MARQUEZ, COMMISSIONER, TEXAS COMMISSION  
ON ENVIRONMENTAL QUALITY

Mr. Chairman and members of the Subcommittee. I am Ralph Marquez, Commissioner of the Texas Commission on Environmental Quality (TCEQ). TCEQ is the state agency with responsibility for environmental quality in Texas. Thank you for the opportunity to come before the subcommittee to provide information concerning ozone transport.

Ozone and its precursor compounds can be transported long distances by wind currents affecting multiple states or regions within a state. I have provided the Subcommittee two examples of ozone transport. The first example is one of interstate transport which demonstrates a September 2002 haze episode in which haze formed

in the Midwestern U.S. and moved across the eastern U.S. and into the southern states and Texas over several days. Our analysis of satellite imagery and monitor readings of ozone and particulate matter shows the impact of pollutant transport on Texas communities during the September episode. For example, 8 hour ozone values in Houston climbed from 41 ppb on September 9 to 144 ppb on September 13, 2002. On those same days particulate matter climbed from 7 micrograms/cubic meter to 56 micrograms/cubic meter. Similar increases for these pollutants occurred in other major metropolitan areas, Dallas-Fort Worth, San Antonio, and Beaumont-Port Arthur.

The second case is an example of intrastate transport on a day (September 1, 2000) when the Beaumont-Port Arthur(BPA) area exceeds the one hour ozone standard at least partially due to transport from the Houston area. In fact, when we reviewed all of the 1 hour ozone exceedances between 1998 and 2002, we found that approximately one-half of the exceedances occurred on days when there was a contribution from Houston. In addition, the highest monitored readings in BPA occurred on days when there was a contribution from Houston.

These examples demonstrate that ozone transport can be significant in causing or contributing to exceedances of the federal ozone standard. We believe that the emission reductions that have been adopted for the BPA area would bring the area into attainment of the 1 hour ozone standard but for the emissions transported from the Houston-Galveston area. This is why it makes sense for areas downwind of a source area to have the same attainment date as the source area. In Texas, we were relying on EPA's transport policy to extend BPA's attainment date so that it matched Houston's attainment date of 2007. The rationale is that BPA could not reach attainment until Houston had reduced its emissions. With the decision of the 5th Circuit Court that EPA exceeded its authority to extend the attainment date, BPA is facing a bump up to a higher classification and a 2005 attainment date, which will be difficult to achieve.

Mr. BARTON. Thank you, Mr. Commissioner.

We now want to hear from Dr. Ramon Alvarez, who is a scientist with the Environmental Defense Fund, and he is located in Austin, Texas. Your testimony is in the record in its entirety, Doctor, and we would ask you to summarize in 5 minutes. Welcome to the subcommittee.

#### STATEMENT OF RAMON ALVAREZ

Mr. ALVAREZ. Thank you, Mr. Chairman, Mr. Boucher, subcommittee members—who just left.

Mr. BARTON. They are all here in spirit.

Mr. ALVAREZ. It is an honor to be here today, and I would like to talk about how you address this issue before you today will have major impacts on the health of American families, especially children.

To illustrate how air pollution can dramatically affect people's lives, I want to tell you a story about Josh Shonborn, a 16-year-old from Dallas, Texas, who suffers from asthma.

I gained an appreciation for the life-altering effects of air pollution when Josh came to testify before the Texas Legislature in 1999, on a bill to reduce emissions from grandfathered power plants. When the chairman called his name, Josh went up to the podium, displayed his satchel of ten or so medications that he routinely used to manage his asthma, and then very articulately described what it is like to grow up as an asthmatic.

In my testimony, I discuss how ozone air pollution can bring on asthma attacks and even increase the risk of children developing asthma. Growing up with asthma affected pretty much everything about Josh's life. Josh's asthma attacks forced him to miss school, on occasion for several weeks at a time. He couldn't go play outside on ozone action days, which he says he can sense by the tightness

in his chest. He couldn't do after-school sports, or even play at friends' houses for fear he might require medical attention.

Of course, he and his family have spent many days and nights in doctors' offices and hospital rooms, seeking treatment for his asthma flareups. All in all, Josh's asthma not only impacted his physical well-being, it also limited some of his social and emotional bonds that are so essential to growing up.

Now, Josh was just 3 years old when Congress enacted the Clean Air Act Amendments in 1990. Since then, the Dallas-Fort Worth area has made little progress in reducing ozone levels. Both the frequency of ozone exceedances and the peak levels monitored each year have remained largely unchanged since the late 1980's. These trends are shown in the charts in Exhibit 1 of my testimony, on page 9.

Notice on the bottom chart that both in 1999 when Josh came to testify at the Texas Legislature, and again this year, 2003—

Mr. BARTON. Do you have a chart that we could put up?

Mr. ALVAREZ. It is in the written testimony at page 9.

Mr. BARTON. We don't have it to put up?

Mr. ALVAREZ. I don't know if you have it in front of you.

Mr. BARTON. We just want to be fair. We put some of Mr. Marquez' charts up, so if we actually have them to put up, we will do it, but apparently you don't have it in—

Mr. ALVAREZ. Oh, I haven't presented that yet, I am sorry.

Mr. BARTON. Okay. Go ahead, please.

Mr. ALVAREZ. So, in 1999 when Josh testified at the Texas Legislature and again this year, picos on readings have topped out at more than 160 ppb in the Dallas-Fort Worth area. The ozone standard is set at 120 ppb. Anything higher than 125 is considered unhealthy for sensitive groups—that is the color orange on the EPA Air Quality Index—and levels above 165 are considered unhealthy—that is the color red on the EPA Air Quality Index. So twice in the last 4 years we have been at levels considered almost very unhealthy by EPA.

Thirteen years have passed since the Clean Air Act Amendments were enacted. Josh is now 16 years old, and air pollution in Dallas remains about as bad as it was in 1990. In fact, the Clean Air Act's promise to Josh and his family that ozone would be cleaned up in his hometown has been broken repeatedly.

As discussed in my testimony, Dallas-Fort Worth was originally supposed to attain by 1996, as a moderate nonattainment area. Then after a bump-up to serious, the region should have attained in 1999, but Texas didn't submit a complete plan before the attainment date, triggering the threat of sanctions from EPA. And that is where the Attainment Date Extension Policy comes in.

Rather than bump-up the Dallas-Fort Worth area to severe with a 2005 attainment date for failing to meet the 1999 deadline, EPA proposed to give the area an additional 2 years, until 2007, on the grounds that pollution transported from Houston would prevent attainment by 2005. Was this true? Well, the evidence shows that it wasn't. The evidence shows only a small and infrequent contribution of Houston on air pollution levels in Dallas-Fort Worth.

Houston's emissions impact the Dallas-Fort Worth area only in 10 percent of all of the exceedance days. This is not enough of an

impact to keep the Dallas-Fort Worth area from attaining, but this is all academic since the policy was found unlawful.

The good news is that all of the stakeholders in the Dallas-Fort Worth area know we have to go back to the drawing board, and the increased public concern over local air pollution and the pressures of the Clean Air Act have provided significant motivation to reach a solution that meets the needs of all parties involved.

I would like to also draw your attention to Exhibit 2 of my testimony, on page 10, an e-mail from Collin County Judge Ron Harris, who asked me to relay that we are making progress through local partnerships, and there is no reason to change the rules again. I should mention that my counterparts in other environmental groups tell me that similar negotiations are going on in the Beaumont-Port Arthur area.

So, in sum, we finally have some momentum through local partnerships to put the Dallas-Fort Worth area on the path to clean air. Federal legislation could put these efforts in jeopardy. Without the additional controls and planning requirements associated with a bump-up, children like Josh will be exposed to ozone for additional years.

As a closing thought, I would like to note that by the time the ozone standard is finally achieved in the Dallas-Fort Worth area, Josh Shonborn will be in college. For him, this victory will be too late to have altered the course of his childhood, but it is not too late to improve the lives of the next generation of children like Josh in Dallas and other U.S. cities with high ozone levels. For their sake, let us not allow any further delay in meeting clean air deadlines.

That concludes my statement. Thank you, Mr. Chairman.

[The prepared statement of Ramon Alvarez follows:]

PREPARED STATEMENT OF RAMON ALVAREZ, SCIENTIST, ENVIRONMENTAL DEFENSE

Good morning. My name is Ramon Alvarez and I am an atmospheric scientist in the Austin, Texas office of Environmental Defense, a non-profit, non-partisan, non-governmental environmental organization representing approximately 300,000 members nationally. Thank you for the invitation to share with you the experience of the Dallas/Fort Worth ozone nonattainment area with EPA's attainment date extension policy.

SUMMARY

Achieving the ozone standard in the Dallas/Fort Worth (DFW) area and other U.S. communities is of vital importance to public health. Ozone impairs the body's respiratory system, aggravates existing respiratory diseases, and has been associated as a causative factor in the development of asthma in children. Unfortunately, the DFW area has made little progress in reducing ozone pollution since the passage of the 1990 Clean Air Act Amendments.

The DFW region twice failed to meet the ozone standard, in 1996 (due to a scientifically flawed plan) and in 1999 (after failing to develop a plan prior to the clean air deadline). After EPA threatened sanctions, a new clean air plan was developed in April 2000. In 2001, EPA proposed to approve this plan, including the request from Texas to extend the attainment date to 2007 without reclassifying the area to severe nonattainment. EPA has indicated that it will not finalize this approval in light of the appellate court decisions on the attainment date extension policy.

As discussed below, transported pollution from Houston has only a minor and infrequent impact on the DFW area. EPA's transport policy, even if legal, was thus erroneously applied in the DFW area, since the evidence shows DFW could attain the ozone standard even if Houston were to do nothing to clean up its air pollution.

As public concern about local air pollution has increased, stakeholders in the DFW area are now more actively working together to agree on a path forward to

clean up the region's air. Legislative proposals to extend attainment deadlines pose a serious risk of disrupting these ongoing negotiations that have a good likelihood of reaching a solution that meets the needs of all the parties involved. Moreover, any further delay in deadlines for the DFW area would mean that thousands of children and other sensitive individuals will continue to suffer the adverse health effects associated with ozone pollution.

#### FAILURE TO REDUCE HIGH OZONE LEVELS SERIOUSLY THREATENS PUBLIC HEALTH.

Inhaling ozone significantly harms human health: ozone can burn cell walls in the lungs and air passages, causing tissues to swell, chest pain, coughing, irritation and congestion. Other effects include decreased lung function, aggravation of asthma, increased susceptibility to bacterial infection, and generation of scar tissue and lesions in the respiratory system.

In reviewing recent evidence of the harm caused by ozone, EPA reached an ominous conclusion on the effects of repeated and long-term exposure to ozone:

EPA has concluded that repeated occurrences of moderate responses, even in otherwise healthy individuals, may be considered to be adverse since they could well set the stage for more serious illnesses.<sup>1</sup>

EPA's conclusion was confirmed by new evidence showing that children who participate in high activity, outdoor sports in portions of the Los Angeles air basin are 3.3 times more likely to develop childhood asthma than children who play equally active sports in communities with low ozone environments.<sup>2</sup> For most children who develop asthma, it is an incurable lifetime affliction. EPA recognizes that whatever the effect of ozone inhalation on average adults, the impact on those who suffer from asthma, the elderly, outdoor workers, and active children are far more severe.<sup>3</sup>

A lifetime of asthma is a high price to exact from our children for failing to reduce ozone to safer levels. Any further delay in deadlines to meet the ozone standard would mean that hundreds of thousands of American children and other sensitive individuals will suffer the adverse health effects associated with ozone pollution.

#### HOW DID DALLAS/FORT WORTH COME TO RELY ON THE ATTAINMENT DATE EXTENSION POLICY?

The Dallas/Fort Worth area has had little success in curbing ozone air pollution since the passage of the 1990 Clean Air Act Amendments. Both the frequency of ozone exceedances and the peak levels monitored each year have remained largely unchanged since the late 1980s. (See Exhibit 1). The Dallas/Fort Worth area continues to routinely record 1-hour ozone exceedances, including this year's high value to date of 161 parts per billion.<sup>4</sup>

Under the 1990 Clean Air Act Amendments, the 4-county Dallas/Fort Worth area was classified as a moderate nonattainment area and required to meet the health standard for ozone by 1996. The State Implementation Plan (SIP) submitted to EPA in 1994 contained only the Act's minimum mandatory reduction (15% of the emissions of volatile organic compounds).<sup>5</sup> Notably, this plan lacked any measures to reduce nitrogen oxides, significant reductions of which are now accepted to be essential to achieving the ozone standard.<sup>6</sup> Not surprisingly, the minimalist VOC-only plan of 1994 failed to bring the region into attainment by the 1996 deadline. EPA reclassified ("bumped up") the Dallas/Fort Worth nonattainment area from moderate to serious in March 1998.

The bump-up to serious required Texas to prepare a new SIP by March 1999. The SIP Texas submitted was, by its own admission, inadequate. Accordingly, EPA found the SIP incomplete and started the sanctions and Federal Implementation Plan clocks.

The looming threat of sanctions spurred the development and submission in April 2000 of a new SIP. This plan relies on EPA's 1998 attainment date extension policy,

<sup>1</sup> 66 Fed. Reg. 57275 (November 14, 2001)

<sup>2</sup> McConnell et al., "Asthma in exercising children exposed to ozone: a cohort study," *Lancet*, V. 359, 386-391 (Feb. 2, 2002). Other recent studies have also linked ozone to serious health effects, including birth defects, decreased lung capacity in girls, and acute stroke mortality.

<sup>3</sup> 66 Fed. Reg. 57276-78 (November 14, 2001)

<sup>4</sup> The 1-hour National Ambient Air Quality Standard for ozone is 120 parts per billion (ppb).

<sup>5</sup> Ozone is not directly emitted by sources. It is formed by the reaction of volatile organic compounds (VOC) with nitrogen oxides (NO<sub>x</sub>) in the presence of sunlight.

<sup>6</sup> The 1994 SIP claimed the 15% VOC reductions would be enough for the region to meet the ozone standard. Texas applied for and received a waiver from § 182(f) of the Clean Air Act regarding NO<sub>x</sub> emission reductions. The DFW area did not begin reducing NO<sub>x</sub> emissions until after the NO<sub>x</sub> waiver was rescinded in 1999. The April 2000 SIP will reduce total NO<sub>x</sub> emissions by approximately 40 percent.



which is the subject of today's hearing. In January 2001, EPA proposed to approve the April 2000 SIP and extend the attainment date to November 2007 while retaining the area's serious classification.<sup>7</sup>

TRANSPORT FROM HOUSTON DOES NOT PREVENT THE DALLAS/FORT WORTH AREA FROM ATTAINING

EPA's proposed extension of the DFW area's attainment date is based on a claim that transported pollution from Houston jeopardized the DFW area's ability to attain the ozone standard. The evidence, however, does not support that claim. We accept the notion that emissions from the Houston/Galveston nonattainment area can contribute to observed ozone levels in the DFW area on some days. Since 1996 we have argued that the control strategy for the DFW area must address ozone transport. However, we do not believe that ozone transported from Houston/Galveston would alone prevent the DFW area from attaining the ozone standard.

EPA justified its proposed extension of the DFW area's attainment date largely on two analyses performed by Texas:<sup>8</sup>

- Ozone source apportionment analysis. On the day with the highest modeled ozone, 2 to 4 ppb of ozone in some portion of the DFW area came from Houston sources.
- Back trajectory analysis. Air masses entering the DFW area had trajectories going back to the Houston area on approximately 10 percent of the days when ozone exceedances were recorded in DFW between 1993 to 1998.

The only conclusion that can be reached from the analyses contained in the administrative record is that on a small number of days, there may be a small amount of additional ozone in the DFW area that came from Houston. Such a result is not surprising—ozone air pollution is known to travel over even longer distances such as from the Midwest to the Northeast. However, the fundamental question that was never answered by Texas or EPA is whether the small amount of ozone originating in Houston that might occasionally arrive in the DFW area is enough to prevent DFW from attaining the ozone standard before Houston's attainment date.

A fair evaluation of the evidence would lead to the conclusion that the Dallas/Fort Area could still attain the ozone standard even if Houston did nothing to clean up its air pollution. For example, Houston's emissions could be expected to impact the DFW area less than one time per year.<sup>9</sup> Even if all of the monitored ozone on those relatively rare days came from Houston,<sup>10</sup> the DFW area could still comply with the 1-hour standard, which allows for 1 exceedance per year. Thus, EPA's transport policy, even if it were legal, was erroneously applied in the DFW area.

Because transport from Houston is only a minor component of Dallas/Fort Worth's ozone air pollution, attainment of the 1-hour ozone standard will only be achieved after sufficient local controls are in place to eliminate the vast majority of exceedances that are the result of ozone precursor emissions generated within the DFW area itself. It is misguided to blame the small amount of transport from an upwind area as the reason to once again extend a deadline established to ensure the DFW area's more than 4 million residents can breathe healthier air.

LEGISLATION THREATENS LOCALLY-DRIVEN, WIN-WIN SOLUTIONS

In both the Dallas/Fort Worth and Beaumont/Port Arthur areas, legislative proposals at this time pose a serious risk of disrupting ongoing negotiations that have a good likelihood of reaching a solution that meets the needs of all the parties involved.

<sup>7</sup>66 Fed. Reg. 4764 (January 18, 2001). EPA has not taken final action on this proposal but has indicated that it will not finalize approvals of any more SIPs relying on the attainment date extension policy.

<sup>8</sup>66 Fed. Reg. 4758 (January 18, 2001).

<sup>9</sup>The 1-hour ozone standard was exceeded in the DFW area on 102 days between 1988 and 2002, or roughly 7 times per year. Since 10% of exceedances were identified to involve some level of transport from Houston, Houston's emissions would have impacted the DFW area an average of roughly 0.7 days per year.

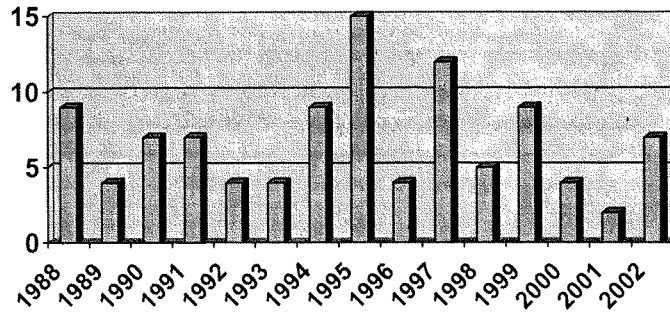
<sup>10</sup>In fact, the opposite is true. The amount of ozone due to home-grown emissions far outweighs the amount of ozone blowing in from Houston. Even a worst-case modeling simulation using "synthetic winds" to carry Houston's air pollution plume directly into the DFW area shows only modest impacts. The synthetic winds were manufactured by choosing the wind speed and direction to maximize the amount of pollution that would reach the DFW area. When all of the man-made emissions of NO<sub>x</sub> and VOC in the Houston area were removed from the model, ozone levels in the DFW area are reduced by up to 10 ppb. Even this modest estimate is unrealistically high since the winds would never carry Houston pollution in a straight line to Dallas/Fort Worth and all Houston emissions could not be eliminated. (Texas Natural Resource Conservation Commission, DFW Attainment Demonstration SIP—April 2000, p. 6-42)

In the Dallas/Fort Worth area, local government officials, business leaders, EPA, the Texas Commission on Environmental Quality and environmental groups are working in a cooperative spirit to agree on a path forward to cleaning up the region's air. One outcome might be expeditious attainment of the 1-hour standard and early compliance with the 8-hour ozone standard now being implemented by EPA. I and other DFW area stakeholders feel that the current air quality challenges facing the region can best be handled at the local level and that federal legislation on the attainment date extension policy is not needed. (See for example Exhibit 2, email from Ron Harris, Collin County Judge)

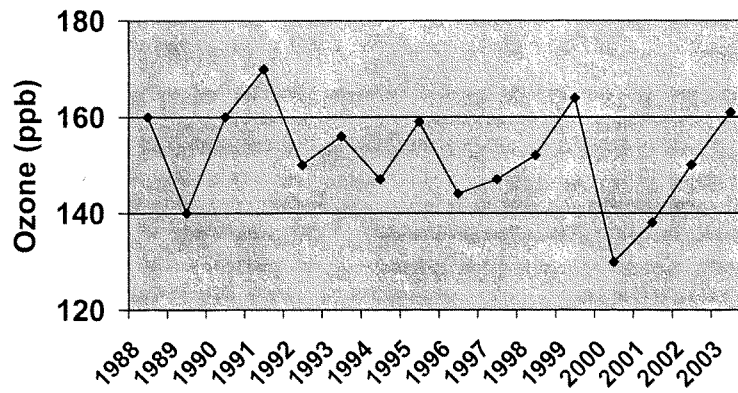
In Beaumont/Port Arthur (BPA), discussions are actively taking place between all the parties (including the environmental plaintiffs, regulated industry, Texas and EPA) to respond to the 5th Circuit Court decision on EPA's use of the attainment date extension policy for the BPA area. These discussions could lead to a negotiated agreement whereby the area would not be bumped up to severe. EPA has already demonstrated the Act's potential flexibility by proposing, in the alternative, a single or double bump up for BPA.

Exhibit 1, R. Alvarez

**Annual DFW 1-hour Ozone Exceedances  
1988-2002**



**Peak Ozone Levels in Dallas/Fort Worth  
1988-2003**



Source: Texas Commission on Environmental Quality

**Exhibit 2, R. Alvarez**

**Text of email from Ron Harris dated 7/19/2003**

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TO: Ramon Alvarez

FROM: Ron Harris, Collin County Judge  
Co-Chair, North Texas Clean Air Steering Committee

As we discussed yesterday, please relay to the House Committee hearings on delay of attainment dates the following:

The North Texas Area is currently working closely with both local government, business, EPA, Texas Commission on Environmental Quality and specifically Environmental Defense along with Public Citizen to continue efforts at cleaning up the air in North Texas.

The efforts include working with the Texas Clean Air Working Group and the Texas Legislature. In my opinion, we are making progress toward attainment of the National Clean Air Standard.

At this juncture, I think it would be better left to local partnerships to work and not change the rules again, until such partnerships become unsuccessful and mistrust from those involved results in a slowing down of the clean air goals.

Mr. BARTON. Thank you, Doctor.

We now want to hear from Mr. Ronald Methier, who is the Chief of the Georgia Department of Natural Resources, Environmental Protection Division. Your testimony is in the record in its entirety, and we ask that you try to summarize it in 5 minutes, Doctor.

#### STATEMENT OF RON METHIER

Mr. METHIER. Thank you very much. I am the Chief of the Air Protection Branch, with the Georgia Environmental Protection Division, and on behalf of the State of Georgia I would like to thank you for this opportunity to talk about this important issue.

We have been grappling with the bump-up policy in Georgia for many years. The Atlanta ozone nonattainment area is one of many serious ozone nonattainment areas that failed to attain the 1-hour ozone standard by the 1999 attainment date established in the Clean Air Act Amendments of 1990. Atlanta's failure to attain can be attributed in significant part to the problem of downwind transport.

For this reason, Georgia applied for and received an extension of its attainment date under EPA's extension policy for nonattainment areas affected by downwind transport. EPA's recent decision to rescind that policy as a result of litigation will result in bump-up that is both unfair and counterproductive.

Georgia has made tremendous progress in controlling emissions at the local level. Atlanta's air quality is steadily improving despite our exponential growth. The Clean Air Act Amendments of 1990 classified nonattainment areas based on air quality at that time, which put Atlanta in the serious classification. If Atlanta were classified based on data through 2002, it would be considered a moderate area. And with the continued air quality progress we are seeing this year, the end of 2003 monitoring data would classify the area as marginal.

EPA was right to extend the attainment date for Atlanta to adjust its statutory scheme to account for the problem of downwind transport. Extending the attainment date also prevented Atlanta from being forced to adopt new local control measures that are, at best, superfluous and, at worst, counterproductive for Atlanta.

Bump-up does not make sense if there are no deficiencies in the SIP to remedy. In Atlanta, for example, EPA has confirmed that Georgia has already adopted all the reasonably available control measures at the local level, and is on schedule to bring Atlanta into attainment as soon as the NO<sub>x</sub> SIP Call Rule is implemented in 2004. It would be premature and counterproductive to bump Atlanta up before the NO<sub>x</sub> SIP Call Rule is implemented. Proposed legislation to codify the extension policy is included in our written testimony.

Our resistance to getting bumped up is not just a fairness issue. We agree that we have to do everything we can at the local level to control emissions, and have already adopted the controls needed for the 1-hour ozone standard in Atlanta. Our problem is that the severe area requirements will do nothing to help clean the air, and might actually make it worse.

Of the items prescribed for severe nonattainment areas, the most counterproductive is the requirement to use Federal reformulated

gasoline, or Federal RFG, within 1 year of being bumped up to severe. Unfortunately, Federal RFG is not the right fuel solution for Atlanta, although it works very well in many other areas. Georgia has adopted a fuel program that is superior to Federal RFG for Atlanta's conditions because it is specifically designed to reduce nitrogen oxides, or NO<sub>x</sub> emissions.

Georgia and EPA have both determined that Georgia's low sulfur program is necessary for the Atlanta nonattainment area to achieve the ozone standard in a timely manner. If Atlanta is bumped up to severe, Atlanta will lose the benefits of this necessary control measure, which will be displaced by Federal RFG. NO<sub>x</sub> emissions from motor vehicles in this area would very likely increase, producing an increase in ozone concentrations.

Even if the extension policy is not codified, the RFG problem could be solved by granting Atlanta a 2-year extension on the requirement to adopt Federal RFG as a severe area. Some proposed legislation is also included in my written testimony that has been drafted to solve Atlanta's problem without having any adverse impact on the nationwide RFG program, or affecting any other area.

Another bump-up problem is the penalty provision you have heard of in Section 185. If Atlanta is bumped up to severe and then fails to attain by 2005, Georgia EPD will be forced to impose penalties on major stationary sources within the Atlanta nonattainment area. These businesses, which range from very large power plants and auto assembly plants, down to very small businesses and hospitals, are complying with these strict permit limits. Under Section 185, however, compliance with strict permit limits would be no defense. By our calculations, about 63 businesses in full compliance with their permits would pay a total of over \$52 million per year if we fail to attain by 2005. This result is highly punitive and unfair, and it also makes no sense to impose penalties for VOC emissions from these sources in a NO<sub>x</sub>-limited area that has, by necessity, adopted a NO<sub>x</sub> control strategy like Atlanta has.

In conclusion, the air in Atlanta is getting cleaner, and it will be even cleaner still once the NO<sub>x</sub> SIP Call Rule takes effect in 2004 next year. EPA took the time to do the NO<sub>x</sub> SIP Call right instead of rushing to an incomplete solution. My concern is that by taking the time to do the job right, EPA has inadvertently put the States in a position of being penalized for delays beyond their control. I urge you to consider the progress we have made in implementing local control measures and in working with EPA to bring the NO<sub>x</sub> SIP Call to fruition, and to find a remedy that will continue our progress toward cleaner air. Thank you.

[The prepared statement of Ronald Methier follows:]

PREPARED STATEMENT OF RON METHIER, CHIEF, AIR PROTECTION BRANCH, GEORGIA ENVIRONMENTAL PROTECTION DIVISION

Good morning ladies and gentlemen: My name is Ronald Methier. I am the Chief of the Air Protection Branch of the Georgia Environmental Protection Division. On behalf of the State of Georgia, I would like to thank you for this opportunity to testify on what is a very important issue, not only to the people of Georgia, but I believe to the people of the United States as a whole.

You have asked me to address the bump-up policy under Title 1 of the Clean Air Act. As you know, we have been grappling with this policy in Georgia for several years. The Atlanta Ozone Non-Attainment Area is one of fifteen (15) Serious ozone non-attainment areas that failed to attain the one-hour National Ambient Air Qual-

ity Standard for ground-level ozone by the 1999 attainment date established in the Clean Air Amendments of 1990. Atlanta faced a number of challenges during the 1990s that prevented attainment. But its failure to attain can also be attributed in significant part to the problem of “downwind transport.” For this reason, Atlanta applied for and received an extension of its attainment date under EPA’s Extension Policy for non-attainment areas affected by downwind transport.<sup>1</sup> EPA’s recent decision to rescind that policy, as a result of litigation, will result in a “bump-up” that is both unfair and counter-productive.

#### I. THE BASIC RATIONALE FOR THE EXTENSION POLICY

The most basic rationale for EPA’s Extension Policy is the recognition that the original, 1999 attainment date was never intended to stand alone. The 1999 attainment date was supposed to be the culmination of a cooperative effort between EPA and the States. The states were assigned responsibility for preparing State Implementation Plans to control local emissions. At the same time, Congress recognized that air pollution does not respect political boundaries. Therefore, Congress assigned EPA the responsibility to adopt a regional plan to prevent upwind emissions from interfering with attainment in downwind states.

Unfortunately, EPA was unavoidably delayed in its effort to adopt effective regional transport controls. The delay was caused by EPA’s discovery of gaps in the data and scientific understanding of the formation and transport of ozone. After a monumental effort by EPA and the affected states, these gaps have now been filled. The result is known as the “NO<sub>x</sub> SIP Call Rule,” which is scheduled to be implemented by 2004. The best available models predict that Atlanta will attain the one-hour standard for ground-level ozone as soon as the NO<sub>x</sub> SIP Call Rule is implemented.

The NO<sub>x</sub> SIP Call rule represents a tremendous step forward, but it came five years too late. Atlanta was supposed to attain by 1999. Because the NO<sub>x</sub> SIP Call Rule has not yet been implemented, Atlanta continues to be significantly affected by emissions that blow into the area from out-of-state.<sup>2</sup>

Meanwhile, Georgia has made tremendous progress in controlling emissions at the local level. Atlanta’s air quality is steadily improving despite exponential growth. The Clean Air Act Amendments of 1990 classified non-attainment areas based on air quality at that time, which put Atlanta in the “serious” classification. If Atlanta were reclassified based on data through 2002, it would be considered a “moderate” non-attainment area. With the continued air quality progress we are seeing this year, the end of 2003 monitoring data could classify the area as “marginal.”

Under these circumstances, EPA was right to extend the attainment date for Atlanta. EPA needed to extend the attainment date for Atlanta to adjust the statutory scheme to account for EPA’s own delay in addressing the problem of downwind transport. Extending the attainment date also prevented Atlanta from being forced to adopt new local control measures that are at best superfluous, and at worst counter-productive.

Proposed legislation to codify the Extension Policy is attached behind Tab A. Additional background is provided below.

##### A. “Bump-up” Does Not Make Sense For Areas Affected by Downwind Transport.

Fundamentally, the bump-up provision will have unintended consequences if it is applied to areas that fail to attain as a result of upwind emissions. By design, bump-up limits the state’s ability to evaluate and adopt local emissions controls. This provision is based on the assumption that non-attainment can be attributed to the state’s failure to adopt a State Implementation Plan with adequate local emissions controls. This assumption does not hold for downwind areas affected by transport.

**1. The Purpose of the Bump-up Provision is to Remedy Deficiencies in the SIP**—The Clean Air Act Amendments of 1990 classified ozone non-attainment areas into five categories and assigned “attainment dates” to each classification.<sup>3</sup>

<sup>1</sup> Extension of Attainment Dates for Downwind Transport Areas, 64 Fed. Reg. 14441 (Mar. 25, 1999) (“Extension Policy”).

<sup>2</sup> Our modeling demonstrates that transported NO<sub>x</sub> contributes as much as 23% to the average ozone exceedance in the Atlanta nonattainment area. See Georgia’s State Implementation Plan for the Atlanta Ozone Non-Attainment Area (July 17, 2001) (“Attainment Demonstration SIP”) at 3-37. The Attainment Demonstration SIP is available on the Georgia DNR website at [http://www.dnr.state.ga.us/dnr/envirom/plans\\_files/plans/sip\\_narrative.pdf](http://www.dnr.state.ga.us/dnr/envirom/plans_files/plans/sip_narrative.pdf).

<sup>3</sup> The attainment dates range from 1993 for Marginal nonattainment areas to 2010 for Extreme areas; for Serious areas, the date assigned was 1999. 42 U.S.C. §7511(a)(1) (Table 1).

Each State was required to develop a State Implementation Plans (“SIP”) to bring its non-attainment areas into attainment by the applicable attainment date. As a rule, the the Act left it to the states, subject to the approval of EPA, to determine the content of the SIP. Congress did, however, prescribe certain elements that were required to be included. These requirements correspond to the area’s classification as a Marginal, Moderate, Serious, Severe, or Extreme. The requirements, which are set forth at 42 U.S.C. § 7511a(a)-(e), become very prescriptive for the higher classifications.

The “bump-up” provision is designed to force the states to remedy deficiencies in the SIP. Thus, if an area fails to attain by the applicable attainment date, it is “bumped up” to the next higher classification.<sup>4</sup> As a result, the state is forced to adopt the emissions control measures that are prescribed for the next higher classification. This is the only legal consequence of missing the attainment date. No other penalties apply.<sup>5</sup> The Act does not generally impose penalties for nonattainment because the emphasis in the Act is on planning and adaptive management, not punishment.<sup>6</sup>

**2. Bump-up Does Not Make Sense Unless the SIP is Deficient**—Bump-up does not make sense if there are no deficiencies in the SIP to remedy. This is the case for areas that are significantly affected by downwind transport. In such areas, the local emissions controls may be perfectly sufficient. In Atlanta, for example, EPA has confirmed that Georgia EPD has already adopted all “reasonably available control measures” at the local level.<sup>7</sup> These controls are projected to bring Atlanta into attainment as soon as the NO<sub>x</sub> SIP Call Rule is implemented in 2004. If we fail to attain in 2004, we will need to reevaluate the SIP and incorporate additional local emissions controls. It would be premature and counter-productive, however, to make this judgment before the NO<sub>x</sub> SIP Call rule is implemented.

## II. BUMP-UP WILL HAVE UNINTENDED CONSEQUENCES

It is important to note that Georgia’s resistance to getting bumped up is not just a fairness issue. We wholeheartedly agree that we must do everything practicable at the local level to control emissions. For this reason, Georgia EPD has already adopted the Severe-area controls that would have any beneficial effect on the ozone situation in Atlanta.<sup>8</sup> Our problem is that the remaining Severe-area requirements will do nothing to help clean the air, and might actually make it worse.

This situation highlights an overall problem with Subpart 2 of the Clean Air Act Amendments of 1990, which is that the ozone provisions are far too prescriptive. The ozone problem is too local and too complicated for a one-size-fits-all solution. What works for Chicago might not work for Atlanta. In fact, the prescription for Severe areas is not right for Atlanta. One requirement in particular—the requirement for Severe Areas to use Federal Reformulated Gasoline (“Federal RFG”)—could actually impede our progress toward clean air.

### A. One-size-fits-all prescriptions do not work for Atlanta

When the Clean Air Act was amended in 1990, it seemed appropriate to mandate a one-size-fits-all solution to the ozone problem. At that time, most scientists believed that ozone was best controlled by reducing emissions of volatile organic compounds (“VOCs”).<sup>9</sup> We now know, however, that this strategy is not right for Atlanta.

EPA confirmed this finding in a study prepared jointly with the National Academy of Sciences. The report was submitted in accordance with Section 185B of the Clean Air Act, which directed EPA to study and report on the relative benefits of VOC and NO<sub>x</sub> controls in reducing ozone levels. EPA submitted its “185B Report” to Congress in July 1993.

<sup>4</sup>See 42 U.S.C. § 7511(b)(2).

<sup>5</sup>See Testimony of Mary D. Nichols, Assistant Administrator, Office of Air and Radiation, Before the Subcommittees on Oversight and Investigations and Health and Environment of the Committee on Commerce, House of Representatives (Nov. 9, 1995) (hereinafter *Nichols Testimony*).

<sup>6</sup>There are exceptions to this rule, but they apply only to Severe areas, which are not subject to bump-up under §181(b). See 7 U.S.C. § 7511(b)(4) & 7511d.

<sup>7</sup>See Attainment Demonstration SIP, *supra* n.2 at 3-35.

<sup>8</sup>See Tab C, Affidavit of Harold F. Reheis, former Director of Georgia EPD.

<sup>9</sup>Ozone is a “secondary” pollutant that is created in the atmosphere when volatile organic compounds (“VOCs”) and oxides of nitrogen (“NO<sub>x</sub>”) combine in sunlight. The reaction is sensitive to atmospheric conditions like humidity and temperature. Because average summer temperatures are comparatively high in Atlanta, conditions in this area are particularly conducive to the formation of ozone.



Focusing specifically on Atlanta, 185B Report concludes that certain areas can best control ozone by reducing NO<sub>x</sub> emissions. This shift in focus stemmed from an increased awareness of the role of biogenic VOCs (i.e., VOCs from natural sources such as trees) in the formation of ozone. In essence, the 185B Report found that ozone in Atlanta is “NO<sub>x</sub> limited,” given the abundance of natural VOCs in the atmosphere. From a practical standpoint, this means that it is far more effective to control ozone by reducing NO<sub>x</sub> emissions than by reducing VOC emissions.<sup>10</sup>

EPA immediately recognized the significance of this finding. EPA noted in particular that the Atlanta studies “cast uncertainty on past emissions control strategy approaches”—including some that had been mandated by the Clean Air Act Amendments of 1990.<sup>11</sup> EPA elaborated as follows:

The important conclusion from this analysis is that, as pointed out by [the National Academy of Sciences] and agreed by EPA, the latest evidence suggests that the ozone precursor control effort should focus on NO<sub>x</sub> controls in many areas [particularly but not only in Atlanta]. The development and implementation of control programs should not be hindered by a bias favoring one control direction over another. **This is extremely significant because it raises questions regarding the effectiveness of the VOC and NO<sub>x</sub> control programs mandated by the current CAA.**<sup>12</sup>

This new understanding is directly relevant to the basic rationale for the Extension Policy. Further studies have confirmed that emissions control programs that Georgia EPD would be required to adopt if Atlanta were bumped up to Severe would not improve air quality. Indeed, while most of these control measures are merely superfluous, a few are actually counter-productive.

#### *B. Federal RFG is Not the Right Fuel Solution for Atlanta*

Of the items prescribed for Severe non-attainment areas, the most counter-productive is the requirement to use Federal RFG. Severe areas are required to use Federal Reformulated Gasoline or “Federal RFG” within one year of being bumped up to Severe.<sup>13</sup> Unfortunately, Federal RFG is not the right fuel solution for Atlanta. The problem with Federal RFG is that it is designed to reduce VOC emissions, as opposed to NO<sub>x</sub> emissions. Specifically, Federal RFG is required to reduce VOC emissions by at least 25% in comparison with conventional gasoline.<sup>14</sup> By contrast, the only Federal RFG requirement pertaining to NO<sub>x</sub> is that NO<sub>x</sub> emissions must be “no greater than” the level of such emissions from conventional gasoline.<sup>15</sup> Federal RFG is obviously not the right fuel solution for a NO<sub>x</sub>-limited area like Atlanta.<sup>16</sup>

**1. Georgia EPD Has Adopted a Fuel Program that is Superior, for Atlanta, to Federal RFG**—Georgia EPD has adopted a fuel program that is superior to Federal RFG for Atlanta’s conditions because it is specifically designed to reduce NO<sub>x</sub> emissions.<sup>17</sup> The program, which is being implemented in two phases, will reduce NO<sub>x</sub> emissions by 12.0%, or 23.54 tpd (VOCs and toxics will be reduced by more than 25%) by September 2003.<sup>18</sup>

Georgia Gasoline is a critical part of Georgia EPD’s strategy to improve air quality through NO<sub>x</sub> reductions and to bring Atlanta into attainment with the ozone standard by 2004.<sup>19</sup> Georgia EPD and EPA have both determined that Georgia’s low-sulfur program is “necessary for the Atlanta nonattainment area to achieve the

<sup>10</sup>Based on sensitivity analyses included in Attainment Demonstration SIP for Atlanta, the ratio is approximately 4 to 1: reducing NO<sub>x</sub> emissions by 1 tpd will achieve the same effect as reducing VOC emissions by 4 tpd. Attainment Demonstration SIP, Table 5-13 ([http://www.dnr.state.ga.us/dnr/enviro/plans\\_files/plans/sip\\_table5-13.pdf](http://www.dnr.state.ga.us/dnr/enviro/plans_files/plans/sip_table5-13.pdf)).

<sup>11</sup>See 185B Report at p. 3-11.

<sup>12</sup>*Id.* at p. 3-28.

<sup>13</sup>42 U.S.C. §7545(k)(5), CAA §211(k)(5), prohibits the use of “conventional gasoline,” as opposed to Reformulated Gasoline, in “covered areas.” 42 U.S.C. §7545(k)(10)(D), CAA §211(k)(10)(D), states that “[e]ffective one year after the reclassification of any ozone nonattainment area as a Severe ozone nonattainment area under section [42 U.S.C. §7511(b), CAA §181(b)], such Severe area shall also be a ‘covered area’ for purposes of this subsection.”

<sup>14</sup>See 42 U.S.C. §7545(k)(3)(B).

<sup>15</sup>See 42 U.S.C. §7545.

<sup>16</sup>Reheis Aff. at 21.

<sup>17</sup>See Approval and Promulgation of Air Quality State Implementation Plans; Georgia: Control of Gasoline Sulfur and Volatility, 66 Fed. Reg. 8,200, 8,201 (Feb. 22, 2002) (“Final Preemption Waiver”).

<sup>18</sup>Reheis Aff. at 22. See also Approval and Promulgation of Air Quality State Implementation Plans; Georgia: Control of Gasoline Sulfur and Volatility, 66 Fed. Reg. 63,982, 63,983 cols. 1-2 (Dec. 11 2001) (“Proposed Preemption Waiver”).

<sup>19</sup>*Id.*

[national ambient ozone standard] in a timely manner.”<sup>20</sup> EPA has further determined that, compared to all other potentially available control measures, Georgia’s fuel program is the most reasonable and practicable measure available to reduce emissions from ozone precursors in the Atlanta area.<sup>21</sup>

If Atlanta is bumped up to Severe, Atlanta will lose the benefits of this necessary control measure, which will be displaced by Federal RFG.<sup>22</sup> NO<sub>x</sub> emissions from motor vehicles in this area would very likely increase, producing an increase in ozone concentrations.<sup>23</sup>

**2. The RFG Problem Can Be Fixed By Granting Atlanta a Two-Year Extension on the Requirement to Adopt Federal RFG**—Fortunately, the RFG problem is easy to fix. Even if the Extension Policy is not codified, the RFG problem could be solved by granting Atlanta a two-year extension on the requirement to adopt Federal RFG as a Severe area. This short extension would solve Georgia’s RFG problem because the benefits of Georgia’s low-sulfur program will phase-out as a new federal low-sulfur mandate phases in. The federal low-sulfur program will be fully phased-in in 2006. Therefore, by the Fall of 2006, Georgia EPD should be able to revoke the state low-sulfur rule, and adopt federal RFG, without any adverse consequences to the region’s air quality.<sup>24</sup>

Proposed legislation is included behind Tab B. Note that this legislation has been drafted to solve Atlanta’s problem without having any adverse impact on the nationwide RFG program. This fix would not require a permanent change to any substantive provision of the RFG program, and would not affect any other area.<sup>25</sup>

### C. Penalties

Another example of a misguided mandate is the penalty provision of 185.<sup>26</sup> If Atlanta is bumped up to Severe and then fails to attain by 2005, Georgia EPD will be forced to impose exorbitant penalties on major stationary sources within the Atlanta non-attainment area. Section 185 is unfair because it would penalize businesses for a problem that is totally beyond their control.

It would be wrong to penalize major stationary sources in Atlanta, which range from large power plants and auto assembly plants down to small businesses, because these businesses are not the problem. Unlike some other areas of the country, the biggest contributor to ozone in Atlanta is the transportation sector. We have already imposed strict emissions limits on the major stationary sources, requiring them to adopt the best emissions control technologies available. These businesses have done their part by complying with these strict permit limits. Under Section 185, however, compliance with strict permit limits would be no defense. Businesses in full compliance with their permits would still be fined millions of dollars on an annual basis.<sup>27</sup> By our calculations, 63 businesses in full compliance with their permits would pay a total of over \$52,000,000 per year if we fail to attain by 2005. This result is highly punitive and unfair. Indeed, it is arbitrary in the extreme to penalize businesses for a problem that is beyond their control.

<sup>20</sup> See Final Preemption Waiver, 66 Fed. Reg. at 8,201.

<sup>21</sup> See Proposed Preemption Waiver, 66 Fed. Reg. at 63,984 col. 3.

<sup>22</sup> While Georgia EPD might have the legal authority to require distributors to continue to comply with the Georgia fuel rules, even after the Federal RFG rules take effect within the 13-county nonattainment area, it would not be practical to impose such a requirement. Doing so would place tremendous stress on the storage and distribution facilities within the Atlanta area. Similar complications have led to distribution bottlenecks and extreme price spikes in other areas. For this reason, the Director of Georgia EPD has concluded that Georgia’s low-sulfur Gasoline program will probably have to be abandoned altogether if Atlanta is bumped up to Severe. See Reheis Aff. 23.

<sup>23</sup> See Reheis Aff. at 24.

<sup>24</sup> Assuming that Atlanta is bumped up by January 1, 2004, gasoline distributors will be required to sell federal RFG by January 1, 2005. This could lead to an increase in NO<sub>x</sub> emissions during the critical 2005 summer ozone season. By the 2006 summer ozone season, the federal low-sulfur standards should have phased-in sufficiently to prevent this negative impact.

<sup>25</sup> Georgia EPD was required to obtain a “preemption waiver” under 42 U.S.C. §7545(c)(4)(C), CAA §211(c)(4)(C) to adopt the low-sulfur fuel rule described above. See Approval and Promulgation of Air Quality State Implementation Plans; Georgia: Control of Gasoline Sulfur and Volatility, 66 Fed. Reg. 8200 (Feb. 22, 2002). None of the other states facing bump-up to Severe have applied for a waiver.

<sup>26</sup> 42 U.S.C. §7511d.

<sup>27</sup> The penalty is \$7,800 (\$5,000 adjusted for inflation) for each and every ton of NO<sub>x</sub> and VOC emissions in excess of 80% of the “baseline amount.” The baseline amount is the lower of (i) “actual emissions” during the attainment year; or (ii) emissions allowed under the permit during the attainment year. See 42 U.S.C. §7511d.

Even worse, Section 185 would require us to penalize these businesses for emissions of both NO<sub>x</sub> and VOCs.<sup>28</sup> It makes no sense to impose penalties for VOC emissions in a NO<sub>x</sub>-limited area that has, by necessity, adopted a NO<sub>x</sub>-control strategy.

### III. THE NO<sub>x</sub> SIP CALL RULE REPRESENTS THE SOLUTION TO THE PROBLEM OF DOWNWIND TRANSPORT.

Finally, this Committee has asked me to give my views concerning the ability of EPA, states and local areas to address downwind attainment problems in the future. In my view, the NO<sub>x</sub> SIP Call Rule will solve this problem for Atlanta and many other areas. That is exactly what the NO<sub>x</sub> SIP Call Rule was designed to do. The Extension Policy is necessary because the NO<sub>x</sub> SIP Call Rule was delayed, but the NO<sub>x</sub> SIP Call Rule is now on schedule to be implemented in 2004.

Furthermore, even if the NO<sub>x</sub> SIP Call Rule does not prove to be 100% effective, we now have the data and the modeling technology necessary to make any necessary adjustments to this rule. We are far ahead of where we were in 1994 when EPA first began to develop regional transport controls. EPA has now filled the “data gap” that was the original and primary cause of delay.

#### A. The “Data Gap” That Delayed Implementation of Transport Controls Has Been Filled.

The Extension Policy is a direct result of the “data gap” that EPA identified in its 1993 report to Congress in accordance with Section 185B. Among other subjects, the 185B Report sought to identify the “basic information” that would be required to use photochemical grid models to evaluate attainment strategies.<sup>29</sup> EPA concluded that “high quality emissions, air quality and meteorological data bases” would be “critical for deriving credible model conclusions.”<sup>30</sup> The report also noted, however, that such data bases did not exist at the time.<sup>31</sup> This “data gap” had to be filled before these models could be used to evaluate ozone control strategies.<sup>32</sup> However, the first Attainment Demonstration SIPs were due in just over a year.<sup>33</sup> EPA later confirmed that it would be difficult or impossible for many states to comply with this submission deadline because the necessary technical information did not exist.<sup>34</sup> Therefore, EPA extended the deadline for states to submit their Attainment Demonstration SIPs.<sup>35</sup>

EPA explained its decision to extend SIP submission deadlines to Congress in an oversight hearing in 1995. EPA explained that it was faced with two choices:

To reduce ozone to healthful levels in many cities east of the Mississippi River, there are two choices: (1) ignore the quality of the air blowing in from upwind areas and require cities to develop stricter, more costly programs to maintain healthy air; or (2) work to find cost-effective ways of reducing emissions “blowing in” from power plants and other sources in upwind areas so that downwind cities do not have to take extreme or unnecessarily costly steps to clean up pollution they did not create to try to maintain healthy air quality. Clearly the latter is the common sense approach.<sup>36</sup>

To take advantage of the extension policy that EPA described to Congress, states were required to make an “enforceable commitment” to participate in a “multi-state

<sup>28</sup>The text of the penalty applies only to VOCs. See 42 U.S.C. §7511d. However, a separate provision states that all SIP provisions that apply to major stationary sources of VOCs apply equally to major stationary sources of NO<sub>x</sub>. 42 U.S.C. §7511a(f).

<sup>29</sup>See 42 U.S.C. §7511f.

<sup>30</sup>See *id.*

<sup>31</sup>See *id.*

<sup>32</sup>See Memo from Mary D. Nichols to Regional Air Directors (Sept. 1, 1994) (“1994 Nichols Memorandum”) at 1-3. The 1994 Nichols Memorandum is available on EPA’s website at <http://www.epa.gov/ttn/oarpg/t1/memoranda/mnozone.pdf>

<sup>33</sup>42 U.S.C. §7511a(c)(2). The SIP is actually the total collection of rules and regulations and control strategies that have been approved by EPA and that are in effect at any one time. The Clean Air Act Amendments of 1990 include many deadlines for specific SIP revisions to incorporate specific programs and/or to make specific demonstrations. We refer to the SIP submitted to fulfill the attainment requirement of 42 U.S.C. §7511a(c)(2)(a) as the “Attainment Demonstration SIP.”

<sup>34</sup>See Memo from Mary D. Nichols to Regional Air Directors (Sept. 1, 1994) (“1994 Nichols Memorandum”) at 1-3. The 1994 Nichols Memorandum is available on EPA’s website at <http://www.epa.gov/ttn/oarpg/t1/memoranda/mnozone.pdf>; NO<sub>x</sub> SIP Call, 63 Fed. Reg. 57356 col. 1 (Oct. 27, 1998) (“NO<sub>x</sub> SIP Call”).

<sup>35</sup>1994 Nichols Memorandum at 3; NO<sub>x</sub> SIP Call, 63 Fed. Reg. at 57,361 col. 1.

<sup>36</sup>See Nichols Testimony, *supra* note, at 126.

consultative process” to address the problem of ozone transport.<sup>37</sup> This consultative process took the form of the Ozone Transport Assessment Group (“OTAG”), which was convened in 1995 to conduct “the most comprehensive analysis of ozone transport ever conducted.”<sup>38</sup> OTAG was a monumental effort, requiring coordination of representatives of 37 states east of the Rocky Mountains, along with representatives from EPA, industry and environmental groups.

OTAG filled the data gap, and thus made it possible to address the problem of ozone transport. However, the group was not able to reach consensus on specific NO<sub>x</sub> emissions controls that should be imposed on sources in upwind states to enable downwind states to attain. When OTAG concluded its work in June 1997, the group still had not developed a regional strategy to address the problem of ozone transport. That responsibility reverted back to EPA. EPA issued its notice of proposed rulemaking on November 7, 1997.<sup>39</sup> After an extended notice-and-comment period, the NO<sub>x</sub> SIP Call Rule was finally promulgated on October 27, 1998.<sup>40</sup>

The NO<sub>x</sub> SIP Call Rule represents the solution to the problem of ozone transport, but it came too late for Atlanta and numerous other Marginal, Moderate, and Serious areas.<sup>41</sup> As EPA explained in its Notice of Proposed Rulemaking for the NO<sub>x</sub> SIP Call:

The amount of time that is necessary to assure that the rulemaking proposed today is well considered by all affected parties, added to the amount of time necessary for the States to adopt the required SIP revisions, and the amount of lead-time necessary to implement the required controls, means that **those controls cannot be expected to be in place in time to assist the serious areas in reaching their attainment date.**<sup>42</sup>

Implementation of the NO<sub>x</sub> SIP Call was delayed even further by litigation after the rule was promulgated. On August 30, 2000, the D.C. Circuit affirmed the NO<sub>x</sub> SIP Call Rule in most respects, but delayed its implementation an additional year to give upwind states time to comply.<sup>43</sup> As a result, downwind areas like Atlanta must wait until May 31, 2004 for relief from upwind emissions.

These delays led EPA to extend the deadline for submission of Atlanta’s Attainment Demonstration SIP. In 1995, when EPA first announced a formal policy of extending the initial submission deadlines for states affected by downwind transport,<sup>44</sup> the purpose was to allow Georgia EPD (and others) to incorporate the results of the OTAG process into the Attainment Demonstration SIP.<sup>45</sup> Initially, this was to be completed by 1996.<sup>46</sup> When EPA took over OTAG’s work by initiating the NO<sub>x</sub> SIP Call rulemaking, the deadline for submission of the Attainment Demonstration SIP had to be extended even further.<sup>47</sup> The court-ordered modifications to the NO<sub>x</sub> SIP Call required additional modifications to the Attainment Demonstration SIP,<sup>48</sup> and for this reason Atlanta’s Attainment Demonstration SIP was not submitted until July 17, 2001.<sup>49</sup>

#### *B. The Extension Policy is a Necessary Response to Prior Delays.*

In summary, the Extension Policy is a necessary out-growth of the data gap and the subsequent history of extensions that have already been granted by EPA. It would be unfair and counter-productive to hold the states to the original schedule

<sup>37</sup> *Id.*; 1995 Nichols Memorandum at 2. (See Memo from Mary D. Nichols to Regional Administrator, Regions I-X (March 2, 1995) (“1995 Nichols Memorandum”).)

<sup>38</sup> See NO<sub>x</sub> SIP Call, 63 Fed. Reg. at 57,362.

<sup>39</sup> See 62 Fed. Reg. 60,318 (Nov. 7, 1997).

<sup>40</sup> NO<sub>x</sub> SIP Call, 63 Fed. Reg. at 57,358 col. 2.

<sup>41</sup> Because the “Serious,” “Moderate,” and “Marginal” attainment dates have all passed, all remaining non-attainment areas would already have been bumped up to Severe if not for EPA’s common-sense policy of extending attainment dates. In fact, of the 53 ozone non-attainment areas nationwide, only 13 are either Severe or Extreme. Three of the Severe areas were only recently bumped up, following EPA’s abandonment of the Extension Policy. The remaining areas are Serious (19 areas with a 1999 attainment date); Moderate (12 areas with a 1996 attainment date); and Marginal (20 areas with a 1993 attainment date). This information is available on EPA’s website at <http://www.epa.gov/oar/oaqps/greenbk/oindex.html#List5>.

<sup>42</sup> 62 Fed. Reg. 60,318, 60,328 cols. 2-3 (emphasis added).

<sup>43</sup> See *Michigan v. EPA*, No. 98-1497 (D.C. Cir. Aug. 30, 2000).

<sup>44</sup> See generally 1995 Nichols Memorandum.

<sup>45</sup> 1995 Nichols Memorandum at 3.

<sup>46</sup> *Id.*

<sup>47</sup> NO<sub>x</sub> SIP Call Rule, 63 Fed. Reg. at 57,358 col. 1-2.

<sup>48</sup> 66 Fed. Reg. 7904 (Jan. 26, 2001).

<sup>49</sup> EPA approved the Attainment Demonstration SIP on May 7, 2002. See Approval and Promulgation of Implementation Plans; Georgia 1-hour Ozone Attainment Demonstration, Motor Vehicle Emissions Budgets, Reasonably Available Control Measures, 68 Fed. Reg. 30,574 (May 7, 2002). EPA has now vacated its approval, however, as a result of its decision that it can no longer defend the Extension Policy.

as if these federal delays had not occurred. Indeed, the Extension Policy is the only way to preserve the original statutory scheme and to prevent the “bump up” mechanism from having unfair and counter-productive consequences that Congress surely did not intend.

#### CONCLUSION

Finally, despite these problems, I am happy to report that the Clean Air Act is working. The air in Atlanta is getting cleaner. It will be even cleaner still once the NO<sub>x</sub> SIP Call Rule takes effect in 2004. It is a testament to EPA that the agency took the time to do NO<sub>x</sub> SIP Call right instead of rushing to an incomplete solution. My only concern is that, by taking the time to do the job right, EPA has inadvertently put the States in a position of being penalized for delays beyond their control. Instead of penalizing the states by bumping them up, we should acknowledge their progress in working with EPA to bring the NO<sub>x</sub> SIP Call to fruition, and we should extend their attainment dates to allow all parties to reap the benefits of this collective effort.

**TAB A**

**SEC. XX. ATTAINMENT DATES FOR DOWNWIND OZONE NON-  
ATTAINMENT AREAS.**

**SEC. XX. ATTAINMENT DATES FOR DOWNWIND OZONE NON-ATTAINMENT AREAS.**

Section 181 of the Clean Air Act (42 U.S.C.7511) is amended by adding the following new subsection at the end thereof:

“(d) EXTENDED ATTAINMENT DATE FOR CERTAIN DOWNWIND AREAS.—

“(1) DEFINITIONS.—(A) The term ‘downwind area’ means an area that is affected by transport from either —

“(i) an upwind area in the same State with a later attainment date; or

“(ii) an upwind area in another State that the Administrator has found to be significantly contributing to nonattainment in the downwind area in violation of section 110(a)(2)(D) and for which the Administrator has established requirements through notice and comment rulemaking to eliminate the emissions causing such significant contribution.

“(B) The term ‘current classification’ means the classification of a downwind area under this section at the time of the determination under paragraph (2).

“(C) The term “affected by transport” means that the downwind area is affected by transport from the upwind area to a degree that affects the downwind area’s ability to attain.

“(2) EXTENSION.—If the Administrator determines that any area is a downwind area with respect to ozone and that the criteria of paragraph (3) are

satisfied, the Administrator, in lieu of reclassification under paragraph (b)(2)(A), shall extend the attainment date for such downwind area in accordance with paragraph (5).

“(3) CRITERIA FOR APPROVAL.—(A) In order to extend the attainment date for a downwind area under this subsection, the Administrator must approve a demonstration that the applicable implementation plan for the downwind area, as revised if necessary —

“(i) complies with all requirements of this Act applicable under the current classification of the downwind area, and

“(ii) includes any additional measures needed to demonstrate attainment by the extended attainment date provided under this subsection.

“(4) PRIOR RECLASSIFICATION DETERMINATION.— Attainment date extensions previously granted by the Administrator under the policy entitled Extension of Attainment Dates for Downwind Transport Areas, 64 Fed. Reg. 14,444 (March 25, 1999), shall be deemed effective upon the effective date of this legislation, notwithstanding any prior or pending court action concerning the authority of the Administrator to issues such extensions. For areas that have previously been reclassified under subsection (b)(2)(A), the reclassification shall be withdrawn upon approval by the Administrator of the demonstration referred to in paragraph (3), and the attainment date shall be extended in accordance with paragraph (5) upon such approval. In such instances the ‘current classification’ used for evaluating the demonstration under paragraph



(3) shall be the classification of the downwind area under this section immediately prior to such reclassification.

“(5) EXTENDED DATE.—The attainment date extended under this subparagraph shall provide for attainment of the national ambient air quality standard for ozone in the downwind area as expeditiously as practicable but no later than the date on which the last reductions in pollution transport necessary for attainment in the downwind area are required to be achieved by the upwind area or areas.

“(6) REVISED ATTAINMENT DATES FOR AREAS RECLASSIFIED PURSUANT TO 7511(b).— If an area that has received an extension under this paragraph is subsequently reclassified pursuant to 7511(b), the attainment date for the reclassified area shall be November 15 in the fifth year after date of such reclassification.”.

## **TAB B**

**PROPOSED AMENDMENT TO THE CLEAN AIR ACT  
TO FIX PROBLEMS CAUSED BY FEDERAL RFG**

**PROPOSED EXTENSION OF REQUIREMENT TO USE FEDERAL RFG**

- ◆ The Atlanta Non-Attainment Area will be required to use federal Reformulated Gasoline (“RFG”) by September 2004.
  - ◇ Under the Clean Air Act, non-attainment areas are required to use federal RFG within one year of being bumped up to the Severe non-attainment classification. Atlanta will be bumped up to Severe by September 15, 2003 as a result of recent court action.
  - ◇ As of September 15, 2004, it will be unlawful for gasoline distributors in this area to sell anything but RFG. This requirement will take effect without any action by the State, and will be enforced directly by EPA.
- ◆ The mandate to use federal RFG is acceptable to most areas, but not to Atlanta. In Atlanta, this mandate will impede our progress toward clean air.
  - ◇ Federal RFG is not the right fuel solution for Atlanta. Georgia EPD has developed a superior low-sulfur fuel, which is targeted at reducing the specific pollutants that cause ozone in Atlanta.
  - ◇ EPA has acknowledged that Georgia’s fuel is superior to RFG for the Atlanta area. For this reason, EPA granted a “preemption waiver” to Georgia EPD to allow Georgia EPD to adopt this low-sulfur fuel rule.
  - ◇ Once the requirement to use federal RFG takes effect, Georgia EPD will be forced to abandon the low-sulfur rule. It would not be feasible to mandate the use of a combination low-sulfur / RFG gasoline, as such a requirement could create substantial supply and distribution problems and dramatic price spikes.
- ◆ **This problem could be fixed by granting a one- to two-year extension on the requirement to adopt federal RFG.**
  - ◇ The benefits of Georgia’s low-sulfur program will phase-out as the federal low-sulfur mandate phases in. The federal low-sulfur program will be fully phased-in in 2006.
  - ◇ By Fall of 2006, Georgia EPD should be able to revoke the state low-sulfur rule, and adopt federal RFG, without any adverse consequences to the region’s air quality.
- ◆ This issue is unique to Georgia, as Atlanta is the only new Severe area that has received a preemption waiver under 42 U.S.C. § 7545(c)(4)(C) to adopt a local fuel rule that is superior (for this region) to federal RFG.
- ◆ The proposed amendment would also defuse a situation that has the potential to create substantial supply and distribution problems within the metropolitan Atlanta region, and dramatically increased prices.

**PROPOSED EXTENSION OF REQUIREMENT TO USE FEDERAL RFG**

Proposed new paragraph 42 U.S.C. § 7545(k)(11):

If an area that has received a waiver under 42 U.S.C. § 7545(c)(4)(C)<sup>50</sup> becomes a "covered area"<sup>51</sup> as a result of reclassification under 42 U.S.C. § 7511(b),<sup>52</sup> the Governor of such state may petition the Administrator to extend the effective date of the prohibition under 42 U.S.C. § 7545(k)(5)<sup>53</sup> for up to one year. Such petitions shall be granted if the fuel formulation approved for use within the covered area under 42 U.S.C. § 7545(c)(4)(C) would achieve reductions in ozone concentrations greater than or equal to the reductions achieved by Reformulated Gasoline. The Administrator shall act on such petitions within 90 days of receipt. The Administrator may renew such extensions for 2 additional one-year periods.<sup>54</sup>

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<sup>50</sup> 42 U.S.C. § 7545(c)(4)(C), CAA § 211(c)(4)(C), provides EPA with the authority to grant a "preemption waiver" to allow states to adopt state-specific fuel rules. Georgia EPD received a waiver for Georgia's low-sulfur gasoline on February 22, 2002. *See* Approval and Promulgation of Air Quality State Implementation Plans; Georgia: Control of Gasoline Sulfur and Volatility, 66 Fed. Reg. 8200 (Feb. 22, 2002).

<sup>51</sup> 42 U.S.C. § 7545(k)(5), CAA § 211(k)(5), prohibits the use of "conventional gasoline," as opposed to Reformulated Gasoline, in "covered areas." 42 U.S.C. § 7545(k)(10)(D), CAA § 211(k)(10)(D), states that "[e]ffective one year after the reclassification of any ozone nonattainment area as a Severe ozone nonattainment area under section [42 U.S.C. § 7511(b), CAA § 181(b)], such Severe area shall also be a 'covered area' for purposes of this subsection."

<sup>52</sup> 42 U.S.C. § 7511(b), CAA § 181(b), is the "bump up" provision, which provides for Serious non-attainment areas to be reclassified as Severe upon a finding of non-attainment.

<sup>53</sup> *See* note 2.

<sup>54</sup> Note that there is a similar provision in the Clean Air Act for areas that "opt-in" to the RFG program. *See* 42 U.S.C. § 7545(k)(6)(B), CAA § 211(k)(6)(B). For such areas, EPA has the authority to delay the effective date of the prohibition in 42 U.S.C. § 7545(k)(5), CAA § 211(k)(5), for one additional year. The extension can be renewed for two additional years.

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**TAB C**

**AFFIDAVIT OF HAROLD F. REHEIS,  
FORMER DIRECTOR OF GEORGIA ENVIRONMENTAL PROTECTION  
DIVISION**

IN THE UNITED STATES COURT OF APPEALS  
FOR THE ELEVENTH CIRCUIT

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SOUTHERN ORGANIZING	)	)
COMMITTEE FOR ECONOMIC AND	)	)
SOCIAL JUSTICE and GEORGIA	)	)
COALITION FOR THE PEOPLE'S	)	)
AGENDA,	)	)
	)	)
Petitioners,	)	)
	)	)
v.	)	Civil Appeal No.: 02-13486-A
	)	)
U.S. ENVIRONMENTAL PROTECTION	)	)
AGENCY,	)	)
	)	)
Respondent,	)	)
	)	)
and	)	)
	)	)
STATE OF GEORGIA,	)	)
	)	)
Intervening Respondent.	)	)
<hr/>		)

AFFIDAVIT OF HAROLD F. REHEIS

STATE OF GEORGIA  
COUNTY OF FULTON

PERSONALLY APPEARED before the undersigned officer, authorized to administer oaths, HAROLD F. REHEIS, ("Affiant"), who, first being duly sworn, testifies as follows:

1. My name is Harold F. Reheis. I am over 18 years of age and am competent to give this Affidavit. My testimony herein is based on personal knowledge and upon documents maintained in the files of the Georgia Environmental Protection Division.

2. I am currently the Director of the Environmental Protection Division of the Department of Natural Resources of the State of Georgia (EPD). As Director, I manage all state environmental programs, including air and water quality, safe drinking water, water resource allocation, solid and hazardous waste, erosion and sedimentation control, radiation control, mine reclamation, underground storage tanks, groundwater protection, and the State Geologic Survey unit. I supervise a staff of more than 750 people and administer an annual budget of approximately \$80 million.

3. I have a Bachelor of Civil Engineering degree from the Georgia Institute of Technology and a Masters of Environmental Engineering degree from the University of Florida. I am also a Registered Professional Engineer in Georgia, South Carolina, and North Carolina.

4. I began my career with EPD in 1969 in the water quality control program. I served as the Chief of the Water Quality Control Section from 1976 until 1981, when I left EPD to manage the Process Engineering Department at

Jordan, Jones & Goulding Engineers. In 1983, I rejoined EPD. I became Assistant Director of EPD in 1984 and Director in 1991.

**BACKGROUND ON OZONE  
AND PRECURSOR CONTROL STRATEGIES**

5. The 1990 amendments to the federal Clean Air Act (CAA) established control measures and other requirements for areas designated non-attainment for the national ambient air quality standard (NAAQS) for the pollutant ozone.

6. The NAAQS for ground-level ozone is 0.12 parts per million (ppm). An area exceeds this standard each time an ambient air quality monitor anywhere within the area records a 1-hour average ozone concentration above 0.124 ppm. An area violates the 1-hour ozone NAAQS if, over a consecutive three-year period, more than three exceedences occur at any monitor. This means that if ozone monitors measure four exceedences within a year, that area will be designated as nonattainment even if no further exceedences are measured during the next two years.

7. Ozone is formed in the atmosphere through a series of complex chemical reactions that take place when precursor compounds, mainly nitrogen oxides (NO<sub>x</sub>) and volatile organic compounds (VOCs), combine in the presence of intense sunlight. Therefore, hot stagnant weather creates conditions for the



creation of ozone. For the Atlanta non-attainment area, these conditions occur during the months of May, June, July, August, and September.

8. Scientific understanding of the formation and control of ozone has progressed rapidly in the past decade. Throughout the 1970s and mid-1980s, scientists and regulators had focused almost exclusively on VOC emissions control strategies as the primary means of controlling ozone. In the late 1980s and early 1990s, however, Atlanta was the focus of a number of studies on the role of natural or "biogenic" VOCs in the formation of ozone.<sup>1</sup> Originally, biogenic VOCs had been discounted and excluded from air quality models. The Atlanta studies demonstrated that this was a major omission. In Atlanta, biogenic VOC emissions play a far more significant role in ozone formation than previously understood. Based on the 1990 emissions inventory, vegetation (biogenic emissions) accounts for at least 60% of all VOC emissions in the Atlanta non-attainment area.

9. Given the abundance of biogenic VOCs in the atmosphere, ozone in Atlanta is "NO<sub>x</sub>-limited." This means that ozone concentrations are most sensitive to the availability of NO<sub>x</sub> in the atmosphere to fuel the chemical reaction that creates ozone. Accordingly, it has been determined through numerous studies that

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<sup>1</sup> See U.S. Environmental Protection Agency, *The Role of Ozone Precursors in Tropospheric Ozone Formation and Control* at 2-1 (July 1993) (Section 185B Report).

the best method to address ozone in the southeast is by reducing NO<sub>x</sub> emissions. Controls directed at reducing VOC emissions are of comparatively little benefit.

10. As EPA recognized in a 1993 Report to Congress, these findings revealed serious flaws in the one-size-fits-all control strategy that Congress had adopted in the Clean Air Act Amendments of 1990.<sup>2</sup> These findings explain why the additional controls measures that would be required if Atlanta were reclassified as a Severe non-attainment area would do little if anything to improve the ozone situation in this area.

11. In addition, recognizing that the full impact of ozone transport on an area's ability to attain the ozone NAAQS had not yet been determined, EPA in early 1995 called for a collaborative process among the states in the eastern U.S. to study ozone transport. EPA's effort led to the formation of the Ozone Transport Assessment Group (OTAG). EPA allowed states to submit their ozone attainment demonstration SIPs in the future based on the expected completion dates of OTAG's work.

12. For about two years, Georgia EPD worked with OTAG, which consisted of EPA, Georgia and 36 other states, industry, and environmental groups, to study the issue of transported ozone and ozone precursors. OTAG evaluated air

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<sup>2</sup> *Id.* at 2-1 to -2.

quality monitoring data, performed extensive computerized photochemical grid modeling, and developed possible VOC and NO<sub>x</sub> control strategies that could be recommended to EPA to address the problem of ozone transport.

13. OTAG completed its work and made recommendations to EPA in June 1997. OTAG generally concluded that there does appear to be significant interstate transport of ozone and ozone precursors and that, because of such transport, NO<sub>x</sub> emissions should be reduced regionally to enable states in the OTAG region to attain the ozone NAAQS. OTAG left it up to EPA to calculate the necessary NO<sub>x</sub> reductions.

14. In November 1997, based on the work of OTAG, EPA proposed a rule that would require Georgia, 21 other states and the District of Columbia to revise their SIPs to reduce NO<sub>x</sub> emissions to address the problem of ozone transport. This rule, commonly referred to as the NO<sub>x</sub> SIP Call, was not issued by EPA until October 1998. Even then, the reductions called for in the NO<sub>x</sub> SIP Call were not scheduled to take effect until May 2003. In August 2000, the U.S. Court of Appeals for the D.C. Circuit extended the deadline of NO<sub>x</sub> reductions even further to give upwind states time to comply. As a result, upwind states now have until May 2004 to implement the transport controls required by the NO<sub>x</sub> SIP Call.

15. Both EPA and Georgia EPD have determined that the large NO<sub>x</sub> emissions from surrounding states will prevent the metro Atlanta area from attaining the ozone standard, even with significant local controls, until the reductions called for in the NO<sub>x</sub> SIP Call are implemented.

**LOCAL EMISSIONS CONTROLS UNDER  
THE ATTAINMENT SIP**

16. In light of these developments in the science of ozone formation and control, Georgia EPD has adopted a "NO<sub>x</sub>-control" strategy as the most effective strategy for attaining the one-hour standard. Specific elements of this strategy include the following:

(a) Implementation of all elements of the 9% ROP SIP, which resulted in NO<sub>x</sub> reductions of 50.10 tpd from 1990 to 1999, through, among other things, the requirement to use Reasonably Available Control Technology (RACT) for NO<sub>x</sub> on certain stationary sources and the enhanced motor vehicle emission inspection and maintenance program.

(b) Implementation of all elements of the 15% Rate of Progress State Implementation Plan (ROP SIP), which resulted in 117.06 tons per day (tpd) of VOC reduction from 1990 to 1996, through, among other things, the enhanced motor vehicle emission inspection and maintenance program, low Reid Vapor

Pressure (RVP) gasoline, Stage II gasoline vapor recovery, a ban on open/slash/prescribed burning, and reliance upon federal rules on architectural and industrial maintenance coatings, auto body repair shops, and new vehicle emissions.

(c) Adoption of rules governing gasoline sold in a 25-county area in and around the Atlanta Ozone Non-attainment Area. Phase 1 of this rule was implemented in 1999. Phase 1 imposed limits on the sulfur content of gasoline sold during the ozone season in a 25-county area in and around the Atlanta non-attainment area. This rule reduced NO<sub>x</sub> and VOC emissions by 11.7 tpd and 17.8 tpd, respectively, in 1999. Phase 2 of this rule will be implemented in 2003, expanding the required use of Georgia Gasoline to an additional 20 counties.

(d) Adoption of rules for modifications at Georgia Power's Yates and McDonough plants (both located within the 13-county non-attainment area), for seasonal application of natural gas technologies, thereby reducing NO<sub>x</sub> emissions by an average of 25.90 tpd in 1999.

(e) Implementation of the Partnership For A Smog-Free Georgia (PSG) Program to obtain voluntary actions by local businesses, governments, schools, universities, and the general public to reduce single occupancy vehicle use,

thereby reducing VOC and NO<sub>x</sub> emissions by 13.0 tpd and 8.6 tpd, respectively, during the summer season when ozone concentrations are the highest.

17. These control strategies have been effective. These measures have improved air quality even though the Atlanta area has experienced growth far above the levels projected when these plans were designed. Based on its earlier design value of 0.162 parts per million (ppm) determined from monitoring data for the years 1987 through 1989, Atlanta was classified a Serious ozone non-attainment area. However, the most recent monitoring data for the years 1999 through the 2001 ozone season (May through September), now indicates a reduction in ozone concentrations, so that the three-year design value is 0.156 ppm. In fact, during the 2001 ozone season, the Atlanta non-attainment area recorded only three exceedences. Therefore, if the Atlanta area were reclassified today, it would no longer be considered a Serious non-attainment area under the CAA. Based on the current three-year design value, Atlanta would be classified as a Moderate non-attainment area. This progress in air quality has been made despite the tremendous growth in metro Atlanta over the past decade. For example, year 2000 census data shows that within the 13-county Atlanta metropolitan area alone, the population has increased almost 40% from 1990.

18. In addition to the local control measures already implemented, Georgia will implement a number of additional measures by May 2003 to achieve attainment. Some of these measures include:

(a) Adoption of rules requiring Phase 2 Georgia Gasoline, significantly lowering the sulfur content of gasoline sold during the ozone season in a 45-county area in and around the Atlanta non-attainment area, which will reduce NO<sub>x</sub> and VOC emissions by 23.54 tpd and 30.50 tpd, respectively, in 2003;

(b) Modifications at point sources with large electric utility steam generating units located in and around the Atlanta non-attainment area, which will reduce NO<sub>x</sub> emissions by approximately 290 tpd in 2003.

(c) Modifications at three point sources with large NO<sub>x</sub> emitting units other than electric utility steam generating units located in the Atlanta non-attainment area, which will reduce NO<sub>x</sub> emissions by 18.83 tpd in 2003.

(d) Adoption of additional requirements in the enhanced motor vehicle emission inspection and maintenance program for the Atlanta non-attainment area, which will reduce NO<sub>x</sub> and VOC emissions by 11.34 tpd and 13.17 tpd, respectively, in 2003.

(e) Expansion of New Source Review (NSR) requirements to applicable point sources located in counties around the Atlanta non-attainment area, which will reduce NO<sub>x</sub> emissions by 21 tpd in 2003.

(f) Adoption of a rule regulating NO<sub>x</sub> emissions from medium-sized new boilers and other fuel-burning equipment in counties around the Atlanta non-attainment area, which will reduce NO<sub>x</sub> emissions by 0.7 tpd in 2003.

(g) Adoption of a rule regulating NO<sub>x</sub> emissions from new and existing stationary engines and new stationary gas turbines used to generate electricity (including peaking power) located in counties around the Atlanta non-attainment area, which will reduce NO<sub>x</sub> emissions by at least 30 tpd in 2003.

#### **THE ROLE OF TRANSPORT**

19. Unlike VOCs, NO<sub>x</sub> can travel for hundreds of miles in the upper atmosphere. Therefore, the "transport issue" is of particular concern to areas like Atlanta that are NO<sub>x</sub>-limited.

20. Georgia EPD has concluded, and EPA has confirmed, that the inability of the Atlanta area to attain the ozone standard to date can be attributed in large part to the significant impact of transported NO<sub>x</sub> from upwind emission sources into the Atlanta area. The impact of transported NO<sub>x</sub> on the ozone situation in Atlanta is highly significant. In the absence of transport controls, modeling done in



the early 1990s in preparation for the Attainment SIP indicated that reductions in all ozone precursor emissions of up to 66% beyond planned controls would have little positive effect on ozone concentrations; in some cases a 33% reduction in NO<sub>x</sub> showed an increase in ozone. In fact, based on EPA modeling done in support of the NO<sub>x</sub> SIP Call Rule, nitrogen oxides from upwind states (including Alabama, Kentucky, North Carolina, South Carolina, and Tennessee) are significant contributors to ozone and ozone precursors in the Atlanta area and on some days can contribute to as much as 23% of the ozone standard.

21. Georgia EPD does not have jurisdiction to control NO<sub>x</sub> emissions from upwind sources that are out-of-state. That is the responsibility of the federal EPA. Under the Clean Air Act, EPA is required to ensure that emissions in upwind states do not interfere with attainment in downwind states. As discussed above, despite this responsibility, EPA's efforts to control upwind emissions were hampered by the lack of sufficient information concerning the formation and transport of ozone. As a result, the implementation of effective federal transport controls was delayed for a number of years. These delays have prevented Atlanta from attaining the one-hour ozone standard.

22. Some have suggested that Georgia should have filed what is known as a Section 126 Petition against its sister states in order to resolve the problem of

transport. Georgia considered filing a such a petition but opted not to pursue such action after concluding that the OTAG process was the best way to get the needed reductions in the transport of ozone. As it turns out, we were right. While some states did file Section 126 Petitions, EPA has synchronized the deadlines imposed pursuant to those petitions and the NO<sub>x</sub> SIP Call. As a result, those who filed Section 126 Petitions are no better off than those who sought reductions through the OTAG process. Moreover, to bring a Section 126 Petition, a downwind state must identify the out-of-state source or sources with problem emissions. Neither EPA nor Georgia EPD had this information until OTAG completed its work. In short, Georgia simply had no ability to force the reduction of NO<sub>x</sub> emissions in neighboring states on a faster timetable than that called for by EPA in the NO<sub>x</sub> SIP Call.

23. EPA promulgated the NO<sub>x</sub> SIP Call Rule on October 28, 1998. The NO<sub>x</sub> SIP Call Rule is the federal answer to the problem of NO<sub>x</sub> transport. When this rule is implemented in 2004, our best projections show that Atlanta will attain the one-hour standard.

**SEVERE-AREA REQUIREMENTS WILL NOT  
BENEFIT AIR QUALITY IN ATLANTA**

24. In contrast to the local control measures included in the Attainment SIP, and to the measures that will be implemented to control upwind out-of-state emissions when the NO<sub>x</sub> SIP Call Rule is implemented, the additional control measures that would be required if Atlanta were reclassified (“bumped up”) from Serious to Severe would have, at most, a negligible impact on ozone concentrations. In fact, some of the measures that would be required could actually complicate and hinder the progress we have made in improving air quality.

25. It is especially important to note that reclassification as a Severe area will have no impact on the Motor Vehicle Emissions Budgets for the Atlanta area. EPA has already determined that the Attainment SIP includes all of the necessary local controls to achieve the ozone standard by the deadline applicable to Severe areas. Therefore, even if the State is required to adopt additional control measures to comply with the technical requirements of the statute, that exercise will have no effect on the MVEBs. *In other words, if Atlanta is bumped up, the MVEBs will remain exactly the same.*

26. If Atlanta were reclassified as a Severe non-attainment area, Georgia EPD would be required to include four new control programs in the Attainment SIP, and gasoline distributors will have to sell Federal Reformulated Gasoline.

None of these would have any measurable effect on air quality. The reasons are explained below.

**“Major Source”**

27. The first requirement applicable to Severe non-attainment areas pertains to the definition of a “major source” of VOCs or NO<sub>x</sub> as contained in Section 182(d). This definition provides the distinction between sources that are required to meet the Reasonably Available Control Technology (RACT) requirements of the Clean Air Act and sources that are not. For Serious areas, the cut-off point is 50 tons per year: that is, sources that emit at least 50 tons per year of VOCs or NO<sub>x</sub> are required to comply with the RACT requirements; sources that emit less than 50 tons per year are not. For Severe areas, the cut-off is reduced to 25 tons per year.

28. The elements of this requirement that would benefit air quality are already in effect in Atlanta. On its own initiative, Georgia adopted the Severe-area RACT requirements for VOCs in 1988. Stationary sources emitting VOCs in excess of 25 tons per year have been required to implement RACT since 1990. This part of the requirement is already in effect.

29. Georgia EPD considered imposing the same requirement on sources of NO<sub>x</sub>, but found that it would have no impact on ozone concentrations, and that the

administrative and economic costs of this measure would far outweigh any benefits that might be achieved. Based on current emissions data, such a measure would require an additional 11 stationary sources to implement RACT. Combined, these sources emit a total of less than one ton of NO<sub>x</sub> per day (approximately 347 tons per year). For comparison, note that over 105,000 tons of NO<sub>x</sub> are emitted within the Atlanta non-attainment area each year. Even if the RACT requirements were to cause these 11 additional sources to shut down entirely and leave the non-attainment area — and there is no reason to believe this would happen — the savings in NO<sub>x</sub> emissions would amount to less than 0.3% of the total emissions for the non-attainment area. Our modeling data indicates that this reduction in NO<sub>x</sub> emissions would translate into ozone reductions of approximately 0.03 ppb. That is 0.03 parts per *billion* — the one-hour standard is measured in parts per *million* (0.12 ppm). A reduction of 0.03 parts per *billion* (which equates to 0.00003 parts per million) on the ozone design standard would be truly negligible.

#### **TCM Requirement**

30. The Attainment SIP also already satisfies the second requirement for a Severe area SIP. Section 182(d)(1) requires Severe areas to study and adopt “Transportation Control Measures” (TCMs) that are sufficient to meet certain goals.

31. The Attainment SIP already includes an aggressive program of TCMs. The TCMs included in the Attainment SIP satisfy the requirements of Section 182(d)(1). Under Section 182(d)(1), TCMs are required only to the extent necessary to offset "growth in emissions" of VOCs from growth in vehicle miles traveled or numbers of vehicle trips. As a result, in part, of the measures already included in the Attainment SIP, motor vehicle emissions of VOCs within the non-attainment area are currently projected to fall from 183.12 tpd in 1999 to less than 106.25 tpd by 2004. Therefore, the TCMs in the Attainment SIP achieve emissions reductions that are more than enough to satisfy the Severe area requirements of Section 182(d)(1).

32. Also note that the statutory performance standard is essentially irrelevant for this area. The requirement is to adopt TCMs sufficient to offset emissions of VOCs. The requirement does not apply to NO<sub>x</sub>. EPA has advised Georgia and other States that we "may wish to adopt similar goals for NO<sub>x</sub> emissions from mobile sources in cases where NO<sub>x</sub> reductions are beneficial to attainment," but this is a *voluntary* option.

33. For the reasons stated above, it is my understanding as the Director of Georgia EPD that nothing more would be required under Section 182(d)(1), even if Atlanta were reclassified as a Severe area.

**Increase in Offset Requirement**

34. Another control measure that is required to be included in a Severe-area SIP relates to the "offset requirement." The offset requirement is essentially a nullity. It has not been invoked in the Atlanta area since 1979. Accordingly, changes to this requirement will have no impact on air quality at all.

35. The offset requirement applies only to new sources seeking to locate within the non-attainment area. In Serious areas, new sources are required to obtain "offsets" in a ratio of 1:1.2. Thus, to obtain a permit to emit 100 tons per year of NO<sub>x</sub>, a new source would be required to obtain off-setting emissions *reductions* in the amount of 120 tons per year. Increasing the offset-ratio from 1.2 to 1.3, as required for Severe areas, would have no impact on air quality. In the Atlanta non-attainment area, the current offset, at 1.2, has been more than enough to prevent new sources from locating in this area.

**Section 185 Penalties**

36. Next, Severe areas are required to include in the SIP a provision to penalize each and every major source of VOCs and NO<sub>x</sub> in the event the area fails to attain the ozone standard by the Severe area attainment date (2005). The penalties are described in the statute as a punitive measure. The penalties will do nothing to help achieve the ozone standard before 2005; if anything the penalty will be counter-productive.

37. By statute, the penalty is equal to \$7,800 (\$5000 in 1990, adjusted annually for inflation) for each ton of VOCs and NO<sub>x</sub> emitted in the calendar year following attainment in excess of 80% of a certain “baseline amount.” This penalty must be paid for each calendar year after the missed attainment date until the area is redesignated attainment. CAA § 185(a), 42 U.S.C. § 7511 d(a). The “baseline amount” is the *lower* of the “actual” or “allowable” emissions during the attainment year for Severe areas (2005). The “allowable” emissions are the emissions allowed under the permit issued by Georgia EPD. Because the baseline amount is set at the *lower* of actual or allowable emissions, however, major stationary sources would have a perverse incentive to emit *no less than* the permitted amount during the attainment year. Therefore, if anything, the penalty requirement may *interfere* with Atlanta’s ability to attain the ozone standard in the attainment year.

38. Moreover, the economic cost of the penalty requirement would be enormous. Based on existing sources in the Atlanta non-attainment area and their projected emissions, this penalty would approximate \$53 million for all major sources of VOC and NO<sub>x</sub>. These penalties would have to be paid by local businesses, industries, and electric utilities even if they were in full compliance with the air quality rules and their air quality permits.



39. Given the perverse incentive to maximize emissions in the attainment year, it is certain that the threat of penalties will do nothing to improve the ozone situation in Atlanta before 2005. Even after that date, it is unlikely that the threat of penalties would achieve significant ozone benefits. Future emissions reductions must be achieved either by improving technology or by decreasing production. Major sources within the non-attainment area have already been required to adopt all Reasonably Available Control Technologies and more, in some cases much more. Further reductions through technological improvements will be very expensive and produce little benefit. In the near term, the only realistic way to meaningfully reduce emissions would be to cut production.

40. In any event, the penalties mandated by Section 185 would only kick in, if at all, *after* the new attainment date for Severe areas had passed. Accordingly, this penalty provision would do nothing to clean the air in the interim. As demonstrated by EPA's approval of the Attainment SIP, the best evidence available demonstrates that the Atlanta area will reach attainment by 2004. As a result, it is highly likely that the penalty provisions will never be needed.

#### **Federal Reformulated Gasoline**

41. Finally, there is one additional consequence of a reclassification to Severe that would not require a revision to the SIP. If bumped up to Severe, all

gasoline sold within the 13-county Atlanta Ozone Non-attainment Area would have to meet the standard applicable to Federal Reformulated Gasoline ("RFG") within 1 year. CAA § 211(k)(10)(D), 42 U.S.C. § 7545(k)(10)(D).

42. Federal RFG is not the right fuel solution for Atlanta. The problem with federal RFG is that it is designed to reduce emissions of VOCs, as opposed to NO<sub>x</sub>. As a result, federal RFG will do very little to improve the ozone situation in Atlanta.

43. In fact, there is a very strong possibility that a requirement to use federal RFG will *interfere* with our progress toward clean air. Recognizing that federal RFG is not the right fuel solution for Atlanta, Georgia EPD has adopted its own fuel program that is specifically designed to achieve NO<sub>x</sub> reductions. With the support of the oil industry and stakeholders, Georgia adopted regulations in May 1998 that lowered the average sulfur concentration in gasoline sold during the ozone season to 150 ppm ("Phase 1 Georgia Low Sulfur Gasoline"). The industry began delivering this gasoline in 1999 for use in a 25-county area in and around the Atlanta non-attainment area. Phase 1 Georgia gasoline reduces NO<sub>x</sub> emissions from gasoline-powered vehicles by 6.6 percent at a cost of approximately 1 to 2 cents per gallon, as estimated by the oil industry.

44. In 2003, Georgia is going to a more stringent gasoline formulation ("Phase 2 Georgia Gasoline"). Phase 2 Georgia Gasoline will reduce NO<sub>x</sub> emissions by 12.0%, or 23.54 tpd, at an estimated cost of 2.2 to 2.4 cents per gallon. Also, because of the 7.0 pound per square inch RVP limit instituted in Georgia in 1995, VOCs and toxics will both be reduced by more than 25%. Georgia Gasoline is a critical part of Georgia EPD's strategy to improve air quality through NO<sub>x</sub> reductions and to bring Atlanta into attainment with the ozone NAAQS by 2004.

45. In contrast, under the federal Phase 2 RFG program, which started January 1, 2000, gasoline sold in RFG areas will reduce NO<sub>x</sub> emissions by only 8.8 percent at an additional cost of about 4 to 6 cents per gallon, as estimated by EPA. Compared with Phase 2 Georgia gasoline, the implementation of federal Phase 2 RFG in the Atlanta area would result in a fuel that is at least 26% less effective in reducing NO<sub>x</sub> emissions at about twice the incremental cost.

46. If Atlanta is bumped up to Severe, there is a strong likelihood that federal RFG will displace Georgia Phase 2 Gasoline within the 13-county non-attainment area. If this occurs, the result would exacerbate the ozone situation in metro Atlanta.

47. In theory, Georgia could try to minimize the damage caused by federal RFG by continuing the Georgia fuel program in counties *outside* the non-attainment area. This would lead to very significant distribution problems, however. Suppliers would have to find the distribution facilities to store and deliver three separate fuel mixtures (conventional gasoline, Georgia Phase 2, and federal RFG) within this State. I have actively inquired of the petroleum suppliers in this area to determine whether such an arrangement would be possible. Response from the industry has been extremely pessimistic.

48. Accordingly, there is a strong possibility that such a requirement could lead to a repeat of the situation that confronted the Midwest in 2000. The fragmentation of gasoline markets makes it more difficult for the industry to supply consumers with the fuels they need, particularly if there is an unexpected disruption in the gasoline supply and distribution system, because it hinders the ability of the industry to shift supplies from one market to another. Over the last few years, boutique fuels have caused most if not all of the country's supply problems and price spikes. Trying to create a unique fuel for Atlanta combining the requirements of Georgia Gasoline and federal RFG would only aggravate this situation.

49. There are two alternatives to this situation. The first is not practical and the second is not attractive. The first alternative would be to require federal

RFG to meet Georgia's standards as well. Based on my conversations with the industry representatives, however, this does not appear to be a practicable solution. As an initial matter, creating a boutique fuel for Atlanta that incorporates the federal RFG requirements with the Georgia low sulphur fuel requirements would require major modifications to refineries. I have been informed that the refineries are not in a position to make these modifications in the near term. Indeed, the refineries are making changes now to meet new federal requirements that take effect in 2004. At a minimum, Georgia would experience significant delays before such a fuel could be prepared for distribution in Atlanta.

50. The second alternative is the most likely — and the least attractive. To avoid creating very significant distribution and supply problems that would be associated with such an overlay of state and federal fuel requirements, Georgia EPD might be forced to abandon the Georgia fuel program. As a result, Atlanta would lose the benefits of the Georgia program. *NO<sub>x</sub> emissions from motor vehicles in this area would very likely increase, which would produce an increase in ozone concentrations.*

51. The requirement to use federal RFG would create other environmental problems as well. Most federal RFG contains an oxygenate called MTBE. MTBE has been recently identified as a serious threat to ground and surface water

supplies, which are often contaminated through leaking underground storage tanks. Concerns over the level of MTBE in drinking water have led at least twelve states to ban MTBE. A recent study estimates that it will cost at least \$29 billion to remove MTBE from soils and drinking water supplies nationwide.

52. The alternative to MTBE is hardly better. To satisfy the oxygenate requirement in federal RFG — a requirement with no ozone benefit — ethanol is the only practical alternative to MTBE. Ethanol may be good for the economy in the Midwest, but it does nothing for ozone. In fact, by increasing vapor pressure, the ethanol may actually *increase* emissions of VOCs.

53. As a final insult, consumers in the Atlanta metropolitan area would face substantially higher gasoline prices in order to pay for this problem fuel. The fuel program adopted by Georgia EPD achieves significant air quality benefits — without poisoning the groundwater — at a cost of just two to three cents per gallon. This fuel significantly out-performs federal RFG because it is designed for the conditions that prevail in this region. If the State is forced to abandon this carefully-tailored program, consumers will be forced to pay significantly more for a fuel that does not achieve the same air quality benefits and that may actually poison the groundwater.

**CONCLUSION**

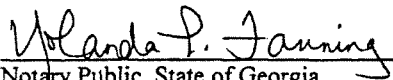
54. Georgia EPD has already demonstrated that the Attainment SIP, which is based on the best photochemical grid modeling and the best data available, provides the right mix of local emissions controls to attain the standard as soon as the NOx SIP Call rule is implemented. If the Extension Policy were disallowed, and if Atlanta were ultimately bumped up to Severe, Georgia EPD would be forced to adopt several new control programs that would affirmatively interfere with the ability of Atlanta to reach attainment. Georgia EPD has already adopted the Severe-area elements that would have any beneficial effect on the ozone situation in Atlanta. The remaining requirements were omitted because they are not appropriate for Atlanta. In sum, reclassifying Atlanta as a Severe area will do nothing to improve air quality and may actually set back our efforts to reach attainment.

FURTHER Affiant sayeth not.

Executed under penalty of perjury this the 28<sup>th</sup> day of June, 2002.

  
\_\_\_\_\_  
HAROLD F. REHEIS

Sworn to and subscribed before me  
this the 28<sup>th</sup> day of June, 2002.

  
\_\_\_\_\_  
Notary Public, State of Georgia

Notary Public  
Fulton County Georgia

My commission expires: My Comm. Expires Oct. 15, 2005



Mr. SHIMKUS [presiding]. Thank you, sir.

I think, at a minimum, we will hear the opening comments of Mr. David Farren, who is an attorney from the Southern Environmental Law Center. You are recognized, and your full statement is in the record.

#### STATEMENT OF DAVID FARREN

Mr. FARREN. Good morning, members of the commission. Thank you for this opportunity to address this commission on the lack of need to alter the fundamental structure of the Clean Air Act as it relates to Atlanta's own efforts to deal with its local smog problem to protect public health.

The failure to attain the ozone standard in Atlanta is not caused by transport to any significant degree, but by the 10-year delay in developing and implementing a plan to adopt local controls, available local controls that could have achieved the air quality standards by the 1999 deadline, without waiting for transport reductions. In fact, only 9 percent of the violation days in Atlanta are contributed to by transport. The 23 percent figure that the State cites is a maximum percentage contribution of transport on those 9 percent of the days.

There has been a lot of talk about the downwind extension policy requiring but for causation. That is not true in Atlanta where we have only 9 percent of the exceedances from transport. Thus, with only 9 percent, EPA still found Atlanta to be significantly affected, and allowed for the delay of local controls based on this small percentage. This shows that if the downwind extension policy is codified, many areas could latch onto transport, that have only a little bit of transport, as an excuse to delay local cleanup.

The vast majority of Atlanta's problem related to ozone pollution is from local transportation emissions and power plant emissions which the area has only belatedly begun to control. These local controls can and will have dramatic effect, as shown by a recent study that is attached to my testimony, from the Journal of the American Medical Association. This was a study in Atlanta during the Olympics, where there was a 23 percent reduction in tailpipe emissions because of alternatives to solo driving. This, in turn, led to a 27 percent ozone reduction and an almost 20 percent reduction in acute emergency care for asthma attacks in children. For HMO recipients and Medicaid recipients, the reduction was even more dramatic, over 40 percent.

This bump-up or reclassification for Georgia, as it admits in its testimony, is not a punishment; instead, it is an opportunity to develop a new plan to clean the air. The mandatory specific measures that Mr. Methier discussed are really only part of the picture, and the effectiveness of any one particular control measure is really a red herring.

The structure of the Act—and this is recognized by the court decisions—is that following bump-up, the area must do whatever is necessary to continue on the path toward clean air, and this includes an annual 3 percent reduction, and doing whatever else is necessary to attain by the new deadline, which Georgia says it believes it can do. Therefore, this issue of penalties will not likely come into play.

In terms of the fuels, there is already sufficient flexibility in the Act that that can be addressed administratively, and there is really no need to tinker with the fundamental structure of the Act. The added controls required by bump-up are not duplicative. The area hasn't attained in 30 years. There have been recent improvements in air quality in Atlanta, but that is largely due to the weather.

If you look at the ozone emissions over a 20-year period, there have been ups and downs, peaks and valleys, but generally the 20-year trend is flat. If you look at these recent years that have been trumpeted as more favorable, there are still over 30 violations each year of the new 8-hour ozone standard. Therefore, putting in place additional controls in Atlanta would not be duplicative.

In conclusion, I would like to point out that Atlanta prides itself on its "can do" spirit, which is exhibited in many areas to solve many problems. Georgia can readily achieve clean air by adopting local controls to protect the health of its 4 million residents within the existing framework of the Clean Air Act. Thank you very much.

[The prepared statement of David Farren follows:]

PREPARED STATEMENT OF J. DAVID FARREN, SOUTHERN ENVIRONMENTAL LAW CENTER

#### INTRODUCTION AND SUMMARY

Mr. Chairman and Members of the Subcommittee: Thank you for the opportunity to provide information on the application of EPA's Downwind Extension Policy as an alternative to reclassification, or "bump up" as the appropriate mechanism to extend the attainment date under Section 181 of the Clean Air Act (the "Act"). As an attorney with the Southern Environmental Law Center, which has an office in Atlanta, I have worked closely over the past decade with conservation groups, other citizen organizations, and health professionals in Georgia on issues related to air quality.

The Atlanta area has never achieved the "one-hour" National Ambient Air Quality Standard (NAAQS) for ground level ozone, an important step in the effort to protect the health and quality of life of the Atlanta area's four million residents. The Eleventh Circuit Court of Appeals ruled last month that the Downwind Extension Policy is illegal as applied to the Atlanta area. For the following reasons, I urge this Subcommittee not to recommend changes to the Act that would undermine its carefully crafted deadline-driven scheme:

- The failure to achieve attainment of the one-hour ozone NAAQS in Atlanta has very little to do with pollution transport and, instead, results overwhelmingly from the failure timely to institute available controls on local sources of pollution. In fact, only 9% of the violation days in Atlanta are contributed to by transport.
- Georgia officials project that Atlanta will achieve the "one-hour" ozone standard by 2004, which will avoid any additional consequences under the Act that would result from the failure to meet the 2005 deadline applicable to "severe" non-attainment Areas.
- Reclassification creates a planning opportunity to ensure that the "one-hour" standard is attained no later than 2005. In addition to the mandatory measures specified in the Act for "severe" areas, Atlanta can choose to implement other measures of its choosing to attain the "one-hour" standard and also to make progress toward meeting the new "eight-hour" standard, which EPA has determined to be necessary to protect public health.
- The prompt reduction of ozone pollution in Atlanta will result in significant public health benefits, increased productivity and reduced health care costs. A study published in the *Journal of the American Medical Association* co-authored by an Atlanta pediatric pulmonologist found that reducing ozone precursors during the 1996 Olympics led to a significant decline in acute respiratory illness.

#### HISTORY OF DELAY IN ATLANTA

Ground-level ozone, one of the main harmful ingredients in smog, is produced when its precursors, volatile organic compounds ("VOCs") and nitrogen oxides

("NO<sub>x</sub>") from motor vehicles, smokestacks, and other sources, react in the presence of sunlight. In the thirty years since EPA established the first national ozone standard in 1971, Georgia has never adopted an effective strategy for achieving the pollution reductions necessary to bring the Atlanta area into attainment with the "one-hour" ozone standard. Under the 1990 Amendments to the Clean Air Act, the Atlanta area was designated a "serious" ozone nonattainment area and was given almost a decade, until November 15, 1999, to develop and implement a plan to control air pollution to attain the NAAQS for ground-level ozone. Unfortunately, the history in Atlanta has been to delay the adoption and enforcement of readily available local controls on ozone precursors. As a result of this failure, hundreds of thousands of Atlantans continue to suffer the adverse health effects associated with ozone, despite the passage of the 1999 deadline for Georgia to implement the emissions reductions required for attainment of the NAAQS.

The 1990 Amendments established a 1994 deadline for Georgia and other states to submit to EPA a plan that would provide for attainment of the NAAQS by the 1999 deadline. See 42 U.S.C. § 7511a(c)(2)(A). It was not until five years after this submittal deadline, October 28, 1999, that Georgia finally submitted for approval its proposed State Implementation Plan (SIP). Even then, EPA proposed to disapprove the SIP unless Georgia included additional pollution control measures to achieve further emissions reductions. See 64 Fed. Reg. 70,478 (Dec. 16, 1999).

A revised SIP with various modifications was not submitted until July 17, 2001, six years after the submittal deadline and almost two years after the deadline for actual attainment. Rather than demonstrating timely attainment of the NAAQS by 1999, this SIP purports to demonstrate attainment by the year 2004 based on EPA's 1998 "Guidance on Extension of Attainment Dates for Downwind Transport Areas" (the "Downwind Extension Policy"). Thus, the delay in attaining the ozone NAAQS in Atlanta is the result of Georgia's delay in developing and implementing a plan to address the longstanding local air pollution problem in Atlanta.

#### TRANSPORT IS A VERY SMALL FACTOR IN ATLANTA'S OZONE POLLUTION

Never formally adopted as a rule by EPA, the Extension Policy permits the extension of the attainment date without "bump up" for some "moderate" and "serious" nonattainment areas based on EPA's belief that certain of these areas have been hindered in their attempts to meet air quality standards by pollution transported from other states. The Extension Policy, however, does not require a showing of "but, for" causation. To be eligible for a waiver of the attainment deadline, the 1999 Federal Register notice announcing the policy explains that downwind areas only need show that transport "significantly contributes to downwind nonattainment," not that transport has rendered attainment by the deadline impossible or even impracticable. 64 Fed. Reg. 14,441 (March 25, 1999).

For Georgia, by example, to be eligible for the policy, it was not required to demonstrate that it was unable to attain the NAAQS in Atlanta by 1999 through more aggressive control of local pollution. In addition, EPA was exceedingly liberal in its interpretation of the "significantly affected" standard for application of the policy. In fact, EPA found that "upwind controls are predicted to reduce the number of exceedances in Atlanta by 9 percent." 63 Fed. Reg. 57,446 (Oct. 27, 1998). This means that over 90% of violation days in Atlanta result from local emissions. If Congress were to change the Act to allow extensions based on small amounts of transport, as occurred with Atlanta, almost any area could claim that it is somewhat affected, delaying public health protections for many millions of American families.

As Georgia acknowledges in its most recent SIP revision, the "worst ozone episodes" occur during "multiple day stagnation and recirculation events." In other words, the smog days result from extended periods of calm weather where local pollutants hover in the air, not on days where the wind is bringing in emissions from out of state. Thus, it is clear that the most effective way to achieve the public health protections of ozone pollution reduction is to focus on local controls, which Georgia has been reluctant to do.

According to Georgia's submitted SIP, the majority of the emissions that cause ozone in Atlanta come from motor vehicles rather than from transport or stationary sources. The nature of the transportation network, the resulting number of vehicle miles traveled in the nonattainment area and the failure to address this issue are directly related to the severity of the ozone pollution problem. As Georgia acknowledges in its SIP, smog in the area "is spreading outward in the shape of a giant doughnut," and is greatly exacerbated by the fact that Atlantans drive about 35 miles per day for every man, woman and child—more miles per capita than in any other major city in the United States.

Unfortunately, Georgia has been extremely reluctant to address transportation emissions. For example, just this spring it further delayed the implementation of a new low-sulfur fuel rule in the Atlanta nonattainment area at the request of interest groups within the oil industry. In addition, Georgia has repeatedly fallen through on promises to provide funding for transportation options to single occupant vehicle driving, such as commuter rail, HOV lanes and other air-quality beneficial transportation investments. Further, the Atlanta transit system languishes with the highest fare in the country, service cutbacks and no support from the State or suburban counties. Georgia has not attempted to develop and implement timely strategies and programs that have been shown to effectively reduce vehicle travel and motor vehicle emissions. Many such strategies are identified in the Act itself, 42 U.S.C. § 7408(f)(1)(A), and even are illustrated in Georgia's SIP as capable of achieving prompt reductions in summer ozone levels in Atlanta.

GEORGIA CAN READILY ACHIEVE THE "ONE HOUR" STANDARD IN ATLANTA WITH LOCAL CONTROLS

The proposed SIP for Atlanta based on the extension policy, recently struck down by the Eleventh Circuit, projected that air quality will be improved sufficiently to meet the one hour standard by 2004, after out of state power plants institute required controls under the national NO<sub>x</sub> SIP call agreement. Thus, the strategy chosen by Georgia for Atlanta was to sit back and do less to control pollution locally, based on the extension policy, rather than institute more strategies to achieve the NAAQS by 1999.

While this choice for Atlanta is now a *fait accompli*, it has consequences for the area, the primary one being the delay in public health benefits. The failure to attain also means that Atlanta must be reclassified to "severe" status and prepare a new SIP, which contains certain additional control measures. Because Atlanta had projected that it could attain the "one-hour" standard even under the prior SIP by 2004, Georgia faces little danger of not meeting the 2005 deadline for "severe" areas. These additional control measures, however, should in no sense be considered superfluous, as they are required under the Act to ensure attainment by the new deadline. In addition, the additional measures will necessary to meet EPA's new "eight-hour" ozone standard beginning next year.

Further, to the extent that transport is a small contributor to nonattainment in Atlanta, many of the appropriate controls are in the process of being implemented. For example, Alabama, the largest source of transport that affects Atlanta, has begun this year to implement NO<sub>x</sub> controls for most of its power plants. Of course, the most effective way to reduce stationary source pollution in Georgia would be to require further reductions from in-state stationary sources, which are second only to transportation emissions as a source of ozone precursors in Atlanta. For example, two of the older power plants in Georgia, McDonough and Yates, lack the post-combustion NO<sub>x</sub> controls of modern facilities.

SUBSTANTIAL PUBLIC HEALTH BENEFITS CAN BE ACHIEVED THROUGH PROMPT OZONE REDUCTION

Ozone is a lung-scarring irritant that affects everyone in the Atlanta region and which can cause or exacerbate serious health problems. For example, people with asthma and others who experience breathing difficulties must limit outdoor activities on days with high ozone levels. Frequently during the spring and summer months, air quality in Atlanta fails to meet the ozone NAAQS established by EPA for the protection of public health.

According to EPA, in 1999, the year established under the Act for attainment, Atlanta violated the existing "one-hour" ozone standard on 23 days and exceeded the "eight-hour" standard on 69 days. *See* Georgia Environmental Protection Division air quality data posted at <http://www.air.dnr.state.ga.us/tmp/99exceedences/old/index.html>. (Due to more favorable weather conditions in the last couple of years, the number of violation days has been lower, as has occurred during previous periods of especially favorable weather patterns.) This means that on many summer days in Atlanta it is not safe for kids to go outside for recess, for the elderly to be working in their gardens and walking in the neighborhood or for healthy adults to exercise outdoors.

Evidence regarding the adverse health effects attributable to ozone pollution strongly influenced the adoption of the 1990 Amendments to the Act. Expert testimony presented to Congress included evidence that:

Ninety percent of the ozone breathed into the lung is never exhaled. Instead, the ozone molecules react with sensitive lung tissues, irritating and inflaming the lungs. This can cause a host of negative health consequences, including

chest pains, shortness of breath, coughing, nausea, throat irritation, and increased susceptibility to respiratory infections.\*\*\*Some scientific evidence indicates that over the long term, repeated exposure to ozone pollution may scar lung tissue permanently...Ultimately, emphysema or lung cancer may result.\*\*\*Young children may be especially vulnerable to both the acute and permanent effects of ozone pollution.

H.R. Rep. No. 101-490 (1990), *reprinted in* Environment and Natural Resources Policy Division of the Congressional Research Service, *Legislative History of the Clean Air Act Amendments of 1990* 3021, 3223 (1993).

The frequent, dangerously high ozone levels in Atlanta during warmer months affect not only children and persons with impaired respiratory systems, but also healthy adults. As the former EPA Administrator concluded: "Exposure to ozone for six to seven hours at relatively low concentrations has been found to reduce lung function significantly in normal, healthy people during periods of moderate exercise. This decrease in lung function is accompanied by such symptoms as chest pain, coughing, nausea, and pulmonary congestion." 60 Fed. Reg. 4712, 4712 (Jan. 24, 1995). In reviewing more recent evidence of the harm caused by ozone, EPA published a lengthy notice summarizing the adverse health effects of both short-term and long-term ozone exposure. According to the Agency, the effects of short-term exposure on healthy individuals include reduced lung function, chest pain, reduced productivity, increased susceptibility to respiratory infection, and pulmonary inflammation. 66 Fed. Reg. 57,268, 57,274-75 (Nov. 14, 2001). With respect to repeated and long-term exposure, the finding is ominous:

EPA has concluded that repeated occurrences of moderate responses, even in otherwise healthy individuals, may be considered to be adverse since they could well set the stage for more serious illness.

*Id.* at 57,275.

These general findings by EPA have been underscored by additional research conducted in many cities, including Atlanta. One recent study published in the prestigious peer-reviewed *Journal of the American Medical Association* on February 21, 2001 demonstrates that when ozone was reduced in Atlanta by encouraging alternatives to motor vehicle travel during the 1996 Olympic Games, the number of children requiring emergency or urgent care for asthma decreased dramatically. There was a 41.6% decline in visits for Medicaid claimants, a 44.1% decline for HMO enrollees and a 19.1% decline in overall hospital asthma admissions. A copy of this study is appended to this testimony, which is entitled "Impact of Changes in Transportation and Commuting Behaviors During the 1996 Summer Olympic Games in Atlanta on Air Quality and Childhood Asthma."

The study specifically tied the positive public health results to the lower ozone concentrations due to a reduction in vehicle emissions. Overall, during the Olympics there was a 27.9% decrease in ozone and no violations of the "one-hour" standard. In contrast, the standard was violated on five days immediately before and after the games. While favorable weather conditions contributed somewhat to the lower pollution levels, this dramatic percentage decrease in ozone pollution and emergency care was substantially contributed to by the 22.5% decrease in peak morning traffic counts resulting from travel demand strategies, increased transit service and other programs encouraged in the Act to reduce transportation emissions.

#### CONCLUSION

"Bump up" of Atlanta to "severe" is an example of the Act working as Congress intended: if a deadline is not met, a new SIP with additional controls is required to ensure that a new deadline is met. The most recent Supreme Court case addressing the Clean Air Act statutory scheme noted that the NAAQS is the "engine that drives nearly all of Title I of the CAA," *id.* at 468, and characterized the attainment deadline provisions as the "backbone" of the ozone control requirements for non-attainment areas. *Whitman v. Am. Trucking Ass'ns, Inc.*, 531 U.S. 457 (2001). Codification of EPA's extension policy would fundamentally weaken the deadline and incentive structure in the Act carefully crafted by Congress in 1990. Instead, it would reward officials, at the expense of many citizens-including the four million residents of Atlanta, who fail to take all appropriate steps to address local ozone pollution. This would set a dangerous precedent that would undermine the Act at a time when the scientific consensus is that more, rather than less, must be done to protect the public from ozone pollution.

Mr. BARTON. Thank you, sir.

We are going to take a very brief recess so that I can go vote, and then we should be able to reconvene at approximately 12 noon,

and maybe a little before that. So, witnesses, you can take a personal convenience break, but we don't want any of the witnesses to go have lunch or anything, so we are going to try to restart this very quickly and get our last two witnesses, to get their testimony, and then have some questions.

So we stand in recess until approximately noon.

[Brief recess]

Mr. BARTON. The subcommittee will please come to order. When we recessed to go to the vote, we had heard from Mr. Farren. We now want to hear from Mr. Baron, Staff Attorney with Earthjustice, and then after him, Mr. Wolfe, and then we will have some questions.

We recognize the distinguished Congressman from Crockett, Texas, the 2nd District, the Honorable Jim Turner. We are always glad to have him in our hearing room.

So, with that, we will now hear from Mr. Baron. Your statement is in the record. We ask that you summarize it in 5 minutes.

#### STATEMENT OF DAVID S. BARON

Mr. BARON. Thank you, Mr. Chairman, I very much appreciate the opportunity to address the subcommittee.

There has been some talk today about penalizing downwind areas, but we also have to think about the penalty suffered by people who breathe the air in these communities that violate clean air standards, and we are living in one of them right here in Washington, DC, where last summer we had the worst ozone season in more than a decade, with 9 Code Red days and 19 Code Orange days, days on which children were cautioned to limit outdoor play, and people with asthma and other respiratory diseases were warned to limit outdoor activity.

That is the kind of health threat that bump-ups were designed to address when Congress put these in the law in 1990. And had EPA followed the law, we would today be enjoying the benefits of the additional pollution reductions required for the severe area classification which Washington should have had more than 2 years ago. Instead of complying with that law and giving us the benefit of those pollution reductions, EPA applied its transport extension policy to delay, and delay, and delay, until today, 13 years after the 1990 Amendments, we still do not have a plan adequate to assure attainment of the clean air standards here, and the same thing is true in a number of these other communities that are seeking relief from reclassification. Congress put those bump-up provisions in the law because we had tried and failed repeatedly—in 1970 under the Clean Air Act. The States had been given a lot of leeway under prior versions of the statute, and it didn't work. We failed again and again to meet clean air standards, and so Congress, in 1990, said "This time we are going to put some teeth in the law," and that is why these provisions are there.

Now, transported pollution simply doesn't justify relaxing these requirements for reclassified areas. In the Washington, DC area, according to EPA figures, 76 percent of our pollution, our ozone problem, is locally generated. In Baton Rouge, according to EPA, the figure is 93 percent locally generated. Transport certainly is a contributing factor, but we can't blame everything on transport

when the figures show us that local pollution is a significant part of the problem. Nor does it make sense to waive reclassification for areas like Beaumont, Baton Rouge, Dallas, and Atlanta, when other communities that also receive transported pollution, and sometimes in greater amounts—communities like New York, Chicago, Milwaukee, Philadelphia, Baltimore, Wilmington—all are classified as severe and all have adopted the same pollution control measures that these Texas communities are now trying to escape.

So, if everyone is on a level playing field, and these communities have been able to implement and comply with these measures without adverse economic impacts, there is no reason why there shouldn't be quality here in terms of communities that still don't meet the standard.

I should note, too, that here in the Washington area, which was reclassified to severe after the EPA's transport policy was invalidated, we are moving ahead with a severe area plan. We don't hear a big public outcry, or even a significant outcry from the business community, opposing reclassification. We are all working together now to implement the severe area measures, and I would hope that that is the direction that all of these communities move in, rather than trying to weaken the law and rollback the protections that Congress wisely put in the Act 13 years ago. Thank you, Mr. Chairman.

[The prepared statement of David S. Baron follows:]

PREPARED STATEMENT OF DAVID S. BARON, ATTORNEY, EARTHJUSTICE

INTRODUCTION AND SUMMARY

Mr. Chairman and members of the Subcommittee, my name is David S. Baron. I am an attorney with the Washington, D.C., office of Earthjustice, a nonprofit law firm that represents conservation and community groups on a wide range of environmental and public health issues, including air quality. Our clients on clean air matters include the American Lung Association, Sierra Club, Environmental Defense, and others. I am very familiar with the Clean Air Act, having specialized in enforcement of that statute for more than twenty years at the local, state, and national levels. In 1996-97, I served on the Subcommittee for Development of Ozone, Particulate Matter and Regional Haze Implementation Programs, a Federal Advisory Committee to the U.S. Environmental Protection Agency (EPA). I have also taught environmental law courses as an adjunct professor at the University of Arizona College of Law and Tulane Law School.

I appreciate your invitation to discuss the Clean Air Act's requirements for reclassification (or "bump up") of areas that fail to timely meet clean air standards, and EPA's prior attempts to waive bump up for cities affected somewhat by air pollution transported from other areas. I strongly believe that EPA's waiver of bump ups via its "downwind extension policy" not only violated the Clean Air Act, but also wrongly delayed measures that are sorely needed to protect public health in these and other communities.

*Background*

In the late 1990's, EPA announced an "Attainment Date Extension Policy" (sometimes called the "downwind extension" policy) that was not authorized by the Clean Air Act. This unfounded policy allowed industries to pollute at higher levels for longer than the Clean Air Act authorized merely because they were located in cities affected somewhat by pollution transported from other areas. EPA applied the policy to unlawfully extend clean air deadlines for a number of cities without requiring them to be reclassified into more protective pollution categories with stronger pollution controls. The courts invalidated this policy as being completely contrary to both the language and purpose of the Clean Air Act.

The 1990 Clean Air Act, signed by the first President Bush, classified cities as marginal, moderate, serious or severe based on the severity of their ozone pollution

problem.<sup>1</sup> Areas with higher classifications were given more time to meet clean air standards, but also had to adopt stronger anti-pollution measures. The clean air deadline for moderate areas was 1996, for serious areas 1999 and for severe areas 2005 or 2007.

Where a city missed its clean air deadline, the Act required that it be reclassified (“bumped up”) to the next highest classification. For example, if a serious area failed to meet standards by 1999, it was to be reclassified to severe. It would then be given until 2005 to meet standards, but would also have to adopt the stronger pollution controls required for severe areas.

Reclassification triggers stronger pollution control requirements for industry as well as additional measures to reduce pollution from car and truck exhaust. These stronger measures are already required in numerous communities throughout the nation, including Chicago, Milwaukee, Baltimore, Philadelphia, New York, Los Angeles, Wilmington, Trenton, Sacramento, Ventura County (CA), Riverside County (CA), and San Bernardino County (CA).

Relying on its unfounded extension policy, EPA extended the clean air deadlines for a number of cities *without* bumping them up to the higher pollution categories that would require the adoption of more protective ozone control measures to help address the adverse public health impacts resulting from the additional delay. EPA also allowed these areas to postpone the adoption and implementation of local measures that were necessary for each area to attain the ozone health standard on the original schedule, thereby postponing a large portion of the public health benefits from reduced ozone that these measures would have achieved. In addition, EPA waived the statutory requirement that each area continue to reduce emissions by 3% annually until the area attains the standard. Three separate federal appellate courts have all ruled that EPA’s policy violates the language and purpose of the Clean Air Act.<sup>2</sup> In voiding the extension policy as applied to the Washington, D.C. area, Chief Judge David Ginsberg of U.S. Court of Appeals for the D.C. Circuit, wrote that “to permit an extension of the sort urged by the EPA **would subvert the purposes of the Act.**” *Sierra Club v. EPA*, 294 F.3d 155, 161 (D.C. Cir. 2002)(emphasis added).

#### HARM TO PUBLIC HEALTH FROM EPA’S DOWNWIND EXTENSION POLICY

EPA’s application of this discredited policy has delayed adoption of additional pollution controls that are badly needed to meet clean air standards in Atlanta, Washington, D.C., Baton Rouge, and Beaumont Texas. The illegal extensions have burdened the public in those areas with dirty air until at least 2005 without the additional pollution controls already required in other cities. As a result of EPA’s illegal deadline extensions, the air in these cities is substantially dirtier than it should be.

If the Clean Air Act were weakened in an attempt to legalize EPA’s extension policy, this would delay the adoption of badly needed antipollution measures in the affected communities. Last summer, the Washington, DC area, for example, suffered from the worst ozone pollution in more than a decade, exceeding the 1-hour standard on nine days, and recording another 19 days when the air was deemed unhealthy for children and persons with lung ailments. On all of these days, children were warned to limit outdoor play. By some estimates, breathing difficulties during a typical smoggy summer in the DC area send 2,400 people to the hospital, and cause 130,000 asthma attacks.

Last year alone, the Beaumont/Port Arthur, Dallas/Fort Worth, and Houston/Galveston regions exceeded the one-hour ozone standard on three, seven, and 26 days respectively. Atlanta exceeded the one-hour ozone standard seven times and the 8-hour ozone standard 38 times. Ultimately, delay of stronger pollution controls has left the air in these cities more unhealthy than it would have been had the law been followed.

Adoption of the EPA policy would also make it harder for other communities to meet clean air standards. Pollution from cities like Washington, Atlanta, Beaumont,

<sup>1</sup> Ozone—a principal component of urban smog—is a severe lung irritant even to healthy adults. It can cause shortness of breath, chest pains, increased risk of infection, aggravation of asthma, and significant decreases in lung function. Elevated ozone levels have been linked to increased hospital admissions and emergency room visits for respiratory causes. Ozone presents a special health risk to small children, the elderly, persons with lung ailments, and adults who are active outdoors. New studies have linked ozone exposure with death by stroke, premature death among people with severe asthma, cardiac birth defects, and reduced lung-function growth in children.

<sup>2</sup> See *Sierra Club v. EPA*, 294 F.3d 155 (D.C. Cir. 2002) (D.C. area); *Sierra Club v. EPA*, 311 F.3d 853 (7th Cir. 2002) (St. Louis area); *Sierra Club v. EPA*, 2002 WL 31761817 (5th Cir.) (Beaumont-Port Arthur area). The Eleventh Circuit also recently invalidated EPA’s use of the policy in Atlanta.



and Baton Rouge can be transported elsewhere, where it contributes to ozone violations. Cities like Baltimore, Philadelphia, and New York that have already adopted more protective “severe” area measures should not have to suffer pollution from upwind cities that have failed to adopt the same level of control.

EPA’S DOWNWIND EXTENSION POLICY IS UNFAIR TO STATES THAT DID THE RIGHT THING

As noted above, many states and cities have already adopted the more protective control measures associated with higher pollution classifications. These areas are also affected by transported pollution, a situation understood by Congress at the time that the 1990 amendments placed them in these higher classifications. Adoption of EPA’s policy, accordingly, would have an inequitable impact on areas that area already doing the right thing without resorting to delays that imperil the health of their citizens.

EPA’s extension policy has been opposed by Republicans as well as Democrats. In 1999, the State of New York under a Republican administration, criticized EPA’s extension policy. The State noted the inequity of allowing some states to avoid achieving timely clean air while other states—also affected by transported pollution like New York—were already undertaking necessary, effective control steps:

“[T]hese more effective control steps [required for higher nonattainment classifications] already have been implemented in many areas of the country and have been proven to reduce the emissions of ozone precursors. Implementation of these measures would help level the playing field among the states, provide some localized relief of ozone levels, and help the affected areas in their efforts to achieve the revised eight-hour ozone standard.”<sup>3</sup>

In 1999, the State of Ohio, also under a Republican administration, criticized this same attainment date extension policy and approach:

“U.S. EPA is rewriting one of the most important and substantive measures placed in the 1990 CAA. . . .”

“Ohio EPA does not believe that the CAA intended that extensions be granted to areas which have not demonstrated attainment. In some cases, these areas have not implemented current CAA requirements and would not achieve the 1-hour ozone standard even after transport had been addressed. These areas need an additional level of local controls, which is the precise purpose of the bump-up provisions of the CAA.”<sup>4</sup>

Thus, a roll back of pollution control requirements under a policy will harm the public health of citizens locally and regionally by delaying more rigorous ozone pollution abatement measures needed to meet clean air standards.

In its unsuccessful defense of its extension policy, EPA claimed that deadline extensions and bump-up waivers for some areas are justified because those areas are impacted somewhat by pollution transported from other areas (generally within the same state). But other cities with higher classifications—and therefore stronger local pollution control requirements—are *also* impacted by transported pollution—in some cases to a much greater extent. For example, transported emissions account for a smaller percentage (24%) of the ozone problem in the Washington D.C. area than in areas that were previously classified as severe, such as Baltimore (56%), Philadelphia (32%), or New York (45%). Conversely, EPA’s data for Atlanta shows that implementation of the NO<sub>x</sub> SIP call controls would eliminate only 9% of the days with expected ozone violations. For Baton Rouge, EPA has found that only 7% of ozone exceedance days between 1996 and 2000 were potentially associated with transported pollution from Houston.

This situation was also true when Congress adopted the 1990 amendments and established the classification system with its consequences for failure to attain air quality standards. Indeed, Congress was aware of EPA’s assessment of the ozone transport problem in its post-1987 attainment date analysis of the reasons why ozone areas failed to attain, and adopted into law EPA’s decision “not to allow a delay in the submittal of the post-1987 ozone attainment demonstrations and revised SIPs for areas affected by [regional transport].” 52 Fed. Reg. 45,874.

CURRENT CIRCUMSTANCES MAKE EPA’S EXTENSION POLICY EVEN LESS DEFENSIBLE

EPA’s policy was ill-advised when it was adopted in 1999, for many of the same reasons given by Ohio and New York above. But whether or not the policy was a good idea then, circumstances have changed in such a way that its codification now

<sup>3</sup>Letter from Carl Johnson, Deputy Commissioner, Office of Air & Waste Management, New York State DEC (April 16, 1999).

<sup>4</sup>Letter from Christopher Jones, Director, Ohio EPA, to EPA Air & Radiation Docket (April 27, 1999).

would be a terrible idea. Technical advances reflected in EPA's new MOBILE VI emissions estimation model are showing that many areas have much larger local emissions problems than were previously thought, and greater local emission reductions will therefore be needed. Moreover, with the upcoming implementation of EPA's more protective 8-hour ozone standard, the areas affected by EPA's policy, and many other areas as well, will need to implement the suite of protective control measures required in the 1990 Clean Air Act Amendments, in addition to reductions in transported pollution. Many of the areas for which EPA has sought to avoid the stronger pollution control measures associated with reclassification are already exceeding the 8-hour ozone standard repeatedly each year. It is insupportable to delay local control measures needed to reduce these annual exceedances, thereby exacerbating local air quality and public health problems, and forestalling the meaningful steps that will be necessary to attain the 1-hour and 8-hour ozone standards.

Mr. BARTON. Thank you, Mr. Baron.

We now want to hear from Mr. Samuel Wolfe, who is an Assistant Commissioner for Environmental Regulation, from the New Jersey Department of Environmental Protection. Your statement is in the record, and we ask that you summarize in 5 minutes, sir.

#### STATEMENT OF SAMUEL A. WOLFE

Mr. WOLFE. Thank you, Mr. Chairman, and members of the subcommittee, as well. I appreciate the opportunity to testify today.

Even though New Jersey is very strongly affected by ozone transport, we unfortunately are unable to support changing the Clean Air Act to incorporate the EPA's bump-up policy. The policy rewards failure to attain air quality standards. It rewards it by extending deadlines for compliance, without requiring any additional action by States in return. In doing so, it passes up some of the most cost-effect air quality benefits that we can find.

Now, the first thing I would ask the subcommittee to consider is that the effect of transport on the ability of an area to attain the air quality standards is just one piece of the puzzle. It is also relevant to ask what can be done with local air pollution measures in that area to address local air quality problems. What can be accomplished, even if it is short of attaining the standards, is to reduce the impact of air pollution on people who live and work in that area. Even when it is not enough for attainment, it can still make those bad air days less frequent and less severe, which means fewer children developing asthma as a result of ozone, fewer hospital admissions for people with respiratory problems.

Aside from the local benefits of taking the measures that are required when an area is bumped up, it is also relevant to ask what those local actions can do for places that are downwind of the area. New Jersey is a perfect example of this because not only are we very strongly affected by transport, with more than a third of our air pollution coming from outside the state, but in turn we then affect States that are downwind of us. So, for that reason, we filed Section 126 petitions trying to get emission reductions from facilities upwind of us, at the same time States downwind of us have filed 126 petitions looking for emission reductions to happen in facilities in New Jersey.

So, considering how those local reductions can affect both air quality within the area that is affected by transport, and also air quality downwind of that area, we don't feel that it is an option for a State to do nothing while waiting for a Federal solution that is going to take care of transport.

Getting these air quality benefits is especially important because the measures that are required under Title I of the Clean Air Act are neither costly nor onerous. And New Jersey should know because since the beginning we have been classified almost entirely as severe nonattainment areas. That means that every one of the measures that people have expressed concern about having to implement, has already been implemented in New Jersey. We have done this, and what I can say now, based on that experience, is that those measures that are required for the severe areas are basically the low-hanging fruit. We are talking about things like reasonably available control technology from major sources of all organic compounds and nitrogen oxides. This is a standard that very strongly tilts toward the economic feasibility of doing better on air pollution control.

With that in mind, I just have not seen the complaints from our business and industrial communities about having to implement measures that are required under Title I for severe areas. Ideally, it would be nice if there were a more level playing field, but these do not seem to be the kinds of measures that have made New Jersey uncompetitive.

So, to sum up, I am concerned that incorporating the bump-up policy into the Clean Air Act would risk repeating the experience that got us to the Clean Air Act Amendments in 1990, when a complete loss of patience over the failure of States to make progress on achieving air quality standards led Congress to set strict deadlines for reaching those standards.

I would also have to say that going forward into the future, there is a risk that we could repeat history again with the 8-hour ozone standard where, if transport is not addressed up front, we will probably be back here doing the same dance again, and for that reason I truly appreciate the interest and the concern of the subcommittee on understanding ozone transport and what it does to areas downwind. Thank you very much.

[The prepared statement of Samuel A. Wolfe follows:]

PREPARED STATEMENT OF SAMUEL A. WOLFE, ASSISTANT COMMISSIONER FOR ENVIRONMENTAL REGULATION NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION

Good morning, Mr. Chairman and members of the Subcommittee. My name is Samuel Wolfe. I am Assistant Commissioner for Environmental Regulation for the New Jersey Department of Environmental Protection. Thank you for the opportunity to testify before you today regarding the Environmental Protection Agency's bump-up policy under Title I of the Clean Air Act.

Even though the EPA created the bump-up policy in an effort to help areas affected by ozone transport, New Jersey cannot support revising the Clean Air Act to accommodate the EPA policy. The policy does nothing to address transport. It simply rewards an area's failure to attain air quality standards by extending deadlines beyond the two years that the law allowed without requiring any additional action to address air pollution.

The 1990 Clean Air Act Amendments created five classes of ozone nonattainment areas to reflect the severity of each area's ozone problem, ranging from marginal to extreme. The classification system followed the principle that a more severe problem would require more work and more time to correct. For that reason, the law requires areas with more severe problems to take more actions to reduce air pollution, and allows those areas more time to attain the federal air quality standard.

Under the law, areas that fail to attain the standard by the statutory deadline could get the deadline extended for up to two years. If they still failed after that extension, they would be "bumped up" to a higher classification, giving them more time but also requiring that they do more to control air pollution.

The EPA's 1998 "bump-up" policy extended the attainment deadlines for moderate or serious nonattainment areas when pollution transported from outside the area interfered with its ability to demonstrate attainment by the deadline. More than many states, New Jersey appreciates the need to address transport. Over a third of the air pollution in our State is transported from outside our borders. However, we cannot support codifying into law a policy that simply provides extensions and does nothing to address transport.

Granting these cost-free extensions would be easier to justify if a bump-up forced an area to impose costly or onerous requirements to control air pollution. This is not the case. From the beginning, the EPA classified most of New Jersey as severe nonattainment areas. As a result, New Jersey has had to implement almost all of the ozone pollution control measures required under Title I of the Clean Air Act. We required our major sources of ozone precursors to install reasonably available control technology. We required vapor recovery at gas stations. We run an enhanced program for motor vehicle inspection and maintenance, which is much easier to create now than it was when we started.

The truth is that these types of Title I measures are now the "low hanging fruit" of emission reductions. Areas that fail to meet their attainment deadlines can put these measures in place without difficulty or great expense.

It would also be easier to justify these extensions if the areas that received them were merely passive victims of transport from upwind. Unfortunately, many of these areas themselves contribute to poor air quality downwind. Extending attainment deadlines, without requiring additional action, means that these areas affected by transport will continue to receive unabated air pollution from outside their borders. This air pollution will harm the health of the area's own residents, as well as the health of people who live and work downwind.

New Jersey itself provides a good example of the problem. Again, more than a third of our air pollution comes from outside our borders. At the same time, air pollution from inside New Jersey affects other states downwind. For that reason, we have filed a petition with the EPA to restrict emissions from facilities upwind of us, while states downwind of us have filed similar petitions targeting facilities in New Jersey. We participated in the research that made it clear that ozone transport is a significant issue in the United States, especially in the eastern half of the country. We have also worked actively with other Northeastern and Mid-Atlantic States and with the EPA to develop regulatory programs and legal actions that would address transport.

At the same time, it was never an option to do nothing while we wait for the transport problem to be solved. For that reason, we continued to pursue sources of air pollution that affected our own residents as well as people downwind. Among other things, we reached an agreement with the operator of the three largest coal-fired electric generating units in the state, which will bring advanced air pollution controls to those units.

Giving a free pass to areas affected by transport does not solve the problem of transport. What will solve the problem of transport is a strong national effort to reduce the formation of ozone air pollution throughout the country, complemented by continuing state and local efforts to find and implement cost-effective ways to reduce air pollution within our borders.

We therefore ask that the existing bump-up provisions of the Clean Air Act be left in place.

Thank you for this opportunity to testify. I am happy to answer any questions you may have.

Mr. BARTON. Thank you, Mr. Wolfe.

Before we go to the question period, the Chair would ask unanimous consent that the documents that have been referred to by various members during opening statements and in their question period, as agreed to by the minority and majority staff, that those documents and letters be put into the record. Is there objection to that?

[No response.]

Hearing none, so ordered.

The Chair would recognize himself for the first 5 minutes of questions.

Judge Griffith, you had some charts that showed how your area has been becoming more compliant. Even as the population has

grown, the number of ozone nonattainment days has gone down. We put that up on the board for the audience to look at. Do you care to elaborate on that a little bit?

Mr. GRIFFITH. Mr. Chairman, there has been much discussion about people sitting back waiting, and that is not the case in the Beaumont-Port Arthur-Orange-Hardin County areas. If you look at the chart here, we have been very aggressive in our implementation of our SIP, with the help of the TCQ and actually Commissioner Marquez' 1997 legislation that attempted to bring into compliance the grandfathered facilities in 1999, the actual 2001 legislation that mandates grandfathered facilities to come into compliance by 2007. Again, trying to make us by 2005 is impossible with the transport issue. And I think the specificity that everyone is picking up communities is really not the issue, it is more about the issue of transport and should it be allowed into the determination because each one of those areas has to stand on its own in whether it can demonstrate. And we have a great demonstration progress of Congress' 1990 Clear Air Act as to what you can do when you implement those strategies.

Mr. BARTON. For those of you on the panel that support giving EPA statutory authority to show flexibility in the compliance date, are any of you advocating that we relax the actual standard you need to meet?

Mr. GRIFFITH. No, sir, absolutely not.

Mr. BARTON. I am not aware of any group or any congressman who is saying we ought to relax the standard themselves. What we are saying is if you show that you are making a good-faith effort to make progress, and you actually are making progress, you shouldn't be penalized by being bumped up to a more severe standard simply because of a transport issue, isn't that correct?

Mr. GRIFFITH. That is what this is about.

Mr. BARTON. Now, Mr. Marquez, you testified before my subcommittee before, and obviously you didn't come prepared to do anything but to extrapolate and to explain your testimony today, but Congressman Waxman, who unfortunately is not here at this moment, he asked to put some documents into the record about some emissions in the Port Arthur-Beaumont area relating to petrochemical and refineries, where they have declared some sort of emergency and emitted emissions outside of their permit, which they are allowed to do if it is really an emergency. And these documents purport to show that, in fact, some of these companies are not doing it on an emergency basis, they apparently are using it as a part of a routine way to get around the Clean Air Act.

Now, we put the summary table and the letter into the record, but we would like for you, as a commissioner from the Texas Air Quality Control Board and perhaps even the County Judges from this affected area, to look at the material that we put in the record and, if you so choose, to give us your response to that material. You haven't seen it yet, but would you be willing to do that if we get that to you?

Mr. MARQUEZ. Mr. Chairman, I believe that I have not seen the data. I have heard the allegations about episodic releases from industry. That is an issue that we have addressed. As a matter of

fact, we have been addressing that very firmly in the last 4 years, particularly in the Houston area where it is a significant problem.

We have, again, new science has been evolving, we have learned more. We have seen in the Houston area where some of those emissions were creating problems, and we have addressed that. We have several new rules that have been issued to address that. We have in the Houston-Galveston area, for example, air monitors now that are continuously monitoring the concentration of these reactive volatile organic compounds in the atmosphere, that help us monitor the activities of companies when they have releases.

So, in the Corpus Christi area, as an example, the number of releases of that type have been reduced by 55 percent in the last 3 years. I do not have numbers for Beaumont-Port Arthur.

Mr. BARTON. My time is about to expire, but you would be willing to look at the materials, and I am not saying you have to provide a response, but we want to give you an opportunity to.

Mr. MARQUEZ. I will be glad to.

Mr. BARTON. My time is really almost out. I want to ask Mr. Baron a question. It is my understanding that you were the litigant, or one of the litigants in these lawsuits that overturned the Clinton Administration policy of flexibility, is that correct?

Mr. BARON. Yes.

Mr. BARTON. Were you the only one, or just one of many in these lawsuits?

Mr. BARON. There were others. Mr. Farren had one of these cases, and there was another one in St. Louis.

Mr. BARTON. So you didn't instigate all three of them, you were in just one of them.

Mr. BARON. No, just the Washington, DC area.

Mr. BARTON. I understand. Do you think that you are better able—and maybe Mr. Farren, too, if he is one of the litigants—do you all have more knowledge than the EPA? I mean, do you think that it is better for you to make a decision which areas are in compliance and noncompliance and how they should go about addressing the problem, than the Executive Agency that is given the authority under the law?

Mr. BARON. Well, Your Honor—

Mr. BARTON. I am not a judge.

Mr. BARON. I am so used to being in court, that is my usual way of responding to—

Mr. BARTON. Luckily, I have never been in court, and I hope I never am.

Mr. BARON. Well, I am sorry. The answer to that question is I think the law should be followed, and the law requires—

Mr. BARTON. But the reality is that you look around the country and you pick a region that for whatever reason you think isn't doing what it is supposed to do, or maybe makes a good test case, and you go into that particular court in that particular region and sue, instead of giving the EPA the authority under the Clinton Administration, to show a little flexibility when the region is making a good-faith effort. So, basically, you put yourself above the law. You actually want to dictate who has to do what, when, it seems to me. You didn't file suit up in Portland, Maine.

Mr. BARON. Well, that actually is not true, Mr. Barton, we did file suit there, and we are currently in settlement negotiations.

Mr. BARTON. Well, my understanding is there have been no lawsuits filed, that there have been some negotiations. Well, I stand corrected, you did file a lawsuit, or a group similar to yours, or an individual—

Mr. BARON. We are representing the Sierra Club in that case, Mr. Chairman, but the answer to your earlier question is, I don't see how it can be said that we are operating above the law when four U.S. Courts of Appeal have agreed with us that EPA was acting—

Mr. BARTON. There are a lot of regions in this country that are not in compliance, and it really does appear to me that you, to coin a phrase, kind of "cherry-pick" where you want to file your lawsuits. Now, if you want to file a joint class action suit for every region, that is one thing, but to kind of play one region against the other when there really are some legitimate transport issues, if you are not above the law, you are very selectively trying to enforce the law. I will stand by that.

Mr. BARON. Mr. Chairman, these cases—and I think Mr. Farren can speak for Atlanta—were all filed in communities that have serious air pollution problems that threaten the health of people in those communities, and that is why we filed.

Mr. BARTON. In your opinion.

Mr. BARON. No, under the Clean Air Act, these communities violate

Mr. BARTON. None of these regions were doing anything to come into compliance, they were all sitting on their hands and thumbing their nose at the Clean Air Act.

Mr. BARON. Mr. Chairman, they were not doing what the law requires.

Mr. BARTON. They were not doing what you thought the law required.

Mr. BARON. Mr. Chairman, with all due respect, they were not doing what the law required and the U.S. Courts of Appeal for four Circuits agreed with us on that point.

Mr. BARTON. Well, the Courts have agreed that the Act, as it is currently constituted, doesn't give EPA the flexibility that the Clinton Administration had granted. That is the purpose of this hearing, to see if, in fact, it makes good public policy not to change the standards, but to actually give such flexibility. I mean, that is our job. As much as it may pain some people, we can legislate. The Constitution gives us the authority, if we so choose. Now, I don't know if we so choose, and I don't know where the majority is in terms of this subcommittee or full committee, but we certainly have the ability to legislate if we think there is a public policy need to.

Mr. BARON. Well, Mr. Chairman, I certainly don't doubt that, that is a different question, though, than the one you were asking before. And the committee is certainly free to, and within its power to consider alternatives. If the question is, is this a good policy, I think we have already addressed that.

Mr. BARTON. You certainly have. My time is expired. I am going to recognize Mr. Boucher for questions.

Mr. BOUCHER. Thank you very much, Mr. Chairman. I notice that your time did expire by a little bit, you were actually 5 minutes over the—

Mr. BARTON. I usually don't do that. It is the first time all year.

Mr. BOUCHER. I would just ask the chairman to consider at some point allowing me to bank away 5 minutes and use it at the time of my choosing somewhere along the line.

Mr. BARTON. I don't do that with Mr. Markey.

Mr. BOUCHER. Thank you very much. I want to say thank you to these witnesses, for your patience here this morning, and for coming here and providing advice to this subcommittee on what I think is a very timely subject.

After listening to what you have had to say, and listening to Mr. Holmstead earlier, my view is that a narrowly tailored policy that permits extensions when downwind communities, through no fault of their own, who are acting in good faith, experience pollution brought in from upwind communities, that because of the upwind communities' pollution places them out of compliance. It seems to me that a narrowly tailored policy that permits an extension of compliance deadlines in those cases would be sensible.

I think it would be important that the policy be truly narrowly tailored—in other words, the test has got to be met, in my view, that the sole cause of the problem is the upwind community. If the downwind community is at fault and is not on its own in compliance, and has not taken the steps that would be required to put it in compliance were it not for the upwind problem, then the downwind community would not qualify. And if we are to grant extensions, they ought to be for a very limited period of time, and the time ought to be measured by how long it takes to bring the upwind community into compliance—to eliminate, in other words, the source of the problem that the extension addresses. But if it does those things, the policy would appear to me to make sense.

Let me just ask those who are here today from the affected communities who are urging that we act in order to renew this opportunity for extensions, if they would agree to that formulation? If we drafted that tightly and make sure that the downwind community is, in fact, operating completely in good faith, would you endorse our acting on such a policy?

Mr. SIMPSON. Yes, sir. From Baton Rouge's point, probably the last one to go through the transport policy, particularly in EPA's mandates to us, we had to submit approval attainment demonstration with the 1-hour standards no later than the attainment date of the upwind nonattainment area. So with ours coming from Houston, which was very evident, we had one exceedance in 2002, and the testimony earlier from Texas showed exactly the transport on September 11, 2002, which is the exact date that we had the one exceedance that kept us from being in attainment. So, yes, we would definitely agree. No one is trying to get out of reaching the attainment, but there are some things that are beyond our control.

Mr. BOUCHER. Thank you. Mr. Griffith?

Mr. GRIFFITH. There's no need to repeat what you just said. We absolutely agree completely with your statement. We are not asking to in any way try to create more problems for air quality, we



are trying to go no longer than what Houston's attainment date is, and that is 2007. That is the bottom line.

Mr. BOUCHER. Thank you. Mr. Thibodeaux?

Mr. THIBODEAUX. Yes, I certainly support what you just said, and certainly support what my two colleagues have just brought up. I think that is going to be the rational, practical way to go.

Mr. BOUCHER. Mr. Marquez, do you agree?

Mr. MARQUEZ. Mr. Boucher, as the State agency that has to submit the plans to EPA, representing the local areas, we need to be moving forward trying to pull a rabbit out of the hat. We cannot have the luxury of waiting 2 years to see what happens with the policy. So, we are marching on, trying to figure out how can we meet the dates as they are required today.

Mr. BOUCHER. I'll take that as a yes. Thank you. My time is about expired. Let me simply say that I think these witnesses have been very forthcoming today, and we appreciate your coming here to share with us your views on this subject, and your appearance here is very meaningful, and I think you can consider your time well spent. So I want to thank you for being here and sharing this with us today.

Mr. Chairman, let me also say that I was just kidding about that other 5 minutes. You have always been very generous in allowing members of this subcommittee to express their views, and you normally stay within your time allotted.

Mr. BARTON. I do.

Mr. BOUCHER. You are quite punctual as a general matter. Today is a very rare example of—

Mr. BARTON. My feelings are hurt, they are very hurt, I am going to pout.

Mr. BOUCHER. [continuing] your actually going beyond, but you are very cooperative in allowing members to express their views, and I thank you.

Mr. BARTON. The only reason I went over a little bit is because we don't have a large attendance, and I didn't see the harm in that.

Mr. Methier, did you want to comment on Mr. Boucher's comment, because it looked like you wanted to say something.

Mr. METHIER. Just briefly. Well, just absolutely we agree, and in our testimony you will note we have actually drafted some proposed language and we would love to work with you on that. The one thing I would urge, though, is that any action you take be prompt. There are things that are happening now and will be required, as an example, with fuel and being bumped up, that if this body chooses to move on that, we would like it to happen as soon as possible.

Mr. BOUCHER. Mr. Chairman, if you would oblige me for just a moment—

Mr. BARTON. I don't know.

Mr. BOUCHER. [continuing] I don't want to draw this out, but what is the sense of urgency here? Just how quickly do we have to act in order to grant the relief which you believe you need?

Mr. METHIER. I would just follow up that in Atlanta's particular case—and we are still working that with EPA on exactly when the bump-up action would happen and when it would be effective—but when that happens, 1 year after that, Federal reformulated gaso-

line will be required. So we are going to have to start working pretty soon with the fuel suppliers. They are going to have to figure out what problems that will cause with the disconnect with our present Georgia gasoline. It is not the kind of thing—a year from now, it could actually be too late. Things will happen. We may have to change some of our rules. And so the sooner we can move forward on that, the better. That is sort of the timing in our particular region.

Mr. SIMPSON. In Baton Rouge's case, we have been bumped up. The reformulated gas is going in place in June of 2004, and the sanctions, the penalties, go in in 2005. So there is a great sense of urgency in our region.

Mr. BOUCHER. Thank you. Thank you, Mr. Chairman.

Mr. BARTON. The gentleman from Illinois is recognized for 5 minutes.

Mr. SHIMKUS. Thank you, Mr. Chairman, and I, too, want to thank the folks here on the panel because it is just an interesting debate because we do have the benefit of cleaner air. There was legislation drafted with the science at that time, and so really the debate is now, with more technology, new science, and a recorded history, where do we go? We have this debate every year in Congress, about is the status quo acceptable, or do we make modifications and change. I mean, we would all like to think it is for the better.

Unfortunately, there are different opinions of what is good and what is the best course of action. Beaumont has gone from 20 exceedances per year to just two exceedances. I would think that that is fairly a good success story of the Clean Air Act, and that there is positive movement in the right direction. So then the debate goes as to at what cost and how do you encourage positive movement into the future. We are having this debate with Medicaid, Medicare, education, and just because there are questions as to the current status quo of the legislation doesn't mean that the intent is to just destroy the status quo, but hopefully to reform and make it better.

I have got a few questions—I want to go on the same line of questioning for Mr. Methieris that French? Let me ask you this series. Baton Rouge indicates that it would be a marginal nonattainment area if it was classified today. You indicated Atlanta would be moderate, yet both could soon be severe areas. Do you think this is the result that Congress intended in 1990?

Mr. METHIER. Well, no. I mean, obviously, Congress intended us to attain by the dates and make the progress. The fact of being in a situation like we are today, being moderate or marginal and then having to do the severe requirements, I can't envision that is what people thought was going to be a good thing. So, no, I don't think so. I think things have changed.

Mr. SHIMKUS. Is it fair to say that the Subpart 2 requirements were based on our understanding of ozone formation in the years before 1990, and that this understanding has changed since that time?

Mr. METHIER. I know that as a State Air Director, the science, the data, the tools, everything we have known about ozone from 10 years ago is dramatically improved and different.

Mr. SHIMKUS. So going back to my little statement before, why would anyone oppose changing the rules and regulations to meet new science?

Mr. METHIER. The perception that we have in the metro area is that things are bad, they are getting worse and, in fact, the air quality by every measure is improving. The labels that we put on them—serious, severe, marginal—are confusing, and we do need to rethink that.

Mr. SHIMKUS. I think you make a good point. We have addressed it here a couple of times, and will continue to do, especially as we go through this whole air debate. Air quality is improving, and has been for many, many years—not to say that it is perfect, but we want to improve.

The last part of the series of questions deals with your testimony which indicates that Section 185 could penalize businesses for emissions of volatile organics. Can you give us some idea what type of businesses you are talking about?

Mr. METHIER. In the Atlanta area, that would be a lot of printers, painting, industrial manufacturing operations, the kinds of things that we really have regulated down to the 25 ton level for many years in metro Atlanta. But what we found is those VOCs don't have as much of an impact on ozone as we, and EPA, and everybody else thought back in 1990. So to penalize those sources in this Section 185 manner really doesn't make a lot of scientific sense.

Mr. SHIMKUS. And I appreciate those comments again. I want to thank all of you for being here and sitting through the one short vote, usually it is worse than that. Mr. Chairman, I appreciate the hearing, I think we are moving in the right direction. I yield back my time.

Mr. BARTON. I have a pending vote in the Science Committee, if you would take the Chair. And we want to recognize the gentlelady from California, Ms. Capps, for 5 minutes.

Ms. CAPPS. Thank you, Mr. Chairman. I would like to ask you a question, Mr. Baron, if I may, and thank all the witnesses from all parts of the country, for taking the time and being here to share your expertise with us.

Mr. Baron, why should areas like Atlanta, Washington, and Dallas, which have significant nonattainment of the 8-hour ozone standard, escape more vigorous requirements for the 1-hour standard that would reduce the extent of their 8-hour problem at the same time? I wish you would comment, if you would briefly, on perhaps this is why Washington area officials are moving forward to identify additional emission reductions for a revised SIP.

Mr. BARON. Ms. Capps, the answer to that question is they should. There is no reason that they should not. Virtually any controls that are implemented to reduce 1-hour violations will be beneficial in addressing 8-hour violations, and we know we have a serious problem. So that is a very strong reason to stick with the original bump-up policy.

Ms. CAPPS. And this would be satisfactory to those—I mean, this is what Washington officials wish we would do, at least some of them.

Mr. BARON. I believe there was a letter offered earlier—

Ms. CAPPS. Yes, I wanted to reference that.

Mr. BARON. [continuing] to that effect. I have not heard any local officials in the Washington area objecting to implementing the severe area requirements here.

Ms. CAPPS. Okay. And then, Mr. Farren, if you would, I understand that Atlanta has a long history of failed compliance with the Clean Air Act, and just 9 percent contribution from transported pollutants.

Given the modest impact of transport, do you think EPA could come up with, or should come up with, a better transport policy that does not reward bad behavior, and could you comment on that?

Mr. FARREN. Yes. Thank you, Representative Capps. Atlanta does have a very long history of failure to meet the ozone standards, going back 30 years, and that results from really delay after delay in putting in place and implementing plans to address local controls which are really very much the lion's share of the problem. And I think the fact that you have only 9 percent of the exceedance days in Atlanta coming from transport shows the flaw with this EPA policy. Even though it was only 9 percent, Atlanta was found to be "significantly affected," and you basically throw the baby out with the bathwater, and you don't implement the reasonable, achievable local controls that could be employed to bring clean air sooner.

There was some talk earlier about things are getting better in Atlanta. When I testified earlier, I made the point that really it is an up-and-down. The last couple of years it has been a little better, but if you look at the 20-year history, it is up and down. And as recently as 1999, which was the deadline year, there were over 20 violations of the 1-hour standard and over 60 violations of the 8-hour standard. Last year, the year they are trumpeting as such a great year in Atlanta, there were over 30 violations of the 8-hour standard.

So, clearly, more needs to be done. This is a flawed policy, especially as applied to Atlanta.

Ms. CAPPS. And perhaps in either direction of how this should be strengthened and, also, I cited Atlanta, but it certainly is not the only area. Maybe others of you on the panel would like to comment on this particular issue of the relationship between transport policy and the whole overlying legislation.

Mr. FARREN. Representative Capps, I think we need to address transport, but we need to do it in a way where we encourage maximum employment of local controls to achieve the standards just as expeditiously as practicable. That is what the Clean Air Act requires. That is the intended structure of the Clean Air Act going back to 1990. Transport was known, but Congress put in place this structure to maximize controls, particularly local controls, in cities like Atlanta where transport is only 9 percent of the problem.

Ms. CAPPS. Any other comments? I have very little time left. Yes, sir?

Mr. ALVAREZ. I would just like to say, in the case of Dallas, unlike the Beaumont area where the data showed some progress in air quality, the data presented in my testimony shows very little progress in that area by at least two different measures of air qual-

ity. And I think it is important to consider the reasons that the bump-up policy was put in place was to kind of have some accountability for clean air plans that are developed. If the clean air plan doesn't succeed in cleaning up the air by the deadline, then new requirements are put in place, both planning requirements and additional measures, and arbitrarily extending attainment dates loses that kind of iterative process to improve on air quality plans and will just delay the ultimate attainment of clean air.

Mr. SHIMKUS [presiding]. The gentlelady's time has expired. The Chair recognizes the gentleman from Maine.

Mr. ALLEN. Thank you, Mr. Chairman. Mr. Methier, I wanted to direct some questions to you. We have sympathy for all you are going through because in Maine we have been through reformulated gas, we have had all of these issues, and that is a long story. But those of us in the northeast are waiting for the NO<sub>x</sub> SIP Call to go into effect are frustrated that we might be punished, too, for delays beyond our control. So I understand your point very well.

You made it quite clear that the Act should not punish areas with strong SIPs that would be in compliance but for transport coming from outside, and you made a strong case that Atlanta has done everything that it could. But to the west, Texas doesn't have a plan, not a plan combined with Louisiana, and I would point out that the NO<sub>x</sub> SIP Call was created because of the threat of bump-up. The threat of bump-up drove the NO<sub>x</sub> SIP Call to be created. And so here is the question.

If the NO<sub>x</sub> SIP Call were going into effect right away so that Atlanta would be in compliance in short order, would you still be hear, at least for your city, making this claim, making this same argument?

Mr. METHIER. In 1999, when our attainment date came, that is when we adopted a lot of the local measures. We had gone through all the science and the modeling, and the NO<sub>x</sub> SIP Call was coming in 2003. That is why 2003 is the year we have all of our power plant controls, gasoline, vehicle emission inspection, everything else. It is only because of the delay of the 1 year of the NO<sub>x</sub> SIP Call to 2004 that we reapplied there. And whether it is 23 percent, or 9 percent, or whatever, on those days, as you are aware, despite everything you do, if upwind emissions are affecting your ability to attain—which does have legal ramifications—we have to be concerned about that. And I am not sure I am really answering your question, but the mindset that we had all along was we always had the ability to ask to be bumped up, the ability to get 2005 as a attainment date, but when we looked at the prescriptiveness of the severe requirements, like Federal RFG, they just didn't make sense for Atlanta. I haven't had time to look at any other state's plans to know whether they are good or bad or whatever, but I only know what we have done in Atlanta, and we have done what we can. We have become convinced that transport is a big part of it.

Mr. ALLEN. Thank you. Let me ask a couple quick questions. The legislative language that is proposed at the end of your testimony, can you tell me who wrote it?

Mr. METHIER. That was done by ourselves, with our legislative counsel.

Mr. ALLEN. Does it have the support of your Governor?

Mr. METHIER. As far as I know.

Mr. ALLEN. In that legislative language, the term "downwind area" is defined as "an area affected by transport," and I guess in many ways almost every city would be affected by transport.

Are you suggesting that—I guess my question is, don't we need a higher standard than that, or is there a higher standard buried elsewhere in the text of the language, or are you just relying on EPA to make the judgment? What is your intention in drafting the legislation?

Mr. METHIER. Our intention was to rely very heavily on U.S. EPA, and the extension policy, when you read it, and the documentation that led up to it, it gives EPA really the discretion to make that decision what area is really most—where it can be most appropriately applied. Every region is different. Every region is unique. The southeast is different than the northeast as far as transport issues, and it is tough to put that in the legislative language. So there would have to be some ability for the Federal EPA to make those kinds of determinations. And it was tough to craft that, but that is our best attempt.

Mr. ALLEN. Thank you. I yield back.

Mr. SHIMKUS. The gentleman yields back. The Chair recognizes the gentleman from New Jersey, Mr. Pallone.

Mr. PALLONE. Thank you, Mr. Chairman. I just wanted to thank our Assistant Commissioner Wolfe, from the New Jersey Department of Environmental Protection, for being here today. And I just wanted to say something briefly and ask a question or two.

Due to the severe nonattainment classification of most of our state, New Jersey has had to act swiftly and forcefully to reach attainment goals, and we are moving forward in a responsible manner to accomplish these goals by the prescribed attainment date. But our State has been a model in addressing the requirements of the Clean Air Act, and our factories and utilities have implemented a large number of ozone pollution control measures. And as you heard in your testimony, which unfortunately I missed, these actions were taken at a time when implementation was much more difficult than it is now.

One of my concerns in regard to the EPA extension policy is the effect that transport from Washington, DC would have on New Jersey. An internal EPA memo regarding the original adoption of the extension policy noted that "the downwind area still must ensure that its emissions will not interfere with attainment in areas farther downwind."

I just wanted to ask Mr. Wolfe if you would elaborate on how an extension for Washington, DC, for example, would affect New Jersey's attempts to reach attainment, and then maybe Mr. Baron could describe for us the measures that are being taken by the District of Columbia to reach attainment.

Mr. WOLFE. I thank you, sir. I understand that Washington, DC has not sought to get relief from the prospect of a bump-up, which would mean that as they bump-up, they are going to be required to take more steps to control the sources of ozone within their boundaries. And to the extent that pollution from Washington is affecting our ability in New Jersey to meet the Federal health stand-

ards for ozone, if Washington is going to take more steps to control that pollution, then that can only help us.

Mr. BARON. Representative Pallone, just to add to that point, if the policy were changed, as some here have suggested, so that Washington could rescind its bump-up, then New Jersey would see uncontrolled pollution from Washington in much greater quantity than it would otherwise. There is no question that there is transport up and down the coast, and that is one of the important reasons that this policy just doesn't work.

In terms of what is being done to meet the severe area requirements, the Washington area—which includes parts of Maryland and Virginia as well as the District of Columbia—is adopting lower thresholds for reasonably available control technology, which means more pollution sources will have to install pollution controls, but as the Deputy Commissioner noted, these are controls that are already being used in New Jersey. And, in fact, the kinds of measures that are going to be adopted here are the kinds of measures that you already have in New Jersey, and measures that should have been adopted here sometime ago.

Mr. PALLONE. Thank you. Mr. Wolfe, I understand that our State has upcoming compliance deadlines in 2005 and 2007, those are the two dates?

Mr. WOLFE. That is correct.

Mr. PALLONE. Could you explain to us what would happen if New Jersey is unable to reach attainment by those deadlines?

Mr. WOLFE. If New Jersey is unable to reach attainment, then we would be in the same position as has been talked about by some of the folks who are opposing the prospect of a bump-up, which is that we would have to impose \$5,000 per ton fees on major sources of volatile organic compounds. So that would be an extremely heavy financial burden and something that I think would be enough to drive businesses to really consider whether they want to continue operating in New Jersey.

So, what we are looking at right now is with the 2005 and 2007 attainment deadlines staring us in the face is that rather than hoping that somebody will move the goalposts for us, we are really scrambling to find every source of emission reduction that we can, that our business community can handle, so that we can meet the standards. That means that we are setting new standards that are going to apply to auto body shops, to gas stations, that we have proposed new standards for VOCs in paints. And on top of that, we reached an agreement last year with the operator of the three largest coal-fired electric generating units in New Jersey that are going to bring major, major reductions in emissions from those units. At the same time, we are also using the tools that the Clean Air Act gives us to go after sources of pollution upwind of us, and that includes having negotiated an agreement in principle for the shutdown of a coal-fired power plant outside our borders, and also that we are participating in new source review litigation, trying to get other upwind power plants to clean up.

Mr. PALLONE. Thank you. Thank you, Mr. Chairman.

Mr. SHIMKUS. Thank you, Mr. Pallone. Is there anyone else seeking additional time?

[No response.]

That being said, we would like to ask for any follow-up responses, maybe any additional questions that we may want to submit in writing to you all, if you would agree to that as to kind of keep the committee still receiving information on this, then we would like to do that. And we would like to thank you for your testimony and being available and accessible today, and I think we are starting on a good process of discourse. And with that, the committee is adjourned.

[Whereupon, at 12:55 p.m., the subcommittee was adjourned.]

[Additional material submitted for the record follows:]

PREPARED STATEMENT OF HON. JOHN BREAUX, A U.S. SENATOR FROM THE STATE OF LOUISIANA

Mr. Chairman and Members of the Committee, thank you for the opportunity to speak with you today about the Environmental Protection Agency's "ozone transport policy" and Title I of the Clean Air Act. This is a matter of great importance not only for Baton Rouge, but also to a number of other important urban centers around the country.

I am proud of the progress my state has made in improving its air quality for our citizens. With the exception of ozone, all 64 Louisiana parishes are classified as being in attainment for all established National Ambient Air Quality Standards. In 1978, there were nearly 20 parishes listed as being in non-attainment for the 1-hour ozone standard. Now only the five Baton Rouge area parishes remain in non-attainment and they have made significant progress toward achieving attainment of the 1-hour standard.

Over the past decade I have worked with leaders from these five parishes, as well as state leaders, as they have tackled various challenges in their efforts to meet the multitude of EPA requirements for non-attainment areas and their efforts to help bring the region into attainment. Over this time I have been impressed by the fact that working toward attainment has truly become a committed community effort.

In reviewing the history of the Baton Rouge area's ozone attainment efforts I can begin to understand the frustration of local leadership and those at the Louisiana Department of Environmental Quality. When the area began its compliance activities under the Clean Air Act Amendments of 1990 the air in the Baton Rouge region was characterized by large quantities of industrial emissions and admittedly poor air quality.

Utilizing EPA's prescribed tools and guidance, the Louisiana Department of Environmental Quality developed a State Implementation Plan (SIP) that EPA agreed would bring Baton Rouge into attainment of the ozone standard. However, the area failed to achieve attainment by the November 15, 1999, deadline prescribed for those areas classified as being in "serious" non-attainment.

In the spring of 2000, the region sought an attainment date extension under the EPA's 1998 Ozone Transport Policy. In a collaborative effort with stakeholders from throughout the Baton Rouge region, DEQ revised its SIP to reflect updated regional airshed modeling that showed the area should shift from a VOC to a NO<sub>x</sub> control strategy to achieve attainment. At that time, a comprehensive analysis of potential impacts of pollutants transported into the area demonstrated that the area's ozone attainment efforts were being impeded by upwind influences. By some experts' accounts, the Baton Rouge area would likely have already achieved attainment of the 1-hour ozone standard had it not been for the influence of ozone and precursor pollutants from southeast Texas periodically raising local ozone levels.

Working under EPA's Ozone Transport Policy guidance, DEQ and the Baton Rouge Ozone Task Force submitted the revised SIP and Transport Demonstration to EPA in December 2001. EPA gave final approval of the new Ozone Transport Policy SIP and the region was granted an attainment date extension to November 2005.

However, as a result of recent federal court rulings, EPA has conceded it lacks authority under the Clean Air Act to extend attainment dates based on its Ozone Transport Policy and has started the reversal of the attainment date extensions it had approved under its 1998 transport policy. The Baton Rouge area was one the first areas to experience a reclassification, or "bump-up," as a consequence of the recent court decisions.

The Baton Rouge region has worked extremely hard, complied with applicable EPA non-attainment requirements and, in spite of upwind influences, has progressed to being very close to attainment of the ozone standard. Thus, it seems un-



fair, as well as unreasonable, to me that due to recent court rulings the EPA will be forced to penalize these efforts by reclassifying Baton Rouge as being in "severe" non-attainment.

This reclassification is further compounded by the fact that the requirements mandated by the Clean Air Act for those areas in "severe" non-attainment will adversely effect the area's economy while only providing negligible ozone reduction benefits. In addition, under the Transport SIP approved by the EPA in October of last year, the Baton Rouge area committed to an aggressive program of emission reductions and an attainment date of November 2005. Thus, the "bump-up" to the "severe" classification and all of the negative impacts it will have on the region does nothing to advance the deadline for being in attainment.

The Baton Rouge region's effort to come into compliance with the Clean Air Act's ozone requirements is a case study for why the EPA adopted its Ozone Transport Policy in 1998. It is clear that the region has made a commitment to come into compliance with the requirements of the Clean Air Act and to address those ozone-forming emissions within its control and despite these efforts, Baton Rouge was still "bumped up" to the "severe" non-attainment classification in large part due to the transport of pollution from upwind areas that it cannot control.

This reclassification is not equitable and Baton Rouge should not be required to implement additional costly controls to offset the effects of pollutants drifting into the region from upwind areas that are working with later attainment dates.

We should not allow regions, such as Baton Rouge, that have made every effort to come into compliance with the Clean Air Act to be "bumped up" due to the transport of pollutants from another region. I repeat, that this is precisely the type of situation the EPA had in mind when it developed its Ozone Transport Policy in 1998.

While I understand that the courts have ruled that the EPA does not have the authority under the Clean Air Act to grant extensions under the Ozone Transport Policy, we as legislators have the opportunity to correct this situation and I look forward to working with you on this important issue. Finally, our progress in the fight for air quality improvement should continue full speed ahead, but it should be guided by reason and common sense.

Again, I thank the committee for considering this important issue and giving communities, such as Baton Rouge, the opportunity to be heard. I hope that as a result of this hearing some ideas will emerge for equitably dealing with progress of non-attainment areas towards their attainment while accounting for impacts of transported pollutants.

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PREPARED STATEMENT OF L. HALL BOHLINGER, SECRETARY, LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY

Thank you Mr. Chairman and members of the Committee for the opportunity to furnish testimony on the reclassification provisions of Title I of the Clean Air Act and on the consequences they bear on the five-parish Baton Rouge non-attainment area and on our state as a whole. The Louisiana Department of Environmental Quality realizes that safeguarding the health of our citizens and improving the vitality of our local economy are closely linked to the attainment of the National Ambient Air Quality Standards (NAAQS.)

Baton Rouge is the hub of Louisiana state government and houses major petrochemical industries, Louisiana State and Southern Universities, and a metropolitan airport. Sitting on the banks of the Mississippi River, its traffic flows include heavy marine transports, Interstate 10, and a concentration of railway assets servicing the community. In spite of a challenging emissions inventory from these sources and the periodic influence of pollutants transported into the region, the five-parish Baton Rouge area has made sound progress toward attainment of the 1-hour ozone standard.

With the exception of the five-parish Baton Rouge non-attainment area, which has not yet met the standard for ozone, the remaining 59 Louisiana parishes are in compliance with the NAAQS for all criteria pollutants. Following the Clean Air Act of 1977, 20 parishes around the state were classified as non-attainment for ozone. Of the 20, 15 have now been redesignated to attainment status. The five-parish Baton Rouge non-attainment area came within 2 ppb of achieving attainment in 1999, and last year came within only one exceedance day of attainment. If the non-attainment area were reclassified today in accordance to the parameters observed by the Clean Air Act amendments of 1990, the area would be classified as marginal.

In a letter to EPA Region 6 Administrator, Gregg Cooke dated May 10, 2000, Governor M.J. "Mike" Foster, Jr. requested that an extension of the attainment date

for the five-parish Baton Rouge area be granted. Meeting U.S. Environmental Protection Agency policy requirements, the state provided a completed Transport State Implementation Plan package to EPA in December 2001. This package included a demonstration that the area was affected by transport from the Houston area in southeast Texas. In October 2002, EPA approved a revised attainment plan showing the area would attain the 1-hour standard by November 2005 by requiring an additional 30% reduction of oxides of nitrogen, an ozone forming pollutant, from industrial plants.

Due to the federal courts' reversal of EPA's authority to grant attainment date extensions, the Baton Rouge area was reclassified from serious to severe, effective June 23, 2003. As a result, the Baton Rouge area will be confronted with a number of new requirements such as the use of reformulated gasoline. Sensitivity analyses conducted during recent Urban Airshed Modeling suggests there would be no measurable benefit from the use of RFG as it relates to the formation of ozone. Further, by using gasoline sales statistics for the five-parish Baton Rouge area, it is estimated that RFG will cost consumers an additional \$48 million per year. In addition to the considerable increase in cost to consumers, the reclassification to severe will tag the five-parish Baton Rouge area with a stigma of having a severe air quality problem, although monitored results show, as stated earlier, that we have at worst a marginal problem.

The new severe area requirements imposed with the reclassification are expected to produce negligible ozone reduction benefit while inflicting enormous cost and economic development impacts. For instance, if the Baton Rouge area does not reach attainment by the 2005 deadline, emission fees will be imposed that will cost our local industry around \$100 million. This will affect the economy as some industries may opt to fold operations and others may choose to bypass the area altogether as a potential location for business.

At this point, I would care to add that considerable practical thought and scientific research went into the development of EPA's transport policy. In the last analysis, the transport policy was designed to allow consideration for situations, such as in Baton Rouge, where attainment efforts are impeded by influences of pollutants transported from upwind sources, and to allow latitude to an otherwise rigid approach to improving air quality. The Clean Air Act should be amended to give EPA the authority to implement its transport policy and extend attainment dates. It would be of most benefit to areas such as the five-parish Baton Rouge non-attainment area for any such amendment to be made retroactive. Such an action would provide much needed relief to other areas that had been granted approved attainment date extensions under the EPA transport policy and that, as a result of courts' rulings, have now been reclassified.

Mr. Chairman, and members of the Committee, Louisiana has made significant progress in meeting the requirements of the Clean Air Act and we have a vested interest in continuing to improve the quality of the air in our state. However, based on sound scientific study, it is the opinion of LDEQ that the five-parish Baton Rouge non-attainment area would have met the federal ozone standard were it not for the transport of pollutants from upwind states. While laws are written for the greater good, they also must be written in accordance to the reality of the situation at hand.

Thank you.

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ADDITIONAL COMMENTS REGARDING THE TESTIMONY BY COUNTY JUDGE CARL R. GRIFFITH

The report titled "Accidents Will Happen," published by the Environmental Integrity Project (EIP) was asked by Congressman Waxman to be entered into the record for the hearing conducted on July 22, 2003, by the Subcommittee on Energy and Air Quality concerning the Environmental Protection Agency's (EPA) Bump-up Policy under Title I of the Clean Air Act.

Since this report pertains to facilities in Jefferson County, Texas, I would like to take this opportunity to provide the sub-committee with additional comments concerning the accuracy of the report.

Although the EIP report does not pertain to the issues of ozone attainment and deadline extensions, since it was entered into the record of the hearing, it should be noted that the report contains factual errors, and uses incomplete research to draw its generalized conclusions. To allow the report to be considered without any discussion of its accuracy does an injustice to all of those who have worked, planned, and invested in efforts to improve the air quality in the Beaumont-Port Arthur-Orange (BPA) area.

To be specific, the report states three reasons that emissions may be underestimated, based on generalized statements and leaves the impression that such activities are condoned in Texas. However, such an impression is incorrect.

1. Reporting of emissions is required when those emissions exceed permits or regulatory requirements by certain amounts, depending on the constituent released. In Texas, more is required, however. For all events that lead to emissions above permit/regulatory limits by *any amount*, reportable or not, each facility must complete a report containing the same information as required for a reportable event and keep that information on file for Texas Commission on Environmental Quality (TCEQ) inspection. Furthermore, the events shown in Appendix B of the report did not necessarily need to be reported to the National Research Center (NRC). One of the facilities listed reviewed every incident listed with EPA personnel, and EPA concurred that in each case a report to NRC was not required. Other facilities have documented NRC Incident Report numbers to confirm that incidents were reported to the NRC, contrary to the data presented in the EIP report. There are also instances in the report's Appendix B that attribute events to specific facilities when there was no event reported by that facility. It should also be noted that any non-reportable event not meeting the same burden (as a reportable event) to prove the incident was not preventable is subject to enforcement action; and TCEQ aggressively enforces this regulation. All emissions resulting from normal operations, startups/shutdowns, and upsets (reportable and non-reportable) are reported to TCEQ in each facility's annual Emissions Inventory.

2. Industry uses flare efficiency factors and specific calculation methods that are provided by a TCEQ Guidance Document on Flares, and flare efficiencies are discussed later in my remarks.

3. TCEQ rules require all pollutants emitted during "reportable episodes" be reported; in mass units, for each specific constituent—even for those constituents that do not exceed reportable quantity thresholds. Facilities failing to report as required are subject to enforcement, but there is no discussion in the EIP report on such enforcement activities for the specific instances listed.

The next section of EIP's report (pages 5 and 6) implies that "unpermitted releases" of VOC's contribute to the BPA area's nonattainment status. The fact is there was only one ozone exceedance during the first seven months of 2002, on July 12. There was one upset reported that day; but it was due to a Sulfur Recovery Unit power failure—five hours after the ozone episode—at a facility several miles northeast of the Sabine Pass monitor, and the wind direction clearly shows the ozone exceedance on that day was due to transport from the Houston/Galveston (HGA) area to the southwest of the Sabine Pass Air Monitoring Station. None of the events listed in the report resulted in the violation of any Ambient Air Quality Standard. The report states that public data on benzene and other hazardous chemicals is scarce, but fails to mention that TCEQ and the South East Texas Regional Planning Commission (SETRPC) have operated monitoring stations for over a decade. The results of TCEQ monitoring is available on their web site, and the SETRPC monitoring results (including ozone, NO<sub>x</sub>, and 52 volatile organic constituents) are issued at its Air Quality Advisory Committee meetings attended by municipalities, industry, business leaders, labor representatives, environmental groups, and the media.

On page 7 of the EIP report, there is a statement that "all accidental releases, as well as many that result from maintenance or shutdown activity of hazardous chemicals above a specified amount, must also be reported to the federal government's NRC within twenty-four hours." This statement is *not true*. Only constituents designated as hazardous substances under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) are subject to the designations and reporting requirements as promulgated under 40CFR302.4 and 40CFR302.6. Therefore, not every emissions event requires reporting to the NRC. Events involving sulfur dioxide, for instance, which is not designated as a hazardous substance under CERCLA, would not be reported to the NRC, while such events would be reported to the Local Emergency Planning Committee (LEPC) and state agencies. The facility mentioned in the EIP report with the upset from a "Grandfathered Unit" did report the event in a timely manner to TNRCC (TCEQ)—though they felt the event didn't meet the reporting criteria, but was not required to report the event to the NRC because the constituents released were not on the CERCLA Hazardous Substances list. In addition, TCEQ reporting limits are lower than federal regulatory requirements for some substances, so it would be expected that TCEQ would have more reports on file than the NRC.

The discussion of flaring efficiencies on page 9 of the report utilizes data from a study of oil field flares to prove flaring efficiencies are lower than industry claims. The study was based on open pipe, small diameter flares with no combustion enhancements. The results were exactly as expected, degraded efficiencies. The prob-

lem with the study, however, is the oil field flares have about as much in common with refinery and chemical plant flares as a rowboat has with the Queen Mary! Other studies conducted on large diameter flares, under real ambient weather conditions, in real industrial facilities revealed combustion efficiencies greater than 98 %, but those studies were not mentioned in the EIP report.

The EIP report applauds BP Amoco for entering into a consent decree with EPA, yet fails to mention that one of the facilities in Port Arthur had also entered into a consent decree with EPA the year before the report was developed.

The report further says that “substituting ‘tail gas units’ (TGTUs) that are much more efficient at destroying hazardous pollutants than the flares on which Port Arthur companies now rely” as a way to improve pollution control; however, the report fails to mention that all the refineries in Port Arthur already utilize TGTUs on their Sulfur Recovery Units, and flares are used only as the safety devices they are designed to be.

Every one of the conclusions in the EIP report fails to understand the situation that exists in Port Arthur.

1. There is a reverse 9-1-1 system in all of Jefferson, Hardin, and Orange Counties. Local emergency response officials can activate the system should any emergency require such steps. This reverse 9-1-1 system was instituted in early 2003; however, was far along in its development during 2002. The EIP could have easily ascertained this fact had it chosen to do so. In addition, industry in the BPA area has funded development of an informational call-in system (and is in the process of preparing to make the system public) that will allow citizens to get information on local plants’ activities, including environmentally related events. The development and preparation of the call-in system was well along during 2002, and the EIP could have easily ascertained information about the system. As discussed earlier, and contrary to the statements made in the EIP report, not all emissions events are required to be reported to the NRC, therefore, disparate numbers of reports between the NRC and local agencies should be expected, not a cause for investigations.

2. The EPA Toxic Atmospheric Gas Analyzer van did monitor the Port Arthur area in early 2003 and, according to the EPA report on the results, the concentrations found were “substantially below the Occupational Safety and Health Administration Permissible Exposure Levels for worker protection.” Several chemicals exhibited short-term concentrations above the Texas Health Effects Screening Levels, although daily, monthly, and annual concentrations would likely be consistent with (below) Health Effects Screening Levels. One EPA official said in responding to a media question about the data said the air in the Port Arthur area was obviously getting better—just opposite the impression left by the EIP report. In addition, industry in Port Arthur has funded an additional stationary VOC air monitoring station (near the Memorial High School 9th Grade Campus), with episodic sampling capability, to be operated by the SETRPC.

3. As discussed earlier, at least one of the Port Arthur facilities entered into a consent decree with EPA in 2001. Hundreds of millions of dollars have been invested by the industrial facilities in Port Arthur over the last decade to improve operational performance and install pollution reduction equipment. There was a 38% reduction in industrial emissions between 1996 and 2001, and an additional 18% in total emissions in the 2002-2006 timeframe. Twenty-two pollution reduction projects were completed by Port Arthur facilities in 2002 with fifteen more scheduled for 2003. To leave the impression that facilities in Port Arthur are reluctant to install state-of-the-art equipment is not supported by the area’s industrial facilities’ investments in pollution control equipment. In addition, area industrial personnel meet quarterly with TCEQ staff personnel to discuss the latest operational and maintenance initiatives that have proved successful in reducing upset and startup/shutdown emissions. These meetings have been occurring for over two years, and discuss information that has been developed locally, as well as practices that have proven successful in other areas of the country.

4. As discussed earlier, TCEQ aggressively enforces its upset rules, which have very limited definitions of what constitutes an upset that can be exempt from enforcement action; however, the EIP report discusses none of those activities. As one facility was told by a TCEQ staff member during a review of non-reportable upset events, “you are being held to a standard of operational perfection!”

The air in Port Arthur has markedly improved over the last decade as evidenced by the EPA’s TAGA van results and the stationary air monitoring systems operated by TCEQ and SETRPC. Elected officials, businesses, labor leaders, industry, municipalities, and the SETRPC have worked diligently with EPA and TCEQ personnel to understand and find solutions to air issues that will benefit the BPA area for years to come. Yet, one-sided, inaccurate, and flawed reports such as EIP’s “Accidents Will Happen” do nothing but mischaracterize the results of those multi-fac-

eted efforts, and divert attention away from the ozone transport policy under consideration by your Subcommittee.

I appreciate having the opportunity to testify before the Subcommittee, and thank you for your consideration of these comments trying to make the Subcommittee members aware of the scope and results of our efforts in Southeast Texas, compared to the impression presented in the EIP report.

September 5, 2003

The Honorable JOE BARTON  
 Chairman  
 Subcommittee on Energy and Air Quality  
 U.S. House of Representatives  
 Washington, DC 20515-6115

DEAR CHAIRMAN BARTON: I am writing in response to your letter of August 22, 2003. In this letter you requested additional information regarding the testimony I presented at the July 22, 2003 subcommittee hearing regarding the "Bump-Up" Policy Under Title I of the Clean Air Act.

Enclosed please find our responses to these questions. If you should need any additional information please do not hesitate to contact me at 512-239-5515.

Sincerely,

R.B. "RALPH" MARQUEZ  
 Commissioner

Enclosures

THE HONORABLE HENRY A. WAXMAN

*Question 1.* Texas requests an extension of the attainment date for nonattainment areas downwind from the Houston-Galveston nonattainment area, but the State has not adopted a SIP that contains a complete control strategy (i.e., all the adopted control measures needed to attain) for the 1-hour ozone standard in Houston.

*Question 1a.* What steps remain to be completed to develop and adopt a complete control strategy for the Houston nonattainment area?

Response. The remaining steps to be completed continue to be those outlined in Chapter 7 of the December 2000 and September 2001 SIP revisions, approved by EPA in November 2001.

*Question 1b.* Is there evidence that the emissions inventory for VOCs used in the photochemical grid modeling approved by EPA in November 2001 as part of the attainment demonstration underestimates actual emissions from sources in the non-attainment area?

Response. See 1d

*Question 1c.* For which VOC species is there evidence that the emissions inventory used in the EPA-approved modeling analysis understates emissions?

Response. See 1d

*Question 1d.* For which sources or source categories is there evidence that the emissions estimates used in the EPA-approved modeling analysis understates emissions?

(Response to Questions 1.b, 1.c, and 1.d) There is strong evidence that industrial emissions of light olefins, especially ethylene and propylene, are significantly larger than the amounts reported in current inventories in the Houston/Galveston/Brazoria (HGB) region. The reporting is based on EPA emission factors. Analysis of data collected during the 2000 Texas Air Quality Study (TexAQS 2000) was conducted by several groups of research scientists who concluded that the observed atmospheric concentrations of ethylene and propylene could not be explained by the reported inventory. They concluded that the ethylene and propylene observations were consistent with industrial emissions of these chemicals, not due to mobile sources. Some of this research is described in supporting documents for the December 2002 SIP Revision (see <http://www.tnrc.state.tx.us/oprd/sips/dec2002hga.html>). Additional material is available at <http://www.tnrc.state.tx.us/air/aqp/airquality-science.html>. Finally, several articles have been published in the scientific literature:

- Ryerson, T.B., et al. (2003), Effect of petrochemical industrial emissions of reactive alkenes and NO<sub>x</sub> on tropospheric ozone formation in Houston, Texas. *Journal of Geophysical Research*, 108(D8): 4249, doi: 10.1029/2002JD003070;
- Wert, B. P., et al. (2003), Signatures of terminal alkene oxidation in airborne formaldehyde measurements during TexAQS 2000. *Journal of Geophysical Research*, 108(D3): 4104, doi: 10.1029/2002JD002502;

—Kleinman, L. I., et al. (2002), Ozone production rate and hydrocarbon reactivity in 5 urban areas: A cause of high ozone concentration in Houston, *Geophysical Research Letters*, 29, doi: 10.1029/2001GL014569.

The TCEQ is currently investigating emissions of non-olefinic hydrocarbons, but no conclusions have been reached regarding whether, or by how much, these emissions may be under-reported. In addition, the TCEQ constantly strives to improve its inventory of emissions from all sources, and plans to examine emissions from a number of non-industrial sources in the coming months and years.

*Question 1e.* By what amount does the emissions inventory used in the EPA-approved modeling analysis understate actual emissions of each of the VOCs identified in response to 1.c?

Response. While it is fairly certain that industrial emissions of light olefins in the HGB area are significantly under-represented in the inventory, the actual amount of under-estimation is unknown. In the modeling analysis conducted for the December 2002 SIP revision, these emissions were inflated to approximately five times the reported amount, but this is by no means a definitive factor. It is very difficult to relate measured atmospheric pollutant concentrations to source strength, and different assumptions and/or analytical techniques invariably lead to different answers. The TCEQ, along with other organizations, is continuing to research the issue and hopes to resolve some of the uncertainties in estimating these emissions in the upcoming months. Additionally, a new major field study is planned for 2005-2006, where additional data collection and new analysis methods should help to provide more definitive answers to the questions posed here.

*Question 1f.* Has the State proposed to adopt, or adopted, emissions limitations or other control measures to achieve reductions in emissions of each of these VOCs?

Response. The commission has adopted emissions limitations and control measures via rules that include a site-wide cap, monitoring, and testing requirements for vents, flares, and cooling towers. The site-wide cap limits the highly reactive volatile organic compounds (HRVOC) emissions from each account on a 24-hour rolling average. The monitoring and testing requirements ensure that leaks and other problems contributing to the emissions of HRVOCs are discovered, evaluated, and corrected in a timely manner in order to ensure compliance with the site-wide cap limits. Flares are also required to demonstrate compliance with 40 CFR 60.18.

*Question 1g.* Has the State determined the magnitude of reductions of each of these VOCs necessary to attain the 1-hour NAAQS?

Response. We understand “these VOCs” to mean any identified in 1c. The purpose of the December 2002 SIP revision was to demonstrate that a certain level of reduction in HRVOCs would result in the same air quality benefit with an 80% NO<sub>x</sub> reduction strategy as was demonstrated with the approved 90% NO<sub>x</sub> reduction strategy.

*Question 1h.* What methodology has been used to make this determination? Please provide copies of documents reporting the methods used in performing any analyses to make such determination.

Response. The methodology used to make this determination may be found at the following websites: <http://www.tnrc.state.tx.us/oprd/sips/dec2002hga.html>. Additional material is available at <http://www.tnrc.state.tx.us/air/aqp/airquality-science.html>.

*Question 1i.* If such determination has not been made, by when will the State complete a determination of the magnitude of reductions of each VOC needed for attainment?

Response. See 1h.

*Question 1j.* When will the State release such determination for review by the public and EPA?

Response. The information used for this SIP revision may be found on our website at: <http://www.tnrc.state.tx.us/oprd/sips/dec2002hga.html>

*Question 1k.* When will the State complete the adoption of all emissions limitations or other control measures needed for attainment?

Response. TCEQ is currently evaluating what emission limitations or other controls are needed and the timeframes in which they can be implemented, as we are required to do.

*Question 1l.* How long does the State expect it will take for the sources of VOCs to implement such emissions reductions after adoption?

Response. The compliance dates for the emission reductions adopted in the December 2003 rule and SIP revision are April 1, 2006 for the site-wide cap; June 30, 2004 for the testing of vents; December 31, 2004 for the monitoring and testing of flares and cooling towers; and December 31, 2003 for the initial monitoring of pump and compressor seals.

*Question 2.* In December 2002, Texas adopted revised emissions limitations that relax the emissions limitations for NO<sub>x</sub> emitted from various industrial sources that had originally been adopted in 1999 and approved by EPA as part of the Houston SIP in November 2001.

Response. The NO<sub>x</sub> emission specifications for HGA were originally adopted in December 2000 and revised (for electric utilities) in September 2001. It was the NO<sub>x</sub> emission specifications adopted in September 2001 which were approved by EPA in November 2001.

*Question 2a.* What is the increase in allowable daily NO<sub>x</sub> emissions that will result if the relaxed emissions limitations are enforced in lieu of the emissions limitations that have been approved as part of the Texas SIP?

Response. 52 tons per day (tpd)

*Question 2b.* By what date are the NO<sub>x</sub> emissions limitations required by the EPA-approved SIP to be achieved?

Response. The Chapter 117 and Chapter 101 rules adopted by the commission on September 26, 2001 were approved by EPA in the November 14, 2001 issue of the *Federal Register*. These rules phased in stationary source NO<sub>x</sub> reductions beginning in 2003 and continuing through 2007. Specifically, for boilers, auxiliary steam boilers, and stationary gas turbines at electric utilities, the allocation of NO<sub>x</sub> allowances resulted in the following overall reductions of NO<sub>x</sub> emitted from electric utilities: 44% reduction beginning April 1, 2003; 88% reduction beginning April 1, 2004; and 90% reduction by April 1, 2007. For non-utility facilities, the allocation of NO<sub>x</sub> allowances resulted in the following overall reductions of NO<sub>x</sub> emitted from non-utility facilities: 35% reduction by April 1, 2004; 60% reduction by April 1, 2005; 70% reduction by April 1, 2006; and 90% reduction by April 1, 2007.

*Question 2c.* What assumptions were made regarding total NO<sub>x</sub> and VOC emissions in the Houston-Galveston nonattainment area when Texas determined that the 1-hour NAAQS would be attained in Beaumont/Port Arthur and Dallas/Fort Worth.

Response. The controls applied in the HGB nonattainment area for both SIP revisions consisted of Tier III NO<sub>x</sub> controls (later referred to as ESAD rates) as specified in Chapter 117. To achieve these NO<sub>x</sub> control levels, most stationary combustion sources in HGB must apply burner modifications and/or flue gas clean-up. However, there undoubtedly will be cases in which an owner or operator evaluates the circumstances of a particular unit and determines, for whatever reason, to pursue an option other than retrofit control technology. For example, replacement or consolidation of existing equipment, reduced fuel firing, and shutdown of existing equipment (particularly for marginally economic equipment and production lines) are possible options for reducing NO<sub>x</sub>. The owner or operator of each affected source is free to choose the control technology which best addresses the circumstances of the affected sources, obtain additional allowances from another facility's surplus allowances, or select a combination of the two approaches.

Application of Tier III NO<sub>x</sub> controls in HGB represents roughly a 90% reduction in NO<sub>x</sub> emissions from 1993 (HGB base case). VOC reductions, mainly in the form of rate of progress (ROP) commitments, amounted to approximately a 40% reduction from 1993 levels.

*Question 2d.* Has Texas determined the magnitude of emissions reductions from local sources that would be necessary to attain the 1-hour ozone NAAQS in the Beaumont/Port Arthur and Dallas nonattainment areas?

Response. Yes

*Question 2e.* If Texas has made the determinations identified in question 2d, what are the allowable emissions target levels for NO<sub>x</sub> and VOC that would need to be met in order to attain in each nonattainment area?

Response. Total allowable emissions for all sources in these areas would be: DFW: 321 tpd NO<sub>x</sub> 680.6 tpd VOC, BPA: 164 tpd NO<sub>x</sub> 187 tpd VOC.

*Question 2f.* To what levels of NO<sub>x</sub> and VOC will the emissions of such pollutants be reduced by the controls required by the adopted control measures in the SIP for the Beaumont/Port Arthur nonattainment area, and the SIP for the Dallas/Ft. Worth nonattainment area?

Response. In the Beaumont/Port Arthur area NO<sub>x</sub> will be reduced by 31%, and VOC has already been reduced by 24%, mainly in the form of ROP commitments, to reach the levels outlined in 2e. In the Dallas/Fort Worth area NO<sub>x</sub> will be reduced by 36% and VOC by 6.5% to reach the levels outlined in 2e. These percentages indicate the difference between the future base case and the future controlled case.

*Question 2g.* Has Texas performed any air quality modeling analysis using photochemical grid models to determine the impact of such increase in NO<sub>x</sub> emissions

on ozone formation in downwind nonattainment areas, including but not limited to, Beaumont/Port Arthur and Dallas/Fort Worth?

Response. No. However, we believe that the transport of ozone is the primary influence on these areas. Therefore, as our analysis has indicated that we can achieve the same level of air quality benefits with reductions in industrial VOC emissions, combined with an overall 80% reduction in NO<sub>x</sub> emissions from industrial sources, the impact on the ozone transported to the Dallas/Fort Worth and Beaumont/Port Arthur areas should also be equivalent. (see <http://www.tnrc.state.tx.us/oprd/sips/dec2002hga.html>) and <http://www.tnrc.state.tx.us/air/aqp/airquality—science.html>).

*Question 2h.* If such analyses have been performed, what is the difference in ozone formation in the downwind areas when the EPA-approved emissions limitations are compared with the relaxed emissions limitations?

Response. See 2g

*Question 2i.* Were such analyses, if any, made available to the public and EPA prior to or during the period for public comment on the proposed relaxed emissions limitations? Please provide copies of documents reporting the methods used in performing such analyses.

Response. See 2g

*Question 3.* You testified that:

We believe that the emission reductions that have been adopted for the BPA area would bring the area into attainment of the 1 hour ozone standard but for the emissions transported from the Houston-Galveston area. This is why it makes sense for areas downwind of a source area to have the same attainment date as the source area.

Please answer the following questions in regard to this statement:

*Question 3a.* Is it the position of the Texas CEQ that the BPA area would attain the 8-hour ozone standard but for the emissions from the Houston-Galveston area?

Response. As with the 1-hour ozone standard, there is evidence that the Houston-Galveston area has a significant impact on the BPA area with regards to its ability to attain the 8-hour ozone standard. However, the TCEQ has not completed all of the analysis necessary to establish a definitive position that the BPA area would attain the 8-hour standard but solely for the emissions from the Houston-Galveston area.

*Question 3b.* If the Texas CEQ does not believe that BPA would attain the 8-hour ozone standard but for the emissions from the Houston-Galveston area, please explain what additional control measures will be necessary for BPA to attain the 8-hour ozone standard. Additionally, please explain why as policy matter it makes sense to delay action to control pollution in BPA when current law will require attainment of the 8-hour ozone standard toward the end of this decade? Additionally, please provide your estimate of the public health impacts of delaying emissions reductions necessary to meet the 8-hour health-based standard.

Response. TCEQ has not completed the analysis to determine what, if any, additional controls would be necessary locally in the BPA area to develop an attainment demonstration for the 8-hour standard. The TCEQ has not taken a position to delay action in the BPA area, and continues to implement the current measures, which will result in approximately a 45% reduction in industrial NO<sub>x</sub> emissions by May 2005. The TCEQ is in the process of conducting a comprehensive scientific analysis of all of the factors contributing to the 8-hour nonattainment status in BPA and will continue to develop strategies to be implemented as expeditiously as practicable in the most cost effective manner to achieve the standard. As the TCEQ conducts its analysis it will evaluate the impact the HGB area has on BPA in its determination of the most scientifically sound approach to achieving the standard. Recognizing the complexity of the ozone problem in the Houston-Galveston area, it may take more time to implement the strategy there before the BPA area will be able to achieve attainment by its currently contemplated attainment date, which does not take into account influence from other areas.

The TCEQ has not conducted a health based analysis with regards to attaining the ozone standard.

*Question 3c.* If the Texas CEQ believes that BPA would attain the 8-hour ozone standard but for emissions from the Houston-Galveston area, please provide the technical basis for this view.

Response. This analysis is anticipated to be completed in the spring of 2004.

*Question 3d.* If the Texas CEQ does not know whether or not BPA would attain the 8-hour ozone standard but for emissions from the Houston-Galveston area, please explain why it makes sense for Congress to legislate to address the situation in Texas before Texas fully understands the scope of its air pollution problems?

Response. The TCEQ believes that there should be an option specifically allowed if the scientific analysis shows this to be the case.



*Question 4.* You did not testify whether the Dallas-Fort Worth area would attain either the 1-hour or 8-hour ozone standard but for emissions from the Houston-Galveston area.

*Question 4a.* Is it the position of the Texas CEQ that Dallas-Fort Worth would attain the 1-hour ozone standard but for emissions from the Houston-Galveston area? Please provide the technical basis for your view.

Response. This analysis was conducted as a part of the attainment demonstration SIP adopted by the commission in April 2000. The full analysis can be found at: <http://www.tnrcc.state.tx.us/oprd/sips/apr2000dfw.html>

*Question 4b.* Would Dallas-Fort Worth attain the 8-hour ozone standard but for emissions from the Houston-Galveston area? Please provide the technical basis for your view.

Response. As with the 1-hour ozone standard, there is evidence that the Houston-Galveston area has a significant impact on the DFW area with regards to its ability to attain the 8-hour ozone standard. However, the TCEQ has not completed all of the analysis necessary to establish a definitive position that the DFW area would attain the 8-hour standard but solely for the emissions from the Houston-Galveston area.

*Question 4c.* If Dallas-Fort Worth would not attain the 1-hour ozone standard or the 8-hour ozone standard, please explain as a policy matter why it makes sense to delay additional pollution control efforts in Dallas-Fort Worth pending action in Houston-Galveston.

Response. The TCEQ has not taken a position to delay action in the DFW area, and continues to implement the current measures, which will result in approximately a 88% reduction in NO<sub>x</sub> emissions from electric utilities by May 2005. The TCEQ is in the process of conducting a comprehensive scientific analysis of all of the factors contributing to the 8-hour nonattainment status in DFW and will continue to develop strategies to be implemented as expeditiously as practicable in the most cost effective manner to achieve the standard. As the TCEQ conducts its analysis it will evaluate the impact the HGB area has on DFW in its determination of the most scientifically sound approach to achieving the standard. Recognizing the complexity of the ozone problem in the Houston-Galveston area, it may take more time to implement the strategy there before the DFW area will be able to achieve attainment by its currently contemplated attainment date, which does not take into account influence from other areas.

*Question d.* What is Texas' estimate of the public health impacts of delaying additional control measures that would be necessary to attain the 8-hour ozone standard until they are mandated by federal law?

Response. The TCEQ has not conducted a health based analysis with regards to attaining the ozone standard.

*Question 5.* According to information received by the Subcommittee, malfunctions, startups, shutdowns, and maintenance activities at just 6 facilities in Port Arthur, Texas (Atofina, BASF, Chevron, Huntsman, Motiva, and Premcor) are responsible for a large amount of emissions that violate the Clean Air Act while also being controllable. The Environmental Integrity Project reports that upsets at these facilities in 2002 emitted over 3 million pounds of SO<sub>2</sub>, over 39,000 pounds of H<sub>2</sub>S, more than 700,000 pounds of CO, almost 174,000 pounds of NO<sub>x</sub>. Total emissions of volatile organic compounds (VOCs) amounted to almost 3 and one-half million pounds of VOCs, including over 163,000 pounds of benzene compounds, 137,000 pounds of butadiene, 995,000 pounds of ethylene, more than 743,000 pounds of unidentified VOCs, and 1,410,000 pounds of other VOCs.

*Question 5a.* Are releases from malfunctions, startups, shutdowns, and maintenance activities at facilities in Beaumont-Port Arthur currently accounted for in Texas' emissions inventory? If so, please provide the levels of emissions that Texas CEQ assumes are emitted from facilities in Beaumont-Port Arthur due to malfunctions, startups, shutdowns, and maintenance activities?

Response. Yes, they are reported by the companies and stored in our inventory database. For the year 2000, (the latest year that electronic data are currently available) the annual emissions (in tons) for the three county Beaumont-Port Arthur area from malfunctions, startups, shutdowns, and maintenance activities as reported by industry are as listed in Table 1 below.

Table 1. Year 2000 Beaumont-Port Arthur Area Annual Malfunction, Startup, Shutdown, and Maintenance Activity Emissions (tons)

H <sub>2</sub> S	NO <sub>x</sub>	SO <sub>2</sub>	CO	VOC	Benzene	Butadiene	Ethylene
25	83	1,167	26,903	1,315	5	55	323

*Question 5b.* If emissions due to malfunctions, startups, shutdowns, and maintenance activities are not accounted for please explain why.

Response. They are submitted by industry and are in the inventory

*Question 5c.* Please explain what Texas CEQ is doing to address these emissions.

Response. There are several approaches being used to address the number of events and emissions related to malfunctions, startups, shutdowns, and maintenance activities in Texas. In the case of emissions from recurring, planned events, such as many maintenance and related shutdown and startup activities, the agency may authorize those emissions through the review and permitting process. The TCEQ addresses the remaining events through investigation and enforcement.

Our first ramped up efforts at addressing the number of and quantity of emissions related to emissions events (malfunctions) and maintenance, startup, and shutdown activities began in January 2000 when we redirected investigator efforts in our three most industrialized areas on the Gulf Coast. We dedicated staff to immediately respond to such events and improved our ability to address such complex events. We expanded the lessons learned in those regions statewide in 2001 to begin conducting planned investigations specifically targeting such events. These planned investigations became part of our EPA Compliance Monitoring Strategy implementation.

During the 77th Texas Legislative Session, the state legislature provided specific direction on addressing such events in portions of HB 2912, which was implemented into state rule in September 2002. Legislative mandates included requiring the electronic reporting of such events, providing access to that information rapidly to the general public (see <http://www.tnrcc.state.tx.us/enforcement/fod/eer/> MACRO BUTTON [HtmlResAnchor http://www.tnrcc.state.tx.us/enforcement/fod/eer/](http://www.tnrcc.state.tx.us/enforcement/fod/eer/)) and promptly addressing the events. Those events determined by the state to be "excessive" require that a company either seek to permit the operations that led to the event (if the nature of the event makes permitting possible) or negotiate a state approved and enforceable Corrective Action Plan, all within approximately 180 days of the declaration that an event is excessive. These actions are in addition to any enforcement that the circumstances of the event warrant.

Further, the legislation provided for the determination that a site can be declared a chronic site for emissions events by act of the Commission. In fiscal year 2002, we allocated approximately 8% of our air investigator resources (10 of approximately 122 FTEs) to emissions events and activities. In 2003 we further increased our efforts in this area and expended approximately 13% of our air program investigator resources, and in fiscal year FY04 (Sept 03 thru Aug 04), we will allocate approximately 20% of our air program investigator resources to address emissions events, startup, maintenance, and shutdown activities. The investigator resources have been redirected from other planned, routine investigations.

*Question 5d.* What percentage of Port Arthur's emissions inventory for each of the identified emissions do the emissions identified by the Environmental Integrity Project account for?

Response. The emissions identified in question 5 are hydrogen sulfide (H<sub>2</sub>S), nitrogen oxides (NO<sub>x</sub>), sulfur dioxide (SO<sub>2</sub>), carbon monoxide (CO), volatile organic compounds (VOC), benzene, butadiene, ethylene. The emissions listed in question 5 are for the year 2002. The area wide emissions for 2002 are not yet available. A comparison of emissions from malfunctions, startups, shutdowns, and maintenance activities as a percentage of all emissions as reported by industry for the year 2000 is in Table 2.

Table 2. Emissions From Year 2000 Malfunctions, Startups, Shutdowns, and Maintenance Activities as a Percentage of All Emissions in the Beaumont-Port Arthur Area

H <sub>2</sub> S	NO <sub>x</sub>	SO <sub>2</sub>	CO	VOC	Benzene	Butadiene	Ethylene
10%	0% <sup>1</sup>	3%	59%	7%	3%	22%	23%

<sup>1</sup> Value is near zero (actual value is 0.2%)

If the assumption were made that total company reported 2002 annual emissions did not differ significantly from those reported by industry in the year 2000, then the percentages of the identified levels of emissions from malfunctions, startups, shutdowns, and maintenance activities for select sites for 2002 as a function of total emissions are listed in Table 3.

Table 3. Emissions From Year 2002 Malfunctions, Startups, Shutdowns, and Maintenance Activities For Select Sites as a Percentage of All Year 2000 Emissions in the Beaumont-Port Arthur Area

H <sub>2</sub> S	NO <sub>x</sub>	SO <sub>2</sub>	CO	VOC	Benzene	Butadiene	Ethylene
8%	0% <sup>1</sup>	4%	1%	9%	42%	27%	35%

<sup>1</sup> Value is near zero (actual value is 0.2%)

RESPONSE OF RON METHIER, AIR DIRECTOR, GEORGIA EPD TO THE QUESTIONS OF  
HON. HENRY WAXMAN

*Question 1.* In your written testimony, you urge Congress to adopt legislation to codify EPA's attainment extension policy and supply proposed legislative language for this purpose. During the hearing, Congressman Allen asked who drafted the proposed language. Your response indicated that the language was produced by the Georgia Environmental Protection Division. Is it correct that staff of the GEPD drafted the proposed legislative language?

Response. Yes, the GEPD drafted the proposed legislative language supplied to the Subcommittee. This proposed language is a revision to draft language provided to us by the State of Louisiana.

*Question 2.* If it is correct that staff of the GEPD drafted the proposed legislative language, please answer the following questions:

*Question 2a.* What office or branch within the GEPD drafted this language?

Response. The Air Protection Branch of the GEPD drafted the proposed language.

*Question 2b.* When did GEPD draft this language?

Response. The proposed legislative language to codify EPA's extension policy was drafted in the Fall of 2002.

*Question 2c.* Did GEPD staff share this language with anyone outside of the GEPD? If so, please specify all governmental (including EPA) and non-governmental entities (including industry entities) that reviewed this language and indicate all entities that provided comments or suggestions.

Response. The GEPD has shared the proposed language with members of Georgia's congressional delegation and with the Governor's office, which fully supports it. The GEPD also consulted with the State of Louisiana concerning revisions to the Louisiana draft. The GEPD did not share the proposed language with EPA or with any other governmental or non-governmental entity before releasing it in its present form. The GEPD did provide a copy to a representative of the Metro Atlanta Chamber of Commerce after the language had been finalized to help garner support for the State's proposal.

*Question 3.* If GEPD staff did not draft the proposed legislative language, what entity provided the language to GEPD? When did GEPD received this language?

Response. See response to No. 1 above.

*Question 4.* The Subcommittee received testimony that Atlanta's air pollution problems have little to do with pollution transport. Specifically, J. David Farren of the Southern Environmental Law Center testified that:

The failure to achieve attainment of the one-hour ozone NAAQS in Atlanta has very little to do with pollution transport and, instead, results overwhelmingly from the failure timely to institute available controls on local sources of pollution. In fact, only 9% of the violation days in Atlanta are contributed to by transport.

Mr. Farren also testified that:

In fact, EPA found that "upwind controls are predicted to reduce the number of exceedances in Atlanta by 9 percent." 63 Fed. Reg. 57,446 (Oct. 27, 1998).

*Question 4a.* Does the Georgia Environmental Protection Division agree or disagree with these statements? Please provide the analytical basis for your position.

Response. The GEPD does not agree that Atlanta's air pollution problems have little to do with pollution transport or result from our failure to timely institute local control measures, and neither does EPA.

In formulating the NO<sub>x</sub> SIP Call rule, EPA used several different approaches to analyze how nonattainment areas contribute to and are affected by pollution transport. To analyze the impact of emissions from upwind states on downwind nonattainment areas, EPA constructed models that artificially “zero out” the emissions from individual upwind states. The model then measured the effect on air quality in the downwind nonattainment area. Based on this analysis, EPA determined that the average percent of 1-hour ozone exceedances in Atlanta caused by emissions from sources in the five upwind states significantly affecting Atlanta (i.e., those states regulated by the NO<sub>x</sub> SIP Call) is 15%. This same analysis also indicated that 23% of the highest daily average 1-hour ozone concentrations in Atlanta during those days of exceedances is from NO<sub>x</sub> emissions from an upwind state. See Appendix I, “Evaluation of Contributions—Table of Metrics 1-Hour CAMx: Upwind States to Downwind Nonattainment Areas”, page I-2 of USEPA document entitled “Air Quality Modeling Technical Support Document for the NO<sub>x</sub> SIP Call”

EPA also analyzed the effect of the emission limits proposed by the NO<sub>x</sub> SIP Call rule by assuming application of the rule in Georgia and other upwind states. This analysis, referred to by Mr. Farren, found that with those limits “upwind controls are predicted to reduce the number of exceedances in Atlanta by 9 percent.”

Upwind emissions in regulated states will be eliminated when the NO<sub>x</sub> SIP Call Rule is implemented in May 2004. Combined with the strict local emissions control measures that have already been adopted in the SIP, this should be enough to enable Atlanta to attain the 1-hour standard.

EPA has confirmed that the GEPD has already adopted all “reasonably available control measures” at the local level. The GEPD did not delay adopting these controls, but adopted them as soon as the gaps in data and scientific understanding were filled. (For a more thorough discussion regarding this issue, see my written testimony at pages 1113.)

*Question 4b.* If upwind controls will reduce Atlanta’s exceedances by only 9 percent, would these reductions be sufficient to bring Atlanta into attainment? If not, please explain the policy basis for granting Atlanta an extension from being bumped-up.

Response. As discussed in 4.a. above, EPA’s modeling indicates that Atlanta is significantly affected by pollution from upwind states. In fact, the air quality analysis in the GEPD’s State Implementation Plan (SIP) for the Atlanta Ozone Nonattainment Area, submitted to EPA July 17, 2001, shows that local emission control measures alone cannot produce attainment; the Atlanta area can attain only if upwind NO<sub>x</sub> emissions are reduced. EPA concurs with this analysis. Further, EPA has determined that NO<sub>x</sub> emissions from upwind states will prevent the Atlanta area from attaining the 1-hour ozone standard until the NO<sub>x</sub> SIP Call rule emission reductions are implemented. Based on this determination, EPA approved the SIP and extended Atlanta’s attainment date from 1999 until 2004.

In sum, both EPA and the GEPD have determined that Atlanta will attain the 1-hour standard as soon as transported pollution is controlled. Because the SIP already imposes strict emissions controls at the local level, once out-of-state pollution is controlled by the NO<sub>x</sub> SIP Call rule, Atlanta will attain. Under the schedule set forth in the Clean Air Act Amendments of 1990, this rule should have been implemented *prior* to the 1999 attainment deadline. It was delayed by events beyond EPA’s control, but it is now scheduled to be implemented by May 2004. Under these circumstances, EPA correctly determined that the attainment date for Atlanta should be extended until the NO<sub>x</sub> SIP Call rule takes effect.

*Question 5.* You testified that “The best available modeling indicates that the Atlanta ozone non-attainment area will attain the one-hour standard for ground-level ozone as soon as the NO<sub>x</sub> SIP Call Rule is implemented, in 2004.” I have several questions regarding this statement:

*Question 5a.* Does the Georgia Environmental Protection Division believe that Atlanta will also attain the 8-hour ozone standard as soon as the NO<sub>x</sub> SIP Call rule is implemented?

Response. While the GEPD expects the NO<sub>x</sub> SIP Call rule to have a positive effect on both 1-hour and 8-hour ozone values, we do not have any data to indicate that the 8-hour ozone standard will be met in Atlanta when the NO<sub>x</sub> SIP Call rule is implemented. The NO<sub>x</sub> SIP Call rule was promulgated by EPA to deal with the effect of upwind NO<sub>x</sub> emissions on downwind 1-hour ozone nonattainment areas only.

Currently, our ozone monitoring data indicate that the number of exceedances and concentrations of both the 1-hour ozone and 8-hour ozone standards are decreasing. If the Atlanta area were classified today based on the most current three years of data (2001-2003), the area would be classified “marginal” for the 1-hour standard. Based on EPA’s proposed 8-hour ozone implementation rules, Atlanta would be classified “moderate” for the 8-hour ozone standard.

*Question 5b.* If not, what additional control measures will be necessary to attain the 8-hour ozone standard?

Response. At this time it is not possible to identify the additional specific control measures that will be necessary to attain the 8-hour standard. The GEPD will not know the answer to this question until we have had a chance to compile the emissions inventories and run the modeling tools that go into development of a plan to attain the 8-hour standard.

EPA is expected to designate 8-hour ozone nonattainment areas in April 2004. Attainment plans will likely be due three years later, in April 2007. This time is necessary to assemble data on the sources of ozone-forming pollutants, to develop the models and model inputs necessary to evaluate and select the most effective control measures, and to develop and adopt enforceable rules to implement those control measures. Although the new 8-hour ozone attainment plan will not be due to EPA until 2007, the GEPD has already begun work to develop the plan.

At this point, a significant impediment to the GEPD's work on the 8-hour plan may be bump-up itself. As a result of bump-up, the GEPD will be required to divert time and resources away from the 8-hour plan to develop and adopt additional control measures for the 1-hour plan that will not help and may actually impede our progress toward clean air. (See page 5 of my written testimony for more details on this issue.)

*Question 5c.* Please explain why delaying additional control measures makes sense when Georgia knows that it will have to comply with the 8-hour ozone standard toward the end of this decade?

Response. The GEPD agrees that it would not make sense to delay adopting additional, beneficial control measures that will reduce ozone values. The measures that we do not want to adopt are the ones that are *not beneficial*. The additional control measures required by the Clean Air Act for severe nonattainment areas, such as implementation of federal reformulated gasoline (RFG), will not reduce ozone values and may actually produce higher values. As is explained in my written testimony, the Clean Air Act imposes a "one-size-fits-all" solution to ozone that simply does not work for Atlanta, which is NO<sub>x</sub>-limited. The GEPD's air quality modeling indicates that higher NO<sub>x</sub> emissions produce higher ozone values. Thus, because implementation of RFG will produce more NO<sub>x</sub> emissions than Georgia's low-sulfur gasoline, RFG may actually produce higher ozone values and adversely impact public health. Instead of implementing additional control measures that will impede our progress toward clean air, we would prefer to focus our efforts on measures that actually work, like the low-sulfur gasoline specifically designed by the GEPD to address Atlanta's ozone problem.

At the hearing on July 23, J. David Farren testified that Georgia's problem with RFG can be dealt with administratively. This is just not the case. The Clean Air Act provides no flexibility regarding the requirement for severe areas to use federal RFG. See 42 U.S.C. §§7545(k)(5) & (10).

Section 211(k) of the Clean Air Act does contain a certification procedure that could be used to certify a fuel as meeting the RFG specifications. Georgia has sought certification of its low sulfur gasoline. A major stumbling block, however, is the "oxygenate" requirement under 42 U.S.C. § 7545(k)(2)(B). To be certified as "RFG," a fuel must contain at least 2% oxygen. The oxygenate requirement does not serve any environmental purpose, at least not in Atlanta, but has nevertheless complicated Georgia's effort to obtain certification for its existing low-sulfur fuel.

Moreover, the requirement to use federal RFG could have the practical effect of requiring GEPD to abandon or significantly limit its existing low-sulfur gasoline program, which actually works. It might be theoretically possible to continue using low-sulfur fuel in areas outside the non-attainment area, where federal RFG would not be required. However, such an arrangement would present numerous supply and distribution problems, and would therefore probably not be practical.

*Question 5d.* What is Georgia's estimate of the public health impacts of delaying additional control measures that would be necessary to attain the 8-hour ozone standard until they are mandated by federal law?

Response. Georgia will not delay attainment of the 8-hour ozone standard. Georgia will adopt such measures as are necessary to attain the 8-hour standard as expeditiously as practical.

Note that Atlanta's failure to attain the 1-hour standard by 1999 can be attributed in large part to the transport issue. The problem was not just the substantive effect of transported pollution, but also the absence of scientific understanding and any data on the transport issue prior to the NO<sub>x</sub> SIP Call rulemaking. Without that data, and the more sophisticated models that followed, it was not possible to evaluate which ozone-control strategies would be most effective in controlling ozone in specific nonattainment areas. In fact, we learned early on that things are not always

what they seem; for example, it is generally beneficial to reduce NO<sub>x</sub> emissions, but in some cases, like Atlanta, this can actually exacerbate the problem. The requirement to use federal RFG in all severe areas is a classic example of the lack of scientific understanding. Given unexpected findings like these, our efforts during most of the 1990s were necessarily directed at gathering data and preparing models. That is why many of the controls that will bring Atlanta into attainment are just now coming on line—first they had to be developed and then industry had to be given time to implement them. (See Appendix C of my written testimony, paragraphs 16-18 for more details on the local control measures adopted.)

Similar considerations apply to the 8-hour standard. The measures that we have adopted to attain the 1-hour standard will not necessarily be as effective for the 8-hour standard. We will not know what compliance with the 8-hour standard will require until we have compiled the emissions inventories and done the necessary modeling. The good news, however, is that the data and the models are now much better developed. As soon as the GEPD is able to determine what is required, it will act to attain the 8-hour standard as expeditiously as practicable.

Finally, GEPD would submit that the public health effect of bumping Atlanta up to Severe should be of equal concern. Because the controls that Atlanta will be forced to adopt as a severe area are not right for Atlanta, this process could actually hinder our ability to clean the air. Although the GEPD has not quantified this adverse health effect, it makes no sense for a state to be required to adopt such counter-productive measures.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

OCT 16 2003

OFFICE OF CONGRESSIONAL AND  
INTERGOVERNMENTAL RELATIONS

The Honorable Henry A. Waxman  
Subcommittee on Energy and Air Quality  
Committee on Energy and Commerce  
U.S. House of Representatives  
Washington, DC 20515

Dear Congressman Waxman:

Thank you for your letter of August 5, 2003 to Jeffrey Holmstead, Assistant Administrator for the Office of Air and Radiation. Your letter to Mr. Holmstead included a series of questions following his appearance at the July 22, 2003 hearing on 'Bump Up' Policy Under Title I of the Clean Air Act before the Subcommittee on Energy and Air Quality. I am pleased to respond to your letter and have enclosed the answers to your questions. Also enclosed is a copy of a letter that EPA sent to the Clean Air Council, which was one of the signatories on a letter sent to EPA regarding excessive emissions in Port Arthur, TX. This EPA letter is referenced in the answer to your question 1a.

Again, thank you for your letter. If you have further questions, please contact me or your staff may contact Paul Almeida of my staff at (202) 564-6401.

Sincerely,

A handwritten signature in cursive script that reads "Ben H. Grumbles".

Benjamin H. Grumbles  
Acting Associate Administrator

Enclosures

July 22, 2003 Hearing on "Bump-Up" Policy  
Answers to Written Questions from Representative Waxman

**Question #1:**

1. During the hearing I asked you to provide a number of analyses for the record. Specifically, I requested the following information:

- a. I submitted for the record a March 19, 2003 letter to you and Mr. John Peter Suarez, Assistant Administrator, Office of Enforcement and Compliance Assurance from Eric Schaeffer, Executive Director, Environmental Integrity Project. I requested that you submit EPA's response to this letter for the record and you agreed to do so.
- b. The March 19, 2003 letter documented air emissions in 2002 caused by malfunctions, startups, shutdowns, and maintenance activities due to certain facilities in Port Arthur, Texas. These emissions may violate the Clean Air Act and may be avoidable. I understand that there may be similar emissions from facilities in or near Baton Rouge, Louisiana. I requested EPA's evaluation of what role such emissions play in Port Arthur and Baton Rouge's failure to attain the national ambient air quality standards for ozone. Please specifically answer how these emissions affect the area's ability to meet the 1-hour and 8-hour ozone standards.
- c. I requested that you submit for the record EPA's analysis of what controls will be necessary in Beaumont-Port Arthur, Texas, Baton Rouge, Louisiana, Atlanta, Georgia, Washington, DC, Portland, Maine and Dallas-Fort Worth, Texas to attain the 8-hour standard.
- d. Finally, I requested that you submit for the record EPA's analysis of the pollution contribution from regional and local sources for each area identified in question 1.c above.

**EPA Response to 1.a:**

EPA has not yet finalized a response to the March 19, 2003 letter from Eric Schaeffer, Executive Director, Environmental Integrity Project, to Mr. John Peter Suarez. EPA, however, is actively investigating the details of the flaring and other incidents that may cause excessive emissions. EPA expects to have a response to the March 19 letter in the next month. Once the response is finalized, we will make certain that you receive a copy of it. On a related matter, EPA has finalized a response to the March 19, 2003, letter sent to EPA by many environmental groups on the same topic as Mr. Schaeffer's letter. As this second letter was apparently coordinated with Mr. Schaeffer's letter, we are providing a copy of the response (attached) for your information. A separate response with identical text was addressed to each of the signatories, the first of which was the American Lung Association.



Answers to Written Questions from Representative Waxman**EPA Response to 1.b:**

EPA has not conducted an evaluation of the impact of upset/malfunctions may have on the Beaumont/Port Arthur and Baton Rouge area's ability to meet the ozone standard. EPA, along with the States, is focusing on efforts to minimize emissions from these malfunction, startup, shutdown, and maintenance activities. To this end, Texas and Louisiana have both revised the definition of reportable quantities of highly reactive volatile organic compounds (VOC) from 5000 lbs/day to 100 lbs/day in an effort to focus more attention on these VOC releases. The States are closely evaluating such events to determine whether they are permissible under the State's excess emission rules and EPA's policy or a violation of enforceable emission limitations. If not permissible, then enforcement actions are taken. Texas has also developed a website designed for the public that documents air emission events in the State. The website, for your information, is found at:  
<http://www2.trc.state.tx.us/ee/main/nides.cfm?fuseaction=searchForm>.

During the Texas Air Quality Study in Houston in 2000, evidence showed that highly reactive VOC emissions are a greater factor in ozone formation than previously expected. In December 2002, the Texas Commission on Environmental Quality adopted measures for Houston to further control emissions of highly reactive VOCs by adopting a cap on highly reactive VOC emissions from flares, cooling towers and process vents. They also tightened controls on fugitive emissions of highly reactive VOCs. These controls will be considered in new plans developed for the 8-hour ozone standard as well as the 1-hour standard. The State's most recent analysis, conducted for the Houston ozone plan, also included excess emissions in the photochemical modeling emissions inventory. These emissions were included in the model based on the "excess emission reports" submitted by industrial sources as required by Texas regulation. By their inclusion in the photochemical modeling, their contribution to the formation of ozone were considered in the development of the Houston ozone plan.

**EPA Response to 1.c:** The latest round of EPA's Clear Skies modeling projects 8-hour ozone design values for major metropolitan areas across the eastern United States in 2010, both before and after implementation of the proposed Clear Skies controls. Based on this modeling, the Beaumont-Port Arthur, Baton Rouge and Portland, Maine, areas are projected to attain the standard by 2010 due to already promulgated controls (e.g., NOx SIP call, Tier 2/Low Sulfur and Heavy Duty Engine rules). (Note that local modeling meeting EPA's modeling guidance is required for purposes of attainment demonstrations.) For Atlanta, GA, Washington, D.C. (including Baltimore) and Dallas-Fort Worth, Texas, EPA expects that substantial additional emissions reductions will be needed to for these areas to come into attainment of the 8-hour standard.

We have not performed detailed modeling analyses to determine what controls will be necessary to bring these areas into attainment of the 8-hour ozone standard. Under the proposed 8-hour ozone implementation rule, these analyses must be completed and submitted with the 8-hour attainment demonstration state implementation plans (SIPs) within 3 years of designations.

Answers to Written Questions from Representative Waxman

We plan to designate areas for the 8-hour standard in April 2004; consequently the attainment demonstration SIPs would be due in 2007.

**EPA Response to 1(d) on Beaumont-Port Arthur, Dallas-Fort Worth, Texas and Baton Rouge Louisiana:**

As a part of the Ozone Transport Assessment Group (OTAG) effort and the NOx SIP call development, EPA and others performed a number of air quality analyses using the UAM-V and the CAMx models to identify the amount of NOx emissions that contribute significantly to nonattainment in downwind areas. These analyses include subregional and state-by-state modeling to (a) quantify the emissions in upwind states that contribute to both 1-hour and 8-hour nonattainment, in downwind areas, and (b) determine whether these contributions are significant. The modeling domain used for the study includes the District of Columbia, parts of three Canadian provinces, Ontario, Quebec, and New Brunswick and portions of all of 37 states, which include Texas and Louisiana. At the time of the NOx SIP call rulemaking, EPA did not have the resources to conduct the full set of modeling runs necessary to determine the impacts on downwind nonattainment areas from sources in Texas or Louisiana. Therefore, Texas and Louisiana were not included in the NOx SIP call.

Texas benefitted from the OTAG/NOx SIP call experience. From this modeling, EPA, Texas and Louisiana gained a better understanding of the role NOx emissions play in the formation and transport of ozone. As a result, the Texas Commission on Environmental Quality improved the manner in which transported NOx is treated in its regional modeling. Texas also benefitted from improvements in the emission inventories and updates to the carbon bond IV chemistry in the model. These improvements helped to better understand the Beaumont/Port Arthur ozone problem.

Based on the outcome of this refined understanding, NOx waivers previously in place in Houston, Beaumont/Port Arthur, Dallas/Fort Worth and Baton Rouge were removed and new controls for NOx became a key component of the control strategies for these areas.

Also, based on the outcome of these efforts, the State of Texas has been addressing transport within its borders on a broader scale. Since 1996, the State has implemented a series of VOC and NOx rules in the entire eastern half of the State (in attainment and nonattainment areas). The following provides details of the local strategies and regional strategies for Dallas/Fort Worth, Beaumont/Port Arthur, Texas and Baton Rouge, Louisiana.

**Dallas/Fort Worth**

The SIP for the Dallas-Fort Worth area included a combination of controls required both locally and regionally within Texas. Regional controls were very important due to the influence from the Houston area as well as emissions over the central and eastern half of the State. In the attainment demonstration for Dallas-Fort Worth submitted April 2000, Texas indicated the

Answers to Written Questions from Representative Waxman

following local controls would be implemented with their corresponding tons/day (TPD).

Local Controls	Reductions (TPD/NOx)
a. Electric Utilities, industrial facilities	129
- Vehicle inspection/maintenance	55
- Texas Emissions Reduction Program	16
- Airport ground support equipment	10
- Speed limits	5
- Voluntary Mobile Emissions Program	5
- Transportation Control Measures	5
- Low emission diesel fuel	4
- Non-road gasoline engines	2
- Water heaters/small boilers	1
<b>Total</b>	<b>232 tpd</b>

Broader State Controls	Reductions
- Regional NOx point source reductions	
-- Electric generating facilities	375
-- Cement kilns	10.6
- ALCOA/Texas Eastman agreed orders	20.5
<b>Total</b>	<b>406 tpd</b>

Photochemical modeling indicates reductions of upwards to 12 parts per billion (ppb) ozone in the area of broader state controls. Reductions in the broader area levels of ozone and ozone precursors will help reduce the maximum ozone concentration and the duration of ozone events in the nonattainment areas.

**Beaumont/Port Arthur**

Local Controls	Reductions %	Reductions (TPD NOx)
A. Electric utility boilers	45%	12.11
B. Industrial boilers	58%	23.00
C. Industrial process heaters	32%	6.45
D. Gas turbines	27%	1.84
E. Rich-burn engines	82%	3.1
F. Lean-burn engines	73%	6.9

Answers to Written Questions from Representative Waxman**Broader State controls**

The same reductions over the eastern half of Texas have benefits to Beaumont-Port Arthur as well as the Dallas-Fort Worth area. These reductions over a broader area of Texas as well as reductions from ozone precursors in the Houston area are very important to ultimately achieving attainment, as explained in the Texas attainment SIP demonstration for Beaumont-Port Arthur and in EPA's May 15, 2001 Federal Register notice of final rulemaking for the approval of the Beaumont-Port Arthur 1-hour ozone attainment demonstration (66 FR 26914).

**Baton Rouge**

Local Controls:	Reductions (TPD/NOx)
Tier II vehicle emission standards, federal low sulfur gasoline, and National Low Emission Vehicle Program	- 8.3
Nonroad diesel engines, recreational marine standards, commercial marine vessels, and locomotives	- 3.5
Inspection and Maintenance Program (on-board diagnostics)	- 2.8
Transportation Control Measure	- 0.9
NOx Reasonably Available Control Technology	76.4 ** (see Broader State Controls, below)
<b>Total</b>	<b>91.9</b>

Local Controls:	Reductions (TPD/VOC)
Tier II vehicle emission standards and federal low sulfur gasoline	- 2.2
Nonroad diesel engines, recreational marine standards, commercial marine vessels, and locomotives	- 6.2
Inspection and Maintenance Program (on-board diagnostics)	- 4.2
Transportation Control Measure	- 2.2
<b>Total</b>	<b>14.8</b>

**Broader State controls** **Reductions (TPD/NOx)**

\*\* State reductions outside of the nonattainment area were also included in the SIP. NOx controls meeting the Reasonably Available Control Technology levels were adopted by sources not only in the Baton Rouge nonattainment area (the Ascension, East Baton Rouge, Iberville, Livingston, and West Baton Rouge parishes) but also by the four parishes in the region of influence. These four parishes are East Feliciana, Pointe Coupee, St. Helena, and West Feliciana. The reason for including the broader area for point source control was the demonstrated influence of point sources in these parishes to the ozone levels in the nonattainment parishes.

Answers to Written Questions from Representative Waxman**EPA Response to 1.d on Portland, Maine:**

EPA NOx SIP call modeling shows that several states contribute more to the ozone problem in Maine, than Maine does itself. Specifically the modeling estimates that

- 33 percent of Maine's ozone is imported from Massachusetts
- 11 percent is imported from New Hampshire and Vermont, and
- 11 percent is imported from New York

Maine itself only contributes 7% to its own ozone problem according to the EPA modeling. In other words 93% of Maine's ozone is imported from others.

Additional local scale modeling performed in New England supplements this regional scale modeling. According to modeling submitted by Massachusetts and New Hampshire, two neighbors to Maine, when all the man-made ozone precursors emitted by the State of Maine are set to zero in the ozone model (a zero-out run), ozone levels in Maine are virtually unaffected. The zero-out run for Maine shows a decrease in Maine's ozone of no more than 5 parts per billion (ppb). This decrease in ozone is over a very small area, and not along the coast of Maine, where exceedences of the 1-hour ozone standard are being measured. It is also worth noting that the current design value for the Portland area is only 0.126 part per million (ppm), or only 0.002 ppm over the standard. The Portland area has also had air quality good enough to meet the 1-hour standard from 1996-1998. In addition, Portland had clean air quality data for the two-year period of 2000 to 2001.

**EPA Response to 1.d on Atlanta, Georgia:**

Georgia's request for an extension of the attainment date was based on the determination by EPA that ozone is transported from upwind areas and affects the ability of the downwind area to attain the 1-hour ozone NAAQS. The modeled control strategy simulations indicate that ozone levels in the Atlanta area would be significantly reduced when the state and local controls identified in the October 1999 attainment demonstration submission (and subsequently approved by EPA) and NOx SIP Call plans in upwind states are implemented. Thus, states upwind of Atlanta had to reduce emissions of ozone forming pollutants if the State's plan was going to demonstrate that Atlanta would attain the standard by November 2003.

The states identified in EPA's final NOx SIP Call rule as affecting Atlanta are Alabama, Kentucky, North Carolina, South Carolina, and Tennessee. Any meaningful evaluation of the impact of transport must be based on the NOx SIP Call's effect on ozone concentrations in Atlanta. Appendix G of the EPA NOx SIP Technical Support Document (TSD), "Evaluation of Contributions - Tables of Metrics, 1-Hour CAMX: Upwind States to Downwind States," page G-6, gives average contributions to an Atlanta area exceedences as follows:

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- Alabama – 8 percent
- Kentucky – 1 percent
- North Carolina – 1 percent
- South Carolina – 1 percent
- Tennessee – 4 percent

The total contribution from upwind areas to Atlanta's ozone nonattainment problem is 21 percent. Fifteen percent of the contribution comes from Alabama, Kentucky, North Carolina, South Carolina, and Tennessee and 6 percent of the contribution comes from other upwind States.

In the attainment demonstration for Atlanta submitted on July 17, 2001, Georgia provided an analysis of reasonably available control measures to determine if sufficient local measures were available to offset the emissions due to transport. This analysis starts on page 3.37 of the SIP submittal. The submittal contains the following language:

Comparison of the effect of the NOx SIP call with the effect of the remaining measures shows that the remaining measures do not come close to replicating the effect of the NOx SIP Call in terms of ozone reduction. Therefore, the remaining measures cannot advance the attainment date.

The following data addresses what Georgia is actually obtaining in emission reductions from local control measures that have been approved and put in place. The only exception is that the low sulfur fuel rule will be fully phased in by September 16, 2003. There was a delay from April 1, 2003 due to difficulties with supply of the low sulfur fuel.

In the attainment demonstration for Atlanta submitted on July 17, 2001, Georgia indicated the following local controls to be implemented by May 1, 2003:

Low sulfur fuel	23.54 NOx and 30.50 VOC tons per day (tpd)
Large Utilities	290 NOx tpd
Other large NOx sources	18.83 NOx tpd
Enhanced I/M (inspections/ maintenance)	11.34 NOx and 13.17 VOC tpd
NSR expansion	21 NOx tpd
Medium size boilers	0.7 NOx tpd
Engines and Gas turbines	30 NOx tpd

Total: 395.41 NOx and 43.67 VOC tpd

EPA Response to 1.d on Washington, D.C.:

The two main analyses regarding the contribution from regional and local sources to the Washington, D.C. area are the air quality modeling for the NOx SIP call and the local air quality

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photochemical grid modeling that was done for the attainment demonstration. The NOx SIP call modeling results suggest that the local and regional contribution are 76 and 24 percent respectively (See Table E-18, Appendix E to Air Quality Modeling Technical Support Document for the NOx SIP Call). However, the 76 percent "local" contribution is an oversimplification for several reasons. The "local" contribution in the NOx SIP call modeling included all emissions for all of Maryland, the District, all of Delaware<sup>1</sup> and all of Virginia. However, only northern Virginia, a portion of Maryland, and Washington, D.C. are in the Washington, D.C. nonattainment area. Therefore, the actual "local" contribution is smaller than 76 percent and, by extension, the actual regional contribution is greater than 24 percent.

The local photochemical grid modeling results project that the Washington, D.C. area design value will be just under 120 parts per billion (ppb) when both the local controls in the attainment demonstration and the NOx SIP call controls are implemented. The District of Columbia, Maryland and Virginia performed modeling runs that, taken together, indicate the NOx SIP Call emissions reductions yield a 5 to 10 ppb reduction in peak ozone concentrations in areas with modeled peak concentrations above 124 ppb, i.e.: above the standard.<sup>2</sup> Without the NOx SIP Call controls, the area would have to impose local controls to make up this 5 to 10 ppb reduction in peak ozone concentrations.

The District of Columbia, Maryland and Virginia performed sensitivity runs that looked at the air quality effects of emission reductions beyond those included in the photochemical grid modeling of attainment for the Washington area. These sensitivity runs reduced NOx emissions from point sources by 60 percent. (The emissions levels for NOx point sources resulting from this 60 percent reduction is substantially less than that which is projected to occur from the NOx SIP call.) The air quality results from these runs showed a slight improvement in ozone levels with a peak reduction of between 1 and 6 ppb depending upon the episode day. The States also ran modeling that forecast the results of requiring more emissions reductions beyond the 60 percent reduction in NOx from point sources – either NOx or VOC emissions reductions or NOx and VOC emissions reductions. The sensitivity runs showed that ozone concentrations are most responsive to a combination of NOx and VOC reductions or just NOx reductions.

To make up the 5 to 10 ppb transport contribution, the Washington, D.C. area would need

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<sup>1</sup>Section IV.A.3. "CAMx State-by-State Source Apportionment Modeling," Air Quality Modeling TSD for the NOx SIP Call, U.S. EPA, Office of Air and Radiation, September 23, 1998. All of Maryland, Washington, D.C., and all of Delaware are included because for reasons relating to computational constraints, the SIP Call modeling grouped these several small northeastern States (and Washington, D.C.) together.

<sup>2</sup> Section III. H. "Effects of Transport", Technical Support Document for the One-Hour Ozone Attainment Demonstrations submitted by the State of Maryland, Commonwealth of Virginia and the District of Columbia for the Metropolitan Washington, D.C. Ozone Nonattainment Area (DC052-7005, MD143-3096, VA152-5062), January 24, 2003.

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to reduce local emissions even beyond the levels required under the NOx SIP call. Reducing 30 percent of NOx emissions would require 48 to 97 tons per day (tpd) reduction which equate to 9.3 to 18.5 percent of the attainment year inventory. Reducing 30 percent of NOx emissions and 30 percent of VOC emissions would require 38 to 77 tpd reduction of NOx (which equate to 7.3 to 14.6 percent of the attainment year inventory) and 38 to 76 tpd reduction of VOC (which equate to 10.6 to 21.2 percent of the attainment year inventory).

**Question #2**

You testified that:

EPA took the position that requiring these additional controls on local sources was not the best solution when: 1) upwind sources significantly affected an area's ability to meet the 1-hour ozone standard; 2) the affected area already had adopted measures to control its local share of the problem; and 3) the area would meet the 1-hour ozone standard through required reductions from upwind sources.

If facilities such as those discussed in question 1.b are significantly affecting an area's ability to meet the 1-hour standard, how does that affect the policy basis for granting an extension?

**EPA Response to 2:** The attainment date extension policy provides that areas that are significantly affected by transported pollution can receive an extension of their attainment date. Under the policy, downwind areas must have an approvable attainment demonstration that includes any local measures needed for attainment. In addition, the area would have to adopt all local measures required of the area's current Clean Air Act classification and any other local measures needed for attainment. Areas that cannot attain the ozone standard because they have not adopted the necessary local controls would not meet the policy's criteria. Consequently, they would not receive an attainment date extension until they adopted measures to address the local component of their air quality problem.

In response to the question on whether these emissions are significantly affecting achieving attainment, please refer to the response to 1.b.

**Question #3**

3. You testified that to qualify for an extension under EPA's policy, a nonattainment area was required to meet four requirements. Specifically, the area must:

- Show that it was affected by transport from (1) an upwind area in the same state with a later attainment date and that significantly contributes to the downwind area's nonattainment problem, or (2) an upwind area in another state that significantly contributes to the downwind area's nonattainment problem (i.e., states subject to the NOx SIP call).



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- Adopt all local measures required of the area's classifications and any additional measures needed to demonstrate attainment.
- Submit an approvable attainment demonstration, including the necessary adopted local measures, showing that the area would attain no later than the time upwind controls must be in place (i.e.: by the compliance date of the NOx SIP call, or by the attainment date for the upwind area).
- Implement all adopted measures as expeditiously as practicable and no later than the time the upwind reductions needed for attainment will be achieved.

In subsequent questioning, you stated that the four requirements in your testimony amount to a "but for" test, where an area is granted an extension only when the area would attain "but for" the contribution from other areas. This "but for" test is not explicitly required in the requirements described in your testimony. Please provide a legal memorandum explaining how EPA's approach amounts to a "but for" test.

EPA Response to Question #3:

You are correct that no "but for" test was explicitly required by the attainment date extension policy. Your question is difficult to answer because there may be more than one way to define a "but for" test. However, I would be happy to further explain my statement during the hearing.

During the hearing, Rep. Boucher asked whether the extensions granted under EPA's attainment date extension policy "were only granted if the community that is seeking the extension, the downwind community, would be in compliance itself were it not for the pollution coming from the upwind community?" My answer was that this was the practical effect of EPA's policy.

The attainment date extension policy recognized that required reductions from upwind sources would help improve air quality in downwind nonattainment areas. But these upwind reductions – from the NOx SIP call, or an upwind nonattainment area – would occur after the downwind area's statutory attainment date. EPA's policy in effect allocated responsibility for reducing ozone pollution between upwind sources and sources in the downwind area. It allowed the downwind area to rely on the required future upwind reductions, as well as local controls, to demonstrate attainment.

The policy included several requirements for local controls to ensure the downwind area addressed its local problem, as I mentioned in my testimony. These included all local measures mandated by the Clean Air Act under the area's current classification, and reasonably available control measures that would advance the attainment date. In addition – and this is key -- the

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downwind area's plan had to include *all local measures which, in tandem with the required upwind controls, were needed to demonstrate attainment* by the time the upwind controls were required to be implemented. Consequently, once the local controls required to qualify for the extension policy were taken into account, the area must be able to attain the standard "but for" transport. This is why I stated that as a practical matter, under the extension policy, an area could be granted an extension only if it would meet the standard were it not for ("but for") the pollution coming from upwind.

**Question #4**

The Subcommittee received testimony that Atlanta would not meet such a "but for" test. Specifically, J. David Farren of the Southern Environmental Law Center testified that:

The failure to achieve attainment of the 1-hour ozone NAAQS in Atlanta has very little to do with pollution transport and, instead, results overwhelmingly from the failure timely (sic) to institute available controls on local sources of pollution. In fact 9% of the violation days in Atlanta are contributed to by transport.

Mr. Farren also testified that:

In fact, EPA found that "upwind controls are predicted to reduce the number or exceedances in Atlanta by 9 percent." 63 Fed. Reg. 57,446 (Oct. 27, 1998).

Does EPA agree or disagree with these statements? Please provide the analytical basis for EPA's position. Additionally, if upwind controls will reduce Atlanta's exceedances by only 9 percent, would these reductions be sufficient to bring Atlanta into attainment? If not, please explain how Atlanta would meet the "but for" test discussed in question 3b.

**EPA Response to Question #4:**

The State of Georgia conducted an analysis using ozone data from 1980-1991 to identify episodes to model for the 1-hour attainment SIP. This analysis contains information on wind regimes that lead to 1-hour ozone exceedances in Atlanta. It shows the number of exceedances associated with different conditions and the modeled episodes. Essentially, calm conditions are associated with 35% of exceedances during this period. Sixty-five percent of the remainder of this data are associated with other conditions and emissions which could be transported from elsewhere. This information conflicts with David Farren's assertion that 9% of the violation days in Atlanta are attributed to transport.

We agree with David Farren's statement that "upwind controls are predicted to reduce the number of 1-hour exceedances in Atlanta by 9 percent". It is a direct quote from our NOx SIP Call notice on significant contribution. The NOx SIP Call was not an attainment demonstration for the 1-hour nonattainment areas like Atlanta. We recognized that additional local controls

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would be needed. We also recognized that different meteorological conditions lead to ozone exceedences. A control strategy has to be robust enough to address these different conditions.

In response to the second half of the question on whether Atlanta would meet a "but for" test, please refer to the response to Question 3. As explained in that response, EPA's extension policy in effect ensured that the area would attain but for transport no later than the date upwind reductions were required, or earlier if reasonably available control measures would result in an earlier attainment date. EPA determined that the Atlanta area met the conditions of the extension policy [67 FR 30574], so Atlanta met this "but for" test.

**Question # 5**

The Subcommittee also received testimony that the Dallas-Fort Worth area would not meet a "but for" test. In 2001, EPA proposed to approve a request from Texas to extend the attainment date for Dallas-Fort Worth to 2007 without reclassifying the area to severe nonattainment. Dr. Ramon Alvarez of Environmental Defense testified that:

[T]ransported pollution from Houston has only a minor and infrequent impact on the [Dallas -Fort Worth] area. EPA's transport policy, even if legal, was thus erroneously applied in the [Dallas -Fort Worth] area, since the evidence shows [Dallas-Fort Worth] could attain the ozone standard even if Houston were to do nothing to clean up its air pollution.

According to Dr. Alvarez:

The only conclusion that can be reached from the analyses contained in the administrative record is that on a small number of days, there may be a small amount of additional ozone in the [Dallas-Fort Worth] area that came from Houston. Such a result is not surprising - ozone air pollution is known to travel over even longer distances such as from the Midwest to the Northeast. However, the fundamental question that was never answered by Texas or EPA is whether the small amount of ozone originating in Houston that might occasionally arrive in the [Dallas-Fort Worth] area is enough to prevent [Dallas-Fort Worth] from attaining the ozone standard before Houston's attainment date.

Please explain how the Dallas-Fort Worth area would meet the test of "significant contribution" in EPA's policy. Additionally, please explain if Dallas-Fort Worth would meet the "but for" test. Please explain how the Dallas-Fort Worth area would meet the test of "significant contribution" in EPA's policy. Additionally, please explain if Dallas-Fort Worth would meet the "but for" test.

**EPA Response to Question #5:**

In answering the question on whether Dallas-Fort Worth would meet our significant contribution test, the State of Texas followed the criteria spelled out in the policy for their

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evaluation. For the Dallas-Fort Worth analysis, to address the first criteria, "that the transport from Houston Galveston area affects Dallas-Fort Worth's ability to attain the NAAQS", the Texas Commission on Environmental Quality (TCEQ) submitted several technical analyses. One of TCEQ's technical analyses used the "Zero-Out" modeling, a procedure applied in the OTAG modeling for evaluating "significant contribution," as an indication of the effects of Houston Galveston's emissions on Dallas-Fort Worth. The elimination of the Houston Galveston emissions show there was a transport of approximately 2 to 10 parts per billion (ppb) from the Houston Galveston nonattainment area to the southern and eastern portions of the Dallas-Fort Worth nonattainment area for the two modeled episodes, June 1995 and July 1996. Generally, in OTAG, a "Zero-Out" modeling analysis of the upwind area's emissions which resulted in a 2 ppb or greater impact to the downwind area was considered significant. Thus, at least on these two episodes, emissions from Houston Galveston contributed significantly to ozone concentrations in the southern and eastern portions of the Dallas-Fort Worth nonattainment area. However, this alone does not suffice to conclude that the contribution from Houston Galveston emissions affects Dallas-Fort Worth's ability to attain.

In addition, TCEQ conducted another technical analysis addressing the frequency of transport. This analysis presented back trajectories for 160 Dallas-Fort Worth 1-hour and/or 8-hour exceedence days from 1994 through 1998. Back trajectories are aerial maps showing an estimate of the path taken by an air parcel, which can be used to see a general picture of where air parcels were coming from and to see generally how fast the air parcels were moving. Twenty-one out of these 160 trajectories traced back to the Upper Texas Gulf Coast (UTGC). During this five year period, there were 45 1-hour exceedence days (i.e., ~28% of the 160) in the Dallas-Fort Worth nonattainment area. If it is assumed that the same proportions hold for the 21 trajectories which trace back to the UTGC, then about 6 out of the 45 1-hour exceedence days have associated transport that may be traced back to the UTGC.

Taken together these two technical analyses indicate the magnitude and frequency of the effect of Houston Galveston emissions on the Dallas-Fort Worth area and show that transported pollution may well have affected Dallas-Fort Worth's ability to attain by the current attainment date (i.e., 1995).

In response to the second half of the question on whether Dallas would meet the "but for" test, please refer to the response to Question 3. As explained in that response, EPA's extension policy in effect ensured that the area would attain but for transport no later than the date upwind reductions were required, or earlier if reasonably available control measures would result in an earlier attainment date. EPA proposed an attainment date extension for Dallas [66 FR 4756] based on transport from the Houston-Galveston area, so EPA believes that Dallas could have met this "but for" test. EPA did not take final action on that proposal because of the court decisions finding that EPA lacked authority for the extension policy.

Answers to Written Questions from Representative Waxman**Question #6**

According to EPA's Technical Support Document for the NOx SIP call, other areas classified as severe receive more ozone transport than Atlanta. For example, EPA has estimated that in Baltimore transport contributes 56% to 1-hour ozone nonattainment on days modeled by EPA. Similarly, the contribution in Philadelphia is 32%, New York is 45%, and Chicago is 21%. How does EPA propose to handle these areas if its illegal bump-up policy is codified?

**EPA Response to Question #6:**

If Congress passes legislation to codify the attainment date extension policy, and an area meets the criteria for an extension, EPA will grant the extension consistent with the law. If EPA's policy were codified, there would be no effect on the four cities you mention. The policy did not apply to severe areas, and all four areas are classified as severe. The policy provided for attainment date extensions in lieu of reclassification, or bump up. Severe areas are not subject to bump up under the Act.

Also, the Technical Support Document for the NOx SIP call analyzed the extent of interstate ozone transport without NOx SIP call controls. It is important to note that the NOx SIP call will substantially reduce emissions that contribute to interstate transport. EPA is investigating the extent, severity and sources of interstate transport that will exist after the existing transport rules are implemented in 2004 after the NOx SIP call.

**Question # 7**

Section 182 (h) of the Clean Air Act addresses Rural Transport Areas. Has EPA ever used this provision to treat an ozone nonattainment area as a rural transport area? If so please identify any areas and provide details on how this provision has been implemented.

**Response to Question #7:**

EPA designated four areas as rural transport areas: Essex County, New York (Whiteface Mountain); Smyth County, Virginia (White Top Mountain); Door County, Wisconsin; and Edmonson County, Kentucky. These areas were originally designated as rural transport areas on November 6, 1991. Since that time, both Door and Edmonson Counties have been redesignated to attainment of the 1-hour standard on April 17, 2003, and November 3, 1994, respectively. Both Essex and Smyth Counties are still designated as rural transport areas. The Clean Air Act allows a rural transport area to be treated as a marginal nonattainment area, even if the area's design value would otherwise qualify it as a moderate or higher nonattainment area. Consequently, these areas were subject to the requirements of a marginal classification.

Answers to Written Questions from Representative Waxman**Question #8**

In providing testimony to the subcommittee, Mr. Ron Methier, Chief, Air Protection Branch, Georgia Environmental Protection Division submitted legislative language to amend the Clean Air Act and codify EPA's bump up policy.

- a. Did EPA review this language prior to the hearing on July 22, 2003? If so when and under what circumstances? Did the White House Office of Management and Budget review the language?
- b. Did EPA have any role in drafting this language? If so, which office or offices were involved?
- c. Has EPA consulted with or discussed this draft language with parties outside the Administration? If so who and when? Please provide copies of any communications with such parties.

**EPA Response to Question #8:**

The legislative language in Mr Methier's testimony is very similar to language from the State of Georgia that was given to EPA in December 2002 by the State of Texas. EPA did not contact Texas or Georgia to provide views on draft legislation, and the Agency has not discussed this draft language with parties outside the Administration. We did not provide the language to OMB. However, at the request of congressional staff last year, EPA did provide technical assistance on bill language designed to codify the agency's attainment date extension policy. Contrary to the introductory statement to your questions, EPA believes that Georgia's proposal is not identical to EPA's former attainment date extension policy.

**Question #9**

Unlike some other areas of the country, the transport problems EPA has identified in Texas are caused by upwind sources in the same State. Is it EPA's position that states which choose not to address air pollution from sources that are within their borders are in the same situation as states that are affected by air pollution sources that are outside of their borders and thus outside of the state's immediate control: If Beaumont-Port Arthur and Dallas-Fort Worth are adversely affected by Houston-Galveston area, please explain if there is a reason why Texas could not address pollution sources in the Houston-Galveston area.

**EPA Response to Question #9:**

Texas is addressing intrastate sources of transport. Below is our description of how they are doing it. There is mounting technical data which suggest that the Dallas-Fort Worth and Beaumont-Port Arthur areas are significantly impacted by transport and high intra-State

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background levels of ozone. The Texas Commission on Environmental Quality (TCEQ) had conducted modeling studies showing that the transport of ozone, or its precursors, from the Houston Galveston area interferes with Beaumont-Port Arthur's ability to attain the 1-hour ozone standard. The modeling studies also indicate the air quality in the Dallas-Fort Worth area is influenced at times from the Houston Galveston area.

TCEQ realized the importance of the role of transported ozone (and/or its precursors) and the need for a statewide comprehensive plan to assist the areas struggling to attain the ozone standard. TCEQ developed a broader control strategy package to reduce ozone causing compounds in the eastern half of the state. This will help reduce background levels of ozone in both the Dallas-Fort Worth and Beaumont-Port Arthur nonattainment areas. Those areas close to noncompliance for the new 8-hour ozone standard will also benefit. Components of the regional strategy included: adoption of cleaner burning gasoline, stage I vapor recovery, voluntary involvement in the permitting of grandfathered facilities and reductions from major stationary sources (e.g., electric generating facilities, cement plants and site-specific agreed orders) and support for the national low emission vehicle program. In addition, TCEQ considered the effects of transport from Houston Galveston to Beaumont-Port Arthur and Dallas-Fort Worth and other areas in Texas. Reductions needed for the Houston Galveston area and the broader state rules are an integral component in the strategy for Dallas-Fort Worth and Beaumont-Port Arthur's attainment of the 1-hour ozone standard.

TCEQ developed SIPs for all the ozone nonattainment areas in Texas (i.e., Dallas-Fort Worth, Beaumont-Port Arthur, etc.) on a coordinated time line. This coordinated planning effort included three of the state's four 1-hour ozone nonattainment areas and potential 8-hour ozone areas. This statewide comprehensive planning, with 2007 as a target date, allowed Texas to utilize its resources in an efficient manner. Texas is developing control strategies to reduce air pollution not only in the urbanized areas, but regionally as well. As a result, the State put together an aggressive control package which reduces approximately 750 tons per day of NOx that are needed for the SIP control strategy for Houston Galveston. About 78% of the reductions come from industrial point sources, which are a major cause of pollution in the State of Texas, and about 25 percent of volatile organic compounds (VOC) reductions are all from mobile sources. All of these measures described above will help the downwind areas of Dallas-Fort Worth and Beaumont-Port Arthur attain the standard.

**Question #10**

You testified that in the areas for which EPA has granted an extension under the bump-up policy, additional local controls will not help the communities. Apparently, you meant that local controls will not help the areas attain the 1-hour ozone standard any faster than the current controls in conjunction with upwind controls.

- a. Please provide EPA's analysis showing this is the case in Beaumont-Port Arthur, Texas, Baton Rouge, Louisiana, Atlanta, Georgia, Washington DC, Portland,

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Maine and Dallas- Fort Worth, Texas.

- b. Would the additional local controls help meet the 8-hour health-based ozone standard? Please provide the analytical basis for your answer.
- c. Would additional local controls help improve public health in the areas? Please provide the analytical basis for your answer.

**EPA Response to Question 10.a:**

EPA believes that a combination of local controls and upwind controls is needed for many areas to attain the ozone standards. Under EPA's attainment date extension policy for areas affected by transported pollution, areas seeking an extension were required to meet certain minimum requirements for local controls in order to qualify.

As I noted in my testimony, one of those requirements was to demonstrate that the extension area had adopted all technically and economically feasible measures that would result in meeting the standard sooner. These are known as "reasonably available control measures," or RACM. Extension areas also had to adopt (1) all measures required for the area's current classification, (2) any additional measures needed for attainment, considering required upwind reductions in upwind areas that EPA found significantly contributed to the downwind area's nonattainment problem, and (3) all other reasonably available control measures.

A RACM analysis was conducted for each of the areas for which states were seeking an attainment date extension. EPA found that the SIPs for each of the areas did contain all reasonably available control measures – in other words, EPA found that there were not technically and economically feasible measures available that would have resulted in earlier attainment.

Following is a brief summary of the RACM analysis findings and other relevant information for each area, and the web addresses for the full analyses. Maine did not seek an attainment date extension for Portland, so different information is provided for that city.

**Atlanta and Washington, D.C.**

Atlanta received an attainment date extension to 2004, based on upwind reductions expected from the NOx SIP call in 2004. Washington received an extension to 2005, based on required upwind reductions from SIP call states and Baltimore, which has a 2005 attainment date.

EPA conducted RACM analyses for Washington, D.C., Atlanta and two other areas. To enable an area to attain in an earlier year, potential additional local controls would need to provide a greater effect on local ozone concentrations than NOx SIP Call controls will provide in



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2004. EPA's analysis identified candidate measures to assess whether they should be considered RACM, estimated the potential tonnage reductions from those candidate measures, and compared these reductions to the quantity of reductions needed for attainment. EPA concluded that "these measures would either (a) likely require an intensive and costly effort for numerous small area sources, or (b) not advance the attainment date in any of the four areas." EPA found that the potential reductions from the candidate measures would be "far less than the emissions reductions needed within the nonattainment areas to reach attainment" in the absence of the NOx SIP call, and therefore could not result in earlier attainment. The analysis also said that the NOx SIP call would provide substantial ozone benefits in the four areas by reducing transported pollution from upwind states, but that full implementation would not occur until May 2004. The analysis concluded that the candidate measures considered were not reasonably available control measures required for the areas' 1-hour ozone plans. Georgia subsequently performed its own RACM analysis for Atlanta, and came to the same conclusion.

EPA's RACM analysis for Washington, D.C. was found deficient by the Court of Appeals for the District of Columbia Circuit in July 2002. The court noted that the analysis omitted analysis of retrofitting diesel trucks and buses, and controlling ground service equipment at airports. Representatives of Virginia, Maryland and the District of Columbia have developed a revised RACM analysis as part of SIP revisions required in light of the area's reclassification as severe. The Metropolitan Washington Air Quality Committee, which includes state and local officials, on August 13 approved this new RACM analysis. Virginia has submitted this analysis to EPA, and Maryland and the District are expected to do so shortly. The analysis examines a variety of potential measures, including measures to reduce emissions from buses and airport ground service equipment, and concludes that none of the further measures should be considered RACM. EPA has not yet reviewed or provided comments on this analysis.

For your further information, the Washington area has implemented severe area requirements even while classified as serious (e.g., reformulated gasoline, and reasonably available control technology - RACT - on sources with the potential to emit 25 or more tons per year of volatile organic compounds (VOCs) in the Maryland and Virginia portions of the area). Maryland and the District required beyond-RACT (more stringent than reasonably available control technology) on the largest major stationary sources of NOx, and participated in a regional 65 percent NOx reduction (from 1990 levels) by 1999 through the Ozone Transport Regions' cap and trade program (commonly called "Phase 2" NOx control). Maryland and the District require compliance with the NOx SIP call in May 2003, and the two electric generating utility sources in the Virginia portion of the nonattainment area also must achieve reductions to an equivalent level to the SIP call in May 2003. Additional NOx controls on area sources are likely to be expensive and require an intensive effort for numerous small area sources. Much of the remaining emissions inventory comes from on-road and off-road mobile sources.

The RACM analyses cited above for Washington, D.C. and Atlanta can be accessed at the following web sites:

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- [http://www.epa.gov/ttn/naaqs/ozone/rto/rto\\_whatsnew.html](http://www.epa.gov/ttn/naaqs/ozone/rto/rto_whatsnew.html) under the listing "10/16/00 - RACM Analysis for Four Serious Areas Designated Nonattainment for 1 one-hr Ozone NAAQS." (EPA's 4-city RACM analysis)
- <http://www.ganet.org/dnr/environ> under the link for plans, "State Implementation Plan for the Atlanta 1-Hour Nonattainment Area (Atlanta Attainment Plan), July 17, 2001." (Georgia's RACM analysis for Atlanta)

(Note: At EPA's request, a federal court vacated Atlanta's approved SIP which had been based on the attainment date extension policy. EPA is moving forward to reclassify Atlanta as a "severe" ozone nonattainment area, and will reconsider the RACM analysis in light of the reclassification.)

Portland, Maine

Portland is not one of the areas that sought an attainment date extension under EPA's policy. However, EPA believes it is significantly affected by transported ozone pollution.

As shown in the attached slides, local controls would not result in significant reductions in Maine's ozone beyond what is already expected from current and upwind controls. Specifically, as the first slide shows, zeroing out all anthropogenic emissions in Maine would result in, at most, a reduction in Maine's ozone on the order of 5 parts per billion (ppb). On the other hand, as shown in the second slide, zeroing out anthropogenic emissions in Massachusetts would result in significant reductions in Maine's ozone (on the order of 40 ppb for south coastal areas of Maine). Finally, as shown in the last slide, Maine is expected to attain the 8-hr ozone standard after the implementation of the NOX SIP call and Tier 2 Controls.

Beaumont-Port Arthur

Based on the RACM analysis, EPA concluded that the SIP for Beaumont/Port Arthur contained all reasonably available control measures. This additional set of evaluated measures addressed in the RACM analysis were determined to not be reasonably available for the specific Beaumont-Port Arthur area, because (a) some would require an intensive and costly effort for numerous small area sources, (b) due to the small percentage of mobile source emissions in the over-all inventory, these measures will not advance attainment of standard and (c) since the Beaumont-Port Arthur area relies in part on reductions from the upwind Houston Galveston area which are substantial, and the reductions projected to be achieved by the evaluated additional set of measures are relatively small, they would not produce emission reductions sufficient to advance the attainment date in the Beaumont-Port Arthur area and, therefore, should not be considered RACM. EPA reached this conclusion primarily because the reductions expected to be achieved by the potential RACM measures are relatively small. These potential reductions are far less than the emissions reductions needed within the nonattainment area to reach attainment (3.3% for NOx and 8.5 % for VOCs). Note that photochemical modeling has shown

Answers to Written Questions from Representative Waxman

that in the Beaumont-Port Arthur area, VOC reductions are less effective than NO<sub>x</sub> reductions in reducing ozone levels.

For your further information, Texas has implemented a series of VOC and NO<sub>x</sub> rules in the Beaumont-Port Arthur area and in the entire eastern half of the State. These include:

- VOC and NO<sub>x</sub> RACT rules in Beaumont-Port Arthur for point and area sources.
- NO<sub>x</sub> rules for electric generating facilities, a lower Reid-vapor pressure gasoline, and Stage I vapor recovery program for gas stations in all of the attainment counties in the eastern half of Texas.
- State-wide NO<sub>x</sub> rules for water heaters, small boilers, and process heaters.

In addition, Texas entered into enforceable agreements that reduced NO<sub>x</sub> emissions at two large point sources in East Texas.

In 2000, Texas adopted beyond-RACT NO<sub>x</sub> rules in Beaumont/Port Arthur for point sources. Some rules are effective this year and the rest will be fully implemented by May 2005.

The Region believes that these measures have put Beaumont-Port Arthur in the position to attain by 2005 but for transport from Houston. More expedited local measures would not advance attainment based on the RACM analysis. Details of EPA's position is documented in our May 15, 2001 Federal Register notice of final rulemaking for the approval of the Beaumont-Port Arthur 1-hour ozone attainment demonstration and in the Texas SIP for Beaumont found at the website given in response to question 1.

Baton Rouge

The State of Louisiana conducted a RACM analysis for the Baton Rouge SIP. The analysis was included in the State's December 2001 submittal. In this submittal, the Louisiana Department of Environmental Quality (LDEQ) conducted a mobile source analysis that consisted of a broad range of transportation control measures (TCMs). As part of this analysis, LDEQ relied on an in-depth TCM evaluation study performed for the Baton Rouge area. Based on a review and analysis of emission reductions from potentially available control measures, the LDEQ concluded that these evaluated control measures are not RACM for the Baton Rouge area, because (a) some would require an intensive and costly effort for numerous small area sources, or (b) these measures would not produce emission reductions sufficient to advance the attainment date in the Baton Rouge area, and therefore, should not be considered RACM. LDEQ reached this conclusion primarily because the reductions that could be achieved by the potential RACM measures are extremely small. These potential reductions are far less than the emissions reductions needed within the nonattainment area to reach attainment. LDEQ concluded that, relative to the total NO<sub>x</sub> reductions required for attainment of the 1-hour ozone NAAQS, additional TCMs that could potentially be implemented in the Baton Rouge area were only a small percentage (approximately 1%) of the emissions reductions needed for attainment.

Answers to Written Questions from Representative Waxman

For your further information, controls adopted by Louisiana that will help reduce ozone in Baton Rouge include:

- NOx controls in the Baton Rouge area requiring implementation as expeditiously as practicable, but no later than May 1, 2005. Among these NOx controls are Reasonably Available Control Technology (RACT) for NOx sources not only in the Baton Rouge nonattainment area ( the Ascension, East Baton Rouge, Iberville, Livingston, and West Baton Rouge parishes) but also four parishes in the region of influence. These four parishes are East Feliciana, Pointe Coupee, St. Helena, and West Feliciana.
- RACT controls for lean burn engines in the five ozone nonattainment parishes.
- A revised vehicle inspection and maintenance (I/M) program that includes the low enhanced vehicle I/M program for the five nonattainment parishes. The revision included on-board diagnostics testing, a vehicle anti-tampering program, and a vehicle gas cap pressure test.
- A transportation control measure, called the Intelligent Transportation System, as a part of their SIP.
- A commitment to implement all adopted measures for the Baton Rouge nonattainment area as expeditiously as practicable and no later than November 15, 2005.

The Baton Rouge RACM analysis was approved in the same action in which EPA had approved the attainment demonstration based on the attainment date extension policy, but the state will have to supply another RACM analysis conducted in light of the bump up that has occurred.

Dallas-Fort Worth

Based on the RACM analysis, EPA concluded that the SIP for Dallas-Fort Worth contained all reasonably available control measures. EPA concluded that this additional set of evaluated measures are not reasonably available for the specific Dallas-Fort Worth area, because (a) some would require an intensive and costly effort for numerous small area sources, (b) Dallas-Fort Worth would need further reductions from sources already regulated, or about to be regulated to advance the attainment date, (c) since the Dallas-Fort Worth area relies in part on reductions from the upwind Houston/Galveston area, and upwind attainment areas in the eastern half of Texas which are substantial, and the reductions projected to be achieved by the evaluated additional set of measures are relatively small, they would not produce emission reductions sufficient to advance the attainment date in the Dallas-Fort Worth area. Therefore, should not be considered RACM. EPA reached this conclusion primarily because the reductions expected to be achieved by the potential RACM measures are relatively small. These potential reductions are far less than the emissions reductions needed within the nonattainment area to reach

Answers to Written Questions from Representative Waxman

attainment (2.2% for NO<sub>x</sub> and 2.1 % for VOCs).

Details of the F.A.C.M analysis for Dallas-Fort Worth are found on the EPA website at <http://www.epa.gov/region6/6xa/dfwfacm4.pdf>

Details of local and regional measures adopted for the Dallas-Fort Worth area and regionally in Texas is explained in the response to question 1(d).

EPA Response to Questions 10.b and c:

The 8-hour ozone standard is generally more protective of public health and more stringent than the 1-hour standard. Additionally, there are more areas that do not meet the 8-hour standard than there are areas that do not meet the 1-hour standard. Consequently local measures adopted and implemented for purposes of meeting the 1-hour ozone standard would likely benefit 8-hour ozone nonattainment areas, with the amount of ozone improvement varying according to the size of the emission reductions, relative sensitivity of ozone levels to NO<sub>x</sub> or VOC reductions, amount of transported pollution, and other factors. However, if a downwind area is significantly impacted by transport from an upwind area, local controls alone would be unlikely to bring the downwind area into attainment. Generally, the downwind area would not be able to attain the standard until the upwind area's emission reductions are achieved. Until the analyses are conducted for the 8-hour ozone attainment demonstration SIPs, we cannot say for certain if the additional local controls will help bring the areas into attainment of the 8-hour ozone national ambient air quality standards (NAAQS) faster in light of the fact that a number of areas will be impacted by transported pollution.

Attachment (to Response 1a.): Letter to American Lung Associate, et al.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

MAY 23 2003

OFFICE OF  
ENFORCEMENT AND  
COMPLIANCE ASSURANCE

Mr. Joseph Otis Minott, Esq.  
Clean Air Council  
135 South 19<sup>th</sup> Street, Suite 300  
Philadelphia, PA 19103

Dear Mr. Minott:

I am writing to reply to your March 18, 2003 letter to John Peter Suarez, Assistant Administrator for Enforcement and Compliance Assurance, and Jeffrey Holmstead, Assistant Administrator for Air and Radiation, in which you request that the United States Environmental Protection Agency (EPA) "take action to stop air pollution from repeated startups, shutdowns, malfunctions and maintenance activities at refineries, chemical plants and other facilities."

I share your concern regarding excess emissions during periods of startup, shutdown and malfunction (SSM) of process-related equipment. In addition, I share your concern that some of the emissions at some facilities may be due to all-too-frequent accidents or poor operation and maintenance practices. I agree that any such emissions are legally excusable only when they meet each of the conditions outlined in EPA's "Policy on Excess Emissions During Startup, Shutdown, Maintenance and Malfunctions." Consequently, it is EPA's goal to eliminate emissions from such activities wherever and whenever possible.

EPA has had considerable success in pursuing this goal. As part of its National Petroleum Refinery Initiative, EPA has entered into separate federal civil judicial consent decrees with seven petroleum refiners. The settlements with these companies require the installation of emission controls and require significant air emissions reductions at each of the thirty-five separate refineries covered by the consent decrees. A core element of each of the consent decrees is the requirement that the settling refiner adopt and implement, at each of its refineries, a protocol to correct the root cause of flaring incidents.

Pursuant to the flaring protocol, refinery operators must report each flaring event to EPA and local permitting authorities, investigate and determine the root cause(s) of such flaring event, and implement remedial action to correct the root cause of the flaring event. Failure on the part of a refinery to implement any of the aforementioned elements of the flaring protocol may result in the imposition of stipulated penalties. The implementation of the flaring protocol at the subject refineries has resulted in a dramatic reduction in both the number and magnitude of flaring incidents. For example, one company reduced the percentage of time it flared at its refineries, including during SSM and upset periods from 29.0% in 1998 to 1.6% in 2002.

EPA is continuing to investigate and pursue petroleum refiners that violate the law as part of the National Petroleum Refinery Initiative. On March 11, 2003, EPA announced a comprehensive settlement with Lion Oil Company that will reduce emissions of harmful air pollutants by approximately 1,380 tons per year. In addition, negotiations with a number of other refiners are ongoing. In announcing the Lion Oil settlement Assistant Administrator Suarez reiterated EPA's commitment to pursuing refineries: "This settlement signals our resolve to ensure that petroleum refineries across this nation comply with the Clean Air Act . . . ." Likewise, the Department of Justice is committed to pursuing petroleum refiners. Assistant Attorney General Thomas L. Sansonetti stated that the Lion Oil settlement "illustrates our commitment to level the corporate playing field by assuring that those members of the refining industry who voluntarily agreed to install improved controls and meet stringent compliance standards will not suffer a competitive disadvantage."

We remain committed to the National Petroleum Refinery Initiative process including the elimination of excess emissions from flares. If you have any questions about EPA's progress in these areas, please feel free to contact Adam M. Kushner at (202) 564-7979.

Sincerely,



Walker B. Smith, Director  
Office of Regulatory Enforcement

cc: John Peter Suarez, Assistant Administrator  
Office of Enforcement and Compliance Assurance

Jeffrey Kolmstead, Assistant Administrator  
Office of Air



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

OCT 16 2003

OFFICE OF CONGRESSIONAL AND  
INTERGOVERNMENTAL RELATIONS

The Honorable Joe Barton  
Chairman  
Subcommittee on Energy and Air Quality  
Committee on Energy and Commerce  
U.S. House of Representatives  
Washington, DC 20515

Dear Mr. Chairman:

Thank you for your letter of August 22, 2003 to Jeffrey Holmstead, Assistant Administrator for the Office of Air and Radiation. Your letter to Mr. Holmstead included a series of questions following his appearance at the July 22, 2003 hearing on 'Bump Up' Policy Under Title 1 of the Clean Air Act before the Subcommittee on Energy and Air Quality. I am pleased to respond to your letter and have enclosed the answers to your questions.

Again, thank you for your letter. If you have further questions, please contact me or your staff may contact Paul Almeida of my staff at (202) 564-6401.

Sincerely,

A handwritten signature in black ink that reads "Ben H. Grumbles".

Benjamin H. Grumbles  
Acting Associate Administrator

Enclosure

cc: Congressman Fred Upton



Questions for the Honorable Jeff Holmstead  
Assistant Administrator for Air and Radiation  
Environmental Protection Agency  
July 22, 2003

1. Would you agree with the statement that for counties like Berrien, Cass, and Allegan county in my district, incoming ozone and precursors are sufficient to cause ozone violations even in the complete absence of local emissions?

Response: While there is not current modeling that shows the influence of local emissions, there is modeling available which demonstrates that these areas are significantly impacted by transported pollution. In the past, EPA has used this information to waive in West Michigan control program requirements, extending attainment dates, and downgrading nonattainment classifications where the Clean Air Act allowed it. EPA will continue to examine ways to address the Western Michigan transport problem, through both the designation and control strategy development processes. Improvements in air quality are expected in Western Michigan when Federal programs such as the NOx SIP Call and Tier 2 /Low Sulfur motor vehicle and fuels rules are implemented. Further air quality improvements are expected as upwind areas put plans in place to meet the ozone national ambient air quality standard (NAAQS). These State plans were developed to show attainment of the 1-hour ozone standard throughout the Lake Michigan area, including West Michigan.

2. If we do not find a way to address this problem and the counties find it impossible to come into compliance with the 8-hour standard because of transient ozone, would they be subject to being bumped up to a higher non-compliance category in the future, and all that entails in even more stringent mandatory controls and other requirements?

Response: Yes, it is possible that EPA will likely have to bump up areas for failing to attain the 8-hour standard. However, EPA is helping local areas meet the NAAQS by reducing regional transport. EPA issued a program known as the NOx SIP call to reduce the regional transport of nitrogen oxides (NOx), which is a key contributor to ground level ozone. This regulation required 19 States and the District of Columbia to significantly reduce their NOx emissions by 2004. In addition, the President's Clear Skies Act, currently before Congress, is based on a regional approach and would go beyond the NOx SIP call to reduce transported pollution. In EPA's June 2, 2003 proposed rule to implement the 8-hour ozone standard, we stated that 8-hour ozone nonattainment areas are eligible for up to two 1-year attainment date extensions based on an area's 4<sup>th</sup> highest daily 8-hour average design values. Our proposed 8-hour ozone implementation rule also states that if an area is not eligible for the two 1-year extensions, then it will be bumped up to a higher classification which would result in additional mandatory measures. However, if EPA's attainment date extension policy is codified, areas impacted by transported pollution could get additional time to attain the 8-hour standard without being bumped up to a higher classification.

3. Under current law, what types of emissions controls or other requirements are these counties facing? How much flexibility do you have in imposing these controls and requirements? For example, Section 182(h) of the Clean Air Act addresses rural transport and states that the EPA

Administrator can use discretion to grant a rural transport classification (which requires less stringent controls and other requirements) to an area based on a demonstration that sources in the area do not make a significant contribution to ozone concentration in the area or other areas?

**Response:** Section 182(h) of the Clean Air Act states that if an area that does not include, and is not adjacent to, any metropolitan statistical area (MSA) or a consolidated metropolitan statistical area (CMSA), then the Administrator can use his/her discretion to treat it as a rural transport area. However, Berrien, Cass and Allegan counties do not qualify for the rural transport classification because they are in, or adjacent to, the Benton Harbor, Kalamazoo-Battle Creek, and Grand Rapids-Muskegon-Holland MSAs, based on 1999 Census Bureau MSA definitions.

4. Does the EPA believe it has the discretion to grant rural transport classification status for small, dramatically affected communities despite their being delineated as Metropolitan Statistical Areas by the U.S. Office of Management and Budget in June, 2003?

**Response:** Based on the language in the Clean Air Act, EPA does not believe that it could classify areas as "rural transport" if they are in a MSA or CMSA.

5. Continuing along this line of how much flexibility the EPA has in determining the types of controls areas out of compliance may adopt, in deciding whether or not to require vehicle and maintenance inspection programs? In Michigan vehicle inspection/maintenance and Stage II vapor recovery measures would likely provide minimal relative air quality benefits when weighed against the costs of re-establishing and operating these programs. That is because of motor vehicle design changes incorporating on-board diagnostic and vapor recovery equipment and the fact that Michigan's automobile fleet is newer than the national average.

**Response:** In West Michigan, I/M will not be an issue for Cass or Berrien Counties, as they fall beneath the population threshold in EPA's I/M rules. For the Grand Rapids-Holland-Muskegon area, I/M will be required only if the area is classified as a moderate ozone nonattainment area. At present, monitored readings in the Grand Rapids-Holland-Muskegon area are above the moderate threshold, however, they are within the 5% bump-down level contained in the section 181(a)(4) of the CAA. This provision of the CAA provides that classifications may be adjusted upward or downward for an area if the area's design value is within 5 percent of another classification. EPA needs to examine the air monitoring values recorded for the remainder of this summer and make a decision on the appropriate classification for the area when we promulgate final designations in April 2004.

EPA was authorized by the 1990 Amendments to the CAA to establish requirements for two varieties of inspection and maintenance (I/M) programs - basic I/M for moderate nonattainment areas and enhanced I/M for areas in serious or higher nonattainment. In establishing the I/M requirements, both air quality and the density of the local population were taken into consideration. For basic I/M to be required in a state such as Michigan, a moderate nonattainment area must have an urbanized population of 200,000 or more, based upon the 1990 Census; for enhanced I/M to be required outside of the ozone transport region (OTR), a serious or higher nonattainment area must have an urbanized population of 200,000 or more, based upon the

1980 Census. In both cases, states have a great deal of flexibility in designing their I/M programs to ensure that the public health goals of the CAA can be met in as practical a manner as possible.

EPA is in the process of revising the I/M program requirements to provide additional options to states that must design a new I/M program for areas that will be designated non-attainment for the 8-hour ozone standard. The revisions will allow program designs that take advantage of onboard diagnostic (OBD) technology that has been installed on model year 1996 and newer vehicles. A relatively simple and accurate check of the OBD system could be performed in place of traditional tailpipe emissions testing. EPA has found that the benefits from an OBD-based I/M program can be significant, particularly over the timeframe associated with meeting the 8-hour ozone standard, when OBD-equipped vehicles will make up a substantial portion of the motor vehicle fleet.

With regard to flexibility for the Stage II vapor recovery program, under the 1-hour ozone standard, moderate ozone nonattainment areas were allowed to drop Stage II requirements once on road vapor recovery (OBVR) was adopted. If a newly designated 8-hour ozone nonattainment area is classified as moderate or lower, it would not have to do Stage II. Since the highest classification expected for any West Michigan area is moderate, Stage II should not be an issue for any of these areas.