

**H.R. 4775, OZONE STANDARDS IMPLEMENTATION  
ACT OF 2016**

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**HEARING**  
BEFORE THE  
SUBCOMMITTEE ON ENERGY AND POWER  
OF THE  
COMMITTEE ON ENERGY AND  
COMMERCE  
HOUSE OF REPRESENTATIVES  
ONE HUNDRED FOURTEENTH CONGRESS  
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## **H.R. 4775, OZONE STANDARDS IMPLEMENTATION ACT OF 2016**

**THURSDAY, APRIL 14, 2016**

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

The subcommittee met, pursuant to call, at 10:18 a.m., in room 2322 Rayburn House Office Building, Hon. Ed Whitfield (chairman of the subcommittee), presiding.

Members present: Representatives Whitfield, Olson, Barton, Shimkus, Latta, Harper, McKinley, Kinzinger, Griffith, Johnson, Long, Ellmers, Flores, Mullin, Rush, McNerney, Tonko, Green, Capps, Doyle, Castor, Sarbanes, Welch, Loeb sack, and Pallone (ex officio).

Staff present: Will Batson, Legislative Clerk; Allison Busbee, Policy Coordinator, Energy and Power; Rebecca Card, Assistant Press Secretary; Tom Hassenboehler, Chief Counsel, Energy and Power; A.T. Johnston, Senior Policy Advisor; Mary Neumayr, Senior Energy Counsel; Annelise Rickert, Legislative Associate; Dan Schneider, Press Secretary; Peter Spencer, Professional Staff Member, Oversight; Jeff Carroll, Democratic Staff Director; Jean Fruci, Democratic Energy and Environment Policy Advisor; Caitlin Haberman, Democratic Professional Staff Member; Rick Kessler, Democratic Senior Advisor and Staff Director, Energy and Environment; Dan Miller, Democratic Staff Assistant; Alexander Ratner, Democratic Policy Analyst; Andrew Souvall, Democratic Director of Communications, Outreach and Member Services; and Tuley Wright, Democratic Energy and Environment Policy Advisor.

Mr. WHITFIELD. I'd like to call this hearing to order this morning and, of course, today we're going to be considering H.R. 4775, the Ozone Standards Implementation Act of 2016, sponsored by Vice Chairman Olson and others.

[H.R. 4775 appears at the conclusion of the hearing.]

And at this point I'd like to recognize myself for 5 minutes for an opening statement.

### **OPENING STATEMENT OF HON. ED WHITFIELD, A REPRESENTATIVE IN CONGRESS FROM THE COMMONWEALTH OF KENTUCKY**

About 3 years ago, we had a series of forums on the Clean Air Act, and at those forums we had regulators from various States that came in and testified.

And the gist of the testimony was that the Clean Air Act needed to be revisited. Everyone recognizes that it has been a successful piece of legislation.

But we also know that every State is affected differently by the regulations coming out of EPA and certainly that is true on the proposed national ambient air quality standard that is being reviewed at this time.

And as I said, most of the testimony indicated that there are some areas of the Clean Air Act, because of ambiguities and deadlines set, that needed to be revisited by the—by the Congress.

Now, we find ourselves in a predicament though where the Clean Air Act is one of those polarizing pieces of legislation that has done a lot of good, and it is polarizing primarily because of the Clean Power Plan, in my humble opinion.

As you know, Congress refused to adopt legislation to help the president in his negotiations in Copenhagen or Paris because the majority in Congress simply disagreed with what was being done in that area.

On the other hand, the proponents of the Paris agreement and the Clean Power Plan feel very strongly that the president needed to proceed in that way.

And so, as I said, Congress didn't act. It was adopted by regulation and what has happened is that it has become a polarizing piece of regulation because 27 States have filed lawsuits and we see more and more lawsuits being filed on these regulations coming out of EPA.

So on the Republican side, you know, we sort of drew a line in the sand. Democrats drew a line in the sand. But on national ambient air quality standards, I think many States, whether they be perceived as Republican States or Democratic States, agree that there needs to be some adjustments here, and I believe that is what H.R. 4775 attempts to do.

Now, I am going to just read a couple of comments from our commissioner from Texas and then those on the Democratic side will say well, that's from Texas. But then I am going to read a couple of comments from the commissioner from California.

Mr. Shaw, in his testimony, says that Texas detailed our disagreements with the EPA's conclusions and formal comments during the rule making process. We also traveled to Washington to meet personally with Administrator McCarthy to make her aware of significant flaws in the studies EPA relied on in coming up with this new standard.

The EPA nonetheless lowered the standard and now my agency is challenging the validity of this standard in court, and I won't go into the details of it.

Now, in California, I want to just read an excerpt from a statement there. I don't think anyone views California as a red State, or a Republican State, but this is what the commissioner says.

The new ozone and PM 2.5 standards established by EPA approached the background pollution concentrations in many regions throughout the Nation including the San Joaquin Valley, and we know that Los Angeles can't meet their existing standard, much less this new standard.

Now, I want to just go on and point out that he goes on to say the reality that we face today sets up regions such as the San Joaquin Valley for failure, leading to costly sanctions and severe economic hardships.

We face these consequences despite having the toughest air regulations on stationary sources, the toughest air regulations on farms and dairies, tough air regulations on what residents can do within the confines of their own home, \$40 billion spent by businesses on clean air, over \$1 billion of public/private investment, toughest regulations on cars and trucks, toughest regulations on consumer products, reduced emissions by 80 percent and still we can't meet the standards.

So I look forward to our discussion today with our distinguished panelists, some from States that are not having a problem, others from States that are, and that's the reality of where we are today. [The prepared statement of Mr. Whitfield follows:]

#### PREPARED STATEMENT OF HON. ED WHITFIELD

This morning we will review the challenges States face in implementing the EPA's recently finalized ozone standards, as well as other challenges with the National Ambient Air Quality Standards program. The recent ozone standards will impose substantial compliance burdens on State and local governments while also jeopardizing economic growth and jobs.

We will also discuss a bipartisan solution, H.R. 4775, the "Ozone Standards Implementation Act of 2016," which would create a more reasonable and streamlined approach to implementing current ozone standards. I want to thank Reps. Olson, Flores, Latta, Cuellar, Leader McCarthy, and Whip Scalise for their great work on this legislation and I welcome our witnesses who represent a number of State and local environmental agencies that are on the front lines of implementing these EPA rules.

EPA's recently finalized National Ambient Air Quality Standards for ozone would impose an additional layer of regulation on States that are currently in the process of implementing stringent ozone standards set by the agency in 2008. Those standards revised the previous standards set in 1997 and established a level of 75 parts per billion. However, the EPA did not finalize the necessary implementing regulations for these 2008 standards until March of 2015, and States are only starting to comply with them.

Nonetheless, the agency decided to create an additional ozone standard, this one at 70 parts per billion. And because the standards from 2008 have not been revoked, States face the prospect of implementing two ozone standards at the same time. Under the new standards, States would be required to begin later this year a complex regulatory process involving designations, State implementation plans, and new permitting programs, long before the 2008 standards have been fully implemented.

As a practical matter, the new ozone standards present implementation challenges because for certain parts of the country they are close to background levels. EPA projects annualized costs of \$2 billion in 2025, including \$1.4 billion for areas outside California and \$800 million for California. Yet these annual costs will almost certainly be much higher since EPA acknowledges that "unidentified controls" will need to be discovered to meet the new standards in some of these areas—in other words, the agency does not really know how States can comply, so it is unclear what the ultimate price tag will be.

This new burden arrives at a time when State and local governments face other expensive EPA mandates. It represents another headwind for job creators, since new permitting requirements have already begun to be implemented. Further, potentially hundreds of counties will be designated as being in "nonattainment" as early as next year.

A "nonattainment" designation places limits on new construction, expansions and transportation projects, triggers a suite of new planning requirements, and subjects areas to potential penalties. Because of the designation, these counties will remain subject to continuing EPA requirements for decades, even after air monitoring shows the counties have attained the standards.

H.R. 4775 offers a commonsense path forward, by allowing the 2008 ozone rule to continue being implemented, and for the 2015 standards to be phased in on a

more reasonable timeframe. EPA itself projects the vast majority of areas in the country would meet the new 70 parts per billion standard by 2025 under existing Federal rules and programs.

Instead of forcing hundreds of counties to be needlessly categorized as “nonattainment,” this legislation builds on EPA’s own projection that all but 14 counties would reach attainment by 2025 based on existing Federal measures. HR 4775 would ensure these areas do not become subject to a suite of new paperwork and requirements that will divert limited State resources but will not contribute to improvements in air quality.

There is no benefit to stacking a new rule on top of an unfinished earlier one. The bill makes practical changes to modify the current requirement that standards for ozone and other pollutants be reviewed every 5 years, and places the new deadline at no more than 10 years subject to the discretion of the administrator.

EPA’s own actions show that 5 years is not enough time and that this arbitrary deadline needs to be revised.

The bill also imposes the commonsense requirement that EPA release implementing regulations and guidance at the same time it releases new standards, something that EPA should have been doing all along.

Overall, the news on ozone is positive and we have seen a 30 percent drop in ozone levels since 1980. EPA itself concedes ozone levels are declining and will continue to fall even in the absence of the new standards. This practical bill simply ensures that air quality continues to improve while avoiding unnecessary harm to State and local governments and to job-creating businesses. Thank you.

Mr. WHITFIELD. At this point, I would like to recognize the distinguished gentleman from Illinois, Mr. Rush, for 5 minutes.

**OPENING STATEMENT OF HON. BOBBY L. RUSH, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF ILLINOIS**

Mr. RUSH. I want to thank you, Mr. Chairman, for holding today’s legislative hearing on the Ozone Standards Implementation Act of 2016.

It is unfortunate, Mr. Chairman, but I have some grave concerns with this bill. This bill will roll back important provisions of the Clean Air Act and hurt our Nation’s efforts to protect air quality.

For starters, H.R. 4775 would unacceptably delay implementation of the EPA’s 2015 ozone standards for another 8 years, even though these standards have not been updated since the Bush administration last did it in 2008.

Additionally, Mr. Chairman, the bill would also mandate that EPA wait a decade before considering any new evidence regarding the health implementations from ozone and other harmful pollutants despite what the science may say.

Mr. Chairman, for those of us who believe that science should inform policy making in regards to public health decisions, prohibiting EPA from revisiting the scientific evidence for at least a decade is an unacceptable risk that could result in potentially disastrous health impacts for the American people.

Mr. Chairman, we know that breathing dirty pollutants such as ozone, carbon monoxide, lead, nitrogen, sulfur dioxide and many other dirty pollutants can lead to a host of health problems including asthma, inflammation of the lungs, respiratory disease and even premature death.

Current research even suggests, Mr. Chairman, that ozone may also occur—may also cause damage to the central nervous system and may harm developing fetuses.

Yet, Mr. Chairman, despite all the scientific research, this bill would stall the new ozone standards, permanently weaken the

Clean Air Act and hamstringing the EPA's ability to regulate these harmful contaminants both now and in the future.

And think, Mr. Chairman—under this bill not only would States not have to comply with the 2015 standards until 2026, but parents were not even being born if their communities were in violation of clean air standards until the year 2025.

Mr. Chairman, I can think of no greater benefit to the public interest denying—than denying citizens information directly tied to their health and their well-being. There is no benefit to the public interest.

Mr. Chairman, instead of trying to stall the 2015 ozone standards and prohibit the EPA from updating the national ambient air quality standards regularly as H.R. 4775 would do, we should be heeding the warnings of doctors and scientists of not acting quickly enough to protect the public health.

For these reasons among many others, I cannot support this bill, and I urge my colleagues to support it—to oppose it, rather, and I yield the rest of my time to Mr. McNerney from California.

Mr. MCNERNEY. Well, I thank the gentleman.

I just want to thank Seyed Sadredin from San Joaquin Valley for appearing in front of the committee today. You're from the San Joaquin Air Valley Pollution Control District, which has one of the biggest challenges in the country. I look forward to your testimony and thank you again for showing up. With that, I yield back.

Mr. WHITFIELD. Thank you. Mr. McNerney told me you were going to yield in 2 minutes, Mr. Rush, but, at this time, I recognize the gentleman from Texas, Mr. Olson, for 5 minutes.

**OPENING STATEMENT OF HON. PETE OLSON, A  
REPRESENTATIVE IN CONGRESS FROM THE STATE OF TEXAS**

Mr. OLSON. I thank my friend from Kentucky.

The Clean Air Act is about cooperation. It is a balance between States and the Federal Government. I believe why we are here today is that we are not in any balance right now.

I would ask all my colleagues to listen carefully to what these State officials will say this morning. They want clean air and will work aggressively to achieve it.

We all want clean air within these communities, our families, our kids, and that is why the Clean Air Act is hugely important, but it is not perfect.

Working together, we can improve it. We've picked out the low-hanging fruit to improve air quality. As we push more improvements, we must go after smaller sources. This provides economic pain at the local level and hides imperfections in the Clean Air Act.

We can provide needed balance to this process. H.R. 4775 does just that. Now, I would like to welcome one Texan with the cowboy hat on the panel, Dr. Bryan Shaw.

He has been on the Texas Commission on Environmental Quality for almost a decade, has been the chairman since 2009. When he does manage to escape Austin, Texas, home of the University of Texas, Dr. Shaw returned to his own alma mater, Texas A&M University, where he is an associate professor. He spends much time of his research—he spends much of his time researching air pollu-

tion. He also finds time to drop by the Dixie Chicken for a nice Texas meal.

Dr. Shaw has also worked here in DC. He is acting lead scientist for air quality at the Department of Agriculture and served as a member of EPA's science advisory board. He brings an incredible amount of depth of knowledge to this hearing. I want to welcome him with a proud small Aggie woo.

I yield back.

Mr. WHITFIELD. Would the gentleman yield to the gentleman from Texas?

Mr. OLSON. Yes, sir.

Mr. WHITFIELD. Mr. Barton.

Mr. BARTON. That's whoop. I am an Aggie.

I just want to welcome Dr. Shaw. Sorry I missed the earlier meeting but you've testified here before and we look forward to hearing what you have to say and, of course, all the other witnesses, and thank the chairman and ranking member for the hearing.

Mr. WHITFIELD. At this time, the Chair recognizes the gentleman from New Jersey, Mr. Pallone, for 5 minutes.

**OPENING STATEMENT OF HON. FRANK PALLONE, JR., A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEW JERSEY**

Mr. PALLONE. Thank you, Mr. Chairman.

The legislation that is the subject of today's hearing, the deceptively named Ozone Standards Implementation Act, has very little to do with implementing EPA's ozone standards and instead is focused on undermining the Clean Air Act.

Make no mistake, H.R. 4775 is a broad attack on some of the most important and successful tenets of the Clean Air Act including health-based standards and protections for all criteria of pollutants.

Since 1970, the foundation of the Clean Air Act has been a set of health-based air quality standards that EPA must set based solely on the latest science and medical evidence.

Essentially, the standard sets the level of pollution that is safe to breathe. With these health-based standards as the goalpost, States then develop plans to control pollution and meet those goals.

Costs and technological feasibility are front and center in this planning and States can identify which pollution control measures are best suited to meeting the standard in the most cost-effective way.

This structure has been extraordinarily effective for 46 years in cleaning the air and protecting public health including the health of sensitive groups like children and the elderly.

H.R. 4775 would alter this proven approach. It would elevate cost considerations in the standard-setting process not just for ozone but also for carbon monoxide, sulfur oxides, nitrogen oxides, particle pollution and even lead.

This would allow polluters to override scientists, leading to air quality standards based on profits rather than health and reversing decades of progress in cleaning our air.

But H.R. 4775 goes even further, delaying development and implementation of national ambient air quality standards, or NAAQS, for all six criteria pollutants.

The bill doubles the review period for all NAAQS, meaning any new evidence or science would only be considered every 10 years. That's a dramatic move in the wrong direction on science-based decisionmaking.

The legislation also includes a provision to alter the way that air quality monitoring data is interpreted, discounting air quality measurements taken during normal weather and climate cycles like heat waves and droughts.

It's an environmental "don't ask don't tell" designed to make it appear that air quality is improving when it's not. We should eliminate pollution, not the record of its occurrence.

The bill actually does manage to address implementation of the new ozone standards directly by delaying implementation by up to 8 years. When you combine this mandated delay with other features of this legislation we virtually guarantee that people living in areas with poor air quality will continue to be exposed to air pollution indefinitely.

In fact, a number of the provisions in this bill impact the areas that have the most persistent problems with air pollution. We have some of those areas represented on the panel today.

There are three fundamental things that we all need every day—food, water and air. When we enacted the Clean Air Act, we made a commitment to the public to make the air safe and healthy to breathe.

H.R. 4775 breaks that commitment. It's simply a bad bill.  
[The prepared statement of Mr. Pallone follows:]

#### PREPARED STATEMENT OF HON. FRANK PALLONE, JR.

Thank you, Mr. Chairman. The legislation that is the subject of today's hearing—the deceptively named "Ozone Standards Implementation Act"—has very little to do with implementing EPA's ozone standards and instead is focused on undermining the Clean Air Act. Make no mistake: H.R. 4775 is a broad attack on some of the most important and successful tenets of the Clean Air Act, including health-based standards and protections for all criteria pollutants.

Since 1970, the foundation of the Clean Air Act has been a set of health based air quality standards that EPA must set based solely on the latest science and medical evidence. Essentially, the standard sets the level of pollution that is "safe" to breathe. With these health-based standards as the goal posts, States then develop plans to control pollution and meet these goals. Cost and technological feasibility are front and center in this planning and States can identify which pollution control measures are best suited to meeting the standard in the most cost-effective way.

This structure has been extraordinarily effective for 46 years in cleaning the air and protecting public health, including the health of sensitive groups like children and the elderly.

H.R. 4775 would alter this proven approach. It would elevate cost considerations in the standard-setting process, not just for ozone, but also for carbon monoxide, sulfur oxides, nitrogen oxides, particle pollution and even lead. This would allow polluters to override scientists, leading to air quality standards based on profits rather than health, and reversing decades of progress in cleaning our air.

But H.R. 4775 goes even farther, delaying development and implementation of National Ambient Air Quality Standards—or NAAQS for all six criteria pollutants. The bill doubles the review period for all NAAQS, meaning any new evidence or science would only be considered every 10 years. That's a dramatic move in the wrong direction on science-based decisionmaking.

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In fact, a number of the provisions in this bill impact the areas that have had the most persistent problems with air pollution. We have some of those areas represented on the panel today.

There are three fundamental things that we all need every day—food, water and air. When we enacted the Clean Air Act, we made a commitment to the public to make the air safe and healthy to breathe. H.R. 4775 breaks that commitment. It is simply a bad bill.

Thank you, Mr. Chairman.

Mr. PALLONE. I wanted to—I have about 2 minutes. Did you want to make your statement? I will yield to Mr. McNerney.

Mr. MCNERNEY. No, I didn't do my duty and then yell out for the Warriors for winning 74 games this season. So, yay, Warriors.

Mr. OLSON. Seventy-three games.

Mr. MCNERNEY. My concern here—

Mr. OLSON. Seventy-three. They won 73.

Mr. MCNERNEY. Seventy-three. Well, I can give them an extra one.

So anyway, I mean, my concern here is the issue with the Clean Air Act is it provides incentives for using new technology and many of the emission reductions are achieved through instead of funds to use new technology that both reduce emissions and reduce costs and that is possible through innovation.

So we don't want to see the new law tear down that provision at all. But California is the home to two regions struggling with the worst air quality in the Nation.

As I mentioned, the San Joaquin Valley has really struggles. Our pollution control district has done tremendous work. They continue to do tremendous work and they have a lot of challenges ahead of them, and I just want to see that this law actually helps our communities fight pollution rather than puts them in a straightjacket.

So that is really what I was going to try and say with my earlier 2 minutes. So and with that, I yield back.

Mr. WHITFIELD. The gentleman yields back. and that concludes the opening statements. So at this point, I would like to introduce our witnesses for the day.

First of all, we have Dr. Bryan Shaw, who is Chairman of the Texas Commission on Environmental Quality. In fact, what I am going to do, I am just going to introduce you and let you give your opening statement. Then I will introduce each one of you when we call on you.

So, Mr. Shaw, you are recognized for 5 minutes.

**STATEMENTS OF BRYAN W. SHAW, CHAIRMAN, TEXAS COMMISSION ON ENVIRONMENTAL QUALITY; SEYED SADREDIN, EXECUTIVE DIRECTOR/AIR POLLUTION CONTROL OFFICER, SAN JOAQUIN VALLEY AIR POLLUTION CONTROL DISTRICT; ALI MIRZAKHALILI, DIRECTOR, DIVISION OF AIR QUALITY, DELAWARE DEPARTMENT OF NATURAL RESOURCES & ENVIRONMENTAL CONTROL; MISAEEL CABRERA, DIRECTOR, ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY; AND ALAN MATHESON, EXECUTIVE DIRECTOR, UTAH DEPARTMENT OF ENVIRONMENTAL QUALITY**

**STATEMENT OF BRYAN W. SHAW**

Mr. SHAW. Thank you.

Good morning. Chairman Whitfield, Ranking Member Rush, members of the committee, thank you very much. A special thank you to Congressman Olson and Congressman Barton. I certainly have enjoyed the opportunity to work with you over the years.

Good morning, and again, I am thankful for the opportunity to talk about an important issue this morning, specifically H.R. 4775, the Ozone Standards Implementation Act of 2016 sponsored by Vice Chair Olson.

My name is Dr. Bryan Shaw and I am the chairman of the Texas Commission on Environmental Quality. My agency's mission is to protect Texas public health and the environment in a way that's consistent with sustainable economic development.

In carrying out that mission, we seek to bring together common sense, sound science and the law to ensure that environmental regulations are safe, fair and predictable.

I am here today because the Environmental Protection Agency's recent action lowering the national ambient air quality standard for ground-level ozone is not consistent with those principles.

As you all know, the EPA finalized their proposal to lower the standard from 75 to 70 parts per billion on October 26th of 2015.

The State's initial designation recommendations are due on October 1st of this year. The TCEQ detailed our disagreements with the EPA's conclusion and formal comments during the rule making process.

We even traveled to Washington to meet personally with Administrator McCarthy to make her aware of the significant flaws in the studies EPA relied on in promulgating the new standard.

The EPA nonetheless lowered the standard and now my agency is challenging the validity of that standard in court. While our voluminous comments and legal filings elaborating great detail on the myriad scientific and legal vulnerabilities with the new standard, I would like to briefly raise a few of the most troubling issues.

First, the EPA claims that the new standard will provide annual health benefits between \$2.9 billion and \$5.9 billion, with a cost of only \$1.4 billion. My agency's analysis suggests these figures are dramatically incorrect.

For example, the EPA only includes industry costs in their analysis, not the States' or taxpayer costs, nor do they look at economic impacts like increased electricity costs.

Another major flaw in the EPA's analysis is their quantification of the benefits that would flow from this new standard. The EPA's

own analysis shows that lowering the standard even to the 65 ppb level will not significantly reduce asthma attacks.

In addition, approximately two-thirds of the benefits the EPA claims would result from the new standard are not based on ozone reductions at all. In fact, they are based on reductions of an entirely different pollutant that is not the subject of this rule.

Specifically, the EPA reasons that in taking the actions necessitated by this standard, States will also lower levels of fine particulate matter, or PM 2.5.

The flaw in that reasoning is that, at least in Texas' case, levels of PM 2.5 are already below the standard set by EPA. Chief Justice Roberts recently questioned this practice when the EPA's Mercury and Air Toxics Standard was reviewed and rejected by the Supreme Court.

While the court ultimately rejected the rule on other grounds, the Chief Justice suggested that EPA's co-benefits analysis might be an illegitimate way of muddling the differing regulatory schemes for each pollutant under the Clean Air Act.

H.R. 4775 is a welcome step in the right direction. It seeks to defer the implementation of the new standard until 2024, and it requires the EPA to spend more time studying and reviewing scientific literature and other factors before implementing new standards.

By suspending the applicability of the new standard, this legislation will allow States to focus their limited resources on fully implementing the 2008 standard as well as a cascade of other new and expensive regulations coming out of EPA.

Especially considering the cost of the negligible health and environmental benefits embodied by the new standard, a delay in implementing this standard is helpful indeed.

More broadly, H.R. 4775 also seeks to make the NAAQS—the National Ambient Air Quality Standards—program applicable to all six criteria pollutants more efficient and effective.

By lengthening the required review period from 5 to 10 years, it will ensure the EPA does not rush to lower given standards only to comply with a statutory deadline. Furthermore, it will give States more time to comply with previous standards before getting saddled with more stringent standards and facing economic and developmental sanctions for nonattainment.

I also support this legislation's addition of technological feasibility and possible adverse welfare, social, and economic effects to the list of factors the EPA can consider in revising a standard.

As the Act is currently written and interpreted by the Supreme Court, the EPA is prohibited from considering whether or not the state of our technological capabilities would even make getting the required reductions possible.

Put simply, the EPA could require States to make reductions that are literally impossible to achieve. The act's requirement that the EPA ignore technological and economic considerations might have made sense 40 years ago when it was initially passed.

However, pollution levels have been lowered to such a degree that the law of diminishing returns has made it more and more difficult to continue to reduce pollutant levels at all, much less in a way that is not burdensome economically.

Finally, H.R. 4775's directive to the EPA to begin timely issuance of implementing regulations and guidance solves a major issue that often confronts States like Texas.

Without this protection, the EPA can and does require States to develop and propose new standards before the EPA itself has given States specific guidance for the standard. And so I understand how charged this issue can be but I appreciate Vice Chair Olson's efforts to streamline this process.

And thank you for the opportunity to testify today.  
[The prepared statement of Mr. Shaw follows:]

Bryan W. Shaw, Ph.D., P.E., *Chairman*  
 Toby Baker, *Commissioner*  
 Jon Niermann, *Commissioner*  
 Richard A. Hyde, P.E., *Executive Director*



## TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

*Protecting Texas by Reducing and Preventing Pollution*

TESTIMONY OF CHAIRMAN BRYAN SHAW, TEXAS COMMISSION ON ENVIRONMENTAL QUALITY  
 DELIVERED TO THE UNITED STATES HOUSE OF REPRESENTATIVES, COMMITTEE ON ENERGY  
 AND COMMERCE, SUB-COMMITTEE ON ENERGY AND POWER

April 14, 2016

Chairman Whitfield, Ranking Member Rush, members of the committee:

Good morning, and thank you for the opportunity to visit with you this morning about HR 4775, "The Ozone Standards Implementation Act of 2016" sponsored by Vice-Chair Olson.

My name is Dr. Bryan Shaw, and I am the Chairman of the Texas Commission on Environmental Quality (TCEQ). My agency's mission is to protect Texans' public health and their environment in a way that is consistent with sustainable economic development. In carrying out that mission, we seek to bring together common sense, sound science, and the law to ensure that environmental regulations are safe, fair, and predictable.

### **The 2015 Standard**

I am here today because the Environmental Protection Agency's (EPA) recent action lowering the National Ambient Air Quality Standard for ground level ozone is not consistent with those principles. As you all know, the EPA finalized their proposal to lower the standard from 75 to 70 parts per billion on October 26, 2015. The States' initial designation recommendations are due on October 1, 2016.

The TCEQ detailed our disagreements with the EPA's conclusions in formal comments during the rulemaking process. We even travelled to Washington to meet personally with Administrator McCarthy to make her aware of significant flaws in the studies EPA relied on in promulgating the new standard. The EPA nonetheless lowered the standard, and now my agency is challenging the validity of this standard in court.

While our voluminous comments and legal filings elaborate in great detail on the myriad scientific and legal vulnerabilities with the new standard, I would like to briefly raise a few of the most troubling issues.

First, the EPA claims that the new standard will provide annual health benefits between \$2.9 billion and \$5.9 billion, with a cost of only \$1.4 billion. My agency's

analysis suggests those figures are dramatically incorrect. For example, the EPA only includes industry's costs in their analysis, not the states' or taxpayer's costs. Nor do they look at economic impacts like increased electricity costs.

Another major flaw in the EPA's analysis is their quantification of the benefits that would flow from this new standard. The EPA's own analysis show that lowering the standard even to 65 ppb will not significantly reduce asthma attacks. In addition, approximately two-thirds of the benefits the EPA claims would result from this new standard are not based on ozone reductions at all. In fact, they are based on reductions of an entirely different pollutant that is not the subject of this Rule. Specifically, the EPA reasons that in taking the actions necessitated by this standard, states will also lower levels of fine particulate matter, or PM<sub>2.5</sub>. The flaw in that reasoning is that, at least in Texas' case, levels of PM<sub>2.5</sub> are already below the standard set by the EPA. Chief Justice Roberts recently questioned this practice when the EPA's Mercury and Air Toxics Standard was reviewed and rejected by the Supreme Court. While the Court ultimately rejected the rule on other grounds, the Chief Justice suggested that EPA's co-benefits analysis might be "an illegitimate way" of muddling the differing regulatory schemes for each pollutant under the Clean Air Act.<sup>1</sup>

#### **HR 4775**

HR 4775 is a welcome step in the right direction. It seeks to defer the implementation of the new standard until 2024, and it requires the EPA to spend more time studying and reviewing scientific literature and other factors before implementing new standards.

By suspending the applicability of the new standard, this legislation will allow states to focus their limited resources on fully implementing the 2008 standard, as well as the cascade of other new and expensive regulations coming out of EPA. Especially considering the cost and the negligible health and environmental benefits embodied by the new standard, a delay in implementing this standard is helpful indeed.

More broadly, HR 4775 also seeks to make the NAAQS program, applicable to all six criteria pollutants, more efficient and effective. By lengthening the required review period from five to ten years, it will ensure the EPA does not rush to lower a given standard only to comply with a statutory deadline. Furthermore, it will give states more time to comply with previous standards before getting saddled with more stringent standards and/or facing economic or developmental sanctions for nonattainment.

I also support this legislation's addition of technological feasibility and possible adverse welfare, social, and economic effects to the list of factors the EPA can consider in revising a standard. As the Act is currently written and interpreted by the Supreme Court, the EPA is prohibited from considering whether or not the state of our technological capabilities would even make getting the required reductions possible.

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<sup>1</sup> Transcript of Oral Argument at 64. *Michigan v. EPA*, No. 14-46 U.S. (2015).

Put simply, the EPA could require states to make reductions that are literally impossible to achieve.

The Act's requirement that the EPA ignore technological and economic considerations might have made sense forty years ago when it was initially passed. However, pollution levels have been lowered to such a degree that the law of diminishing returns has made it more and more difficult to continue to reduce pollutant levels at all, much less in a way that is not burdensome economically.

Finally, HR 4775's directive to the EPA to begin timely issuance of implementing regulations and guidance solves a major issue that often confronts states like Texas. Without this protection, the EPA can, and does, require states to develop and propose new standards before the EPA itself has given states specific guidance for the standard's implementation.

There is some language in the bill that I bring to your attention as potentially problematic, and that I discuss in more detail in my written comments to the subcommittee. For example, the term "not later than" in Section 2, subsection(a)(1) would allow states to submit designation recommendations to the EPA before October 2024, which could become a source of confusion due to differing designation, implementation, and attainment dates across the country. At the same time, I am cognizant of the fact that that was not the intent of this legislation, and I look forward to working with the members of the subcommittee to avoid any confusion.

I understand how charged the issue of air quality regulation can be, so I appreciate Vice-Chair Olson's efforts to streamline this process.

**Comments on Draft Federal Legislation: H.R. 4775 by Rep. Olson**Section 2, subsection (a)(1), Page 2, lines 1-2:

The language “not later than” would not prevent states submitting designations to EPA earlier than October 26, 2024, which could create confusion and differing designation dates, implementation dates, and attainment dates across the country, since the same language appears in subsection (a)(2). EPA would not be prohibited from (and might be required to) act on earlier submissions. This could result in transport reductions being required from states that have not been designated yet that potentially impact states that chose to submit designations earlier than the specified date. Suggested fix: change the phrase “not later than” to “no earlier than.”

Section 2, subsection (b), page 3, line 3:

This section of the draft bill specifies that the 2015 ozone standards shall not apply to the review and disposition of a “preconstruction permit” application if specified criteria are met. “Preconstruction permit” application is defined in section 4 of this bill to mean a permit that is required under part C or part D of title I of the Clean Air Act (i.e., PSD and NNSR permits for major stationary sources). However, EPA interprets FCAA, §110 to also require that preconstruction permits be obtained from minor sources. Because the draft bill does not address applicability for minor sources, the 2015 ozone standard would apply to preconstruction permitting for those sources, while major stationary sources could be exempt. Also, when you read this section together with the definition in section 4, we think that it means that any new or modified source subject to major NSR (PSD or nonattainment) permitting requirements would not be subject to the 2015 standard, including in the case of PSD, a modeling analysis of whether they meet the new standard. This would mean that we would only be looking at the older 75 ppb standard for those sources. We are not sure if this is what was intended by the bill and it would be different from how we have conducted permit reviews during previous standard transitions. It would also mean that we would not be conducting a nonattainment review for any area that might be designated nonattainment under the new standard, nor would we be requiring lower major source thresholds or higher offset ratios for any area that is potentially a higher nonattainment classification under the new standard – we believe that this was the intention of the bill.

Section 2, subsection (b), page 3, line 6:

One of the criteria for determining whether the 2015 ozone standard does not apply to the requirement for a “preconstruction permit” is that the application has been determined to be “complete” on or before the date of promulgation of the final designation. Completeness criteria is not specified by the draft language.

Section 3, subsection (e)(4), page 8, lines 7-15:

As discussed above, “preconstruction permit” application is defined to mean a permit that is required under part C or part D of title I of the Clean Air Act (i.e., PSD and NNSR permits for major stationary sources). However, EPA interprets FCAA, §110 to also require that preconstruction permits be obtained from minor sources. Because the draft bill does not address applicability for minor sources, the 2015 ozone standard

would apply to preconstruction permitting for those sources, while major stationary sources could be exempt.

Section 4, subsection (5), page 11, lines 24-25 and page 12, lines 1-5:

As discussed above, “preconstruction permit” application is defined to mean a permit that is required under part C or part D of title I of the Clean Air Act (i.e., PSD and NNSR permits for major stationary sources). However, EPA interprets FCAA, §110 to also require that preconstruction permits be obtained from minor sources. Because the draft bill does not address applicability for minor sources, the 2015 ozone standard would apply to preconstruction permitting for those sources, while major stationary sources could be exempt.

Mr. WHITFIELD. Thank you, Dr. Shaw.

And now our next witness is Seyed—Mr. Seyed Sadredin, who is the Executive Director of Air Pollution Control for San Joaquin Valley Air Pollution Control District.

You are recognized for 5 minutes.

#### STATEMENT OF SEYED SADREDIN

Mr. SADREDIN. Thank you, Chairman Whitfield, Ranking Member Rush and members of the committee. It is an honor to be here before you today.

My name is Seyed Sadredin and I am the executive director and air pollution control officer for the San Joaquin Valley Air Pollution Control District.

With me today I have a number of local elected officials that serve on the governing board of the air district—Council Member Baines from the city of Fresno, Chairman of the Board Supervisor Worthley from Tulare County, and Supervisor Elliott from San Joaquin County.

They serve on the District Governing Board and deal with a lot of the issues that we are about to talk about today.

The area of our jurisdiction covers a 25,000 square mile region in the Central California, the beautiful area that is a big source of food throughout the Nation and throughout the world.

We are the largest air district in the State of California, and today I am here as a public health official as a representative of an agency that is charged with protecting public health to urge a strong bipartisan support for H.R. 4775. I think it is good for air quality, and it also streamlines the act.

H.R. 4775, in my opinion, provides for much needed streamlining of the implementation of the Clean Air Act. It does not roll back anything that is already in the Clean Air Act in the form of protections for public health, safeguarding public health and it does nothing to roll back any of the progress that has been made and it will not impede or slow down our progress as we move forward to reduce air pollution and improve public health.

I want to congratulate you and express my gratitude to you, to your committee, to the sponsors of the bill for taking reasonable action to provide much-needed and long overdue congressional guidance with respect to the implementation phase of the Clean Air Act.

As you know, it has been more than 25 years since the act was last amended by the Congress. To date, as many have said, the act has served us well and we have made significant progress in reducing air pollution and improving quality of life all across the Nation.

We have reached a point, however, in my opinion and many others in our region that have had decades of experience implementing the act, that we are reaching a point of diminishing return and many of the well-intentioned provisions in the act are leading to unintended consequences that are costly.

In many cases, they are actually adverse to public health. I don't think anyone here believes that Congress meant to put something in the act that actually is detrimental to public health, and there are a number of provisions in the act now that if you fully implement them the way the courts have read them, the way EPA sees

them, they are actually detrimental to public health and finally, consequences that set regions like ours up for failure with potentially devastating economic sanctions.

And these consequences are going to be mostly felt in many of our environmental justice communities with a great deal of poverty and a lot of other disadvantages that they face already.

I believe good governance and common sense dictates that after 25 years we reexamine our policies, and I am hoping that our decades of experience in our region can be helpful as your committee, as the Congress moves forward to chart the course for our future.

In our region, we have imposed the toughest air regulations on all businesses and all agricultural activities.

We have imposed the toughest regulations on cars, trucks, consumer products. We have imposed even tough regulations on what people can do inside their homes, as you mentioned, Mr. Chairman.

We have left no stone unturned in reducing emissions from all sectors of our economy and from every source of air pollution in our region.

We have reduced air pollution by over 80 percent. We have reduced population exposure to ozone by over 90 percent. Unfortunately, at this point, despite all that progress we are nowhere near meeting the latest standards.

If you could just take a quick look at Figure 2 that I provided in my written testimony it basically breaks down the sources of air pollution from various sectors.

Today, if we eliminate all businesses in San Joaquin Valley, small and large, we will not come anywhere near meeting the standard. If we eliminate all agriculture—and I have to tell you, seven of the top ag producing counties in the Nation are in our region—if we eliminated all agriculture in San Joaquin Valley we will not come close to meeting the standards.

If we removed all passenger vehicles in our area—2.7 vehicles—if we removed all of them we will not meet the standard. If we removed all the trucks that travel up and down the valley we will not come anywhere near meeting the standard.

I don't think this is what the Congress envisioned when they passed the act when it was last amended and I will take a few more seconds, Mr. Chairman, if I could, to finish.

I don't think the Congress envisioned a scenario like this where you reduce air pollution by 80 percent and you were at a point that you are not anywhere near meeting the standard.

I believe, as I have detailed in our written testimony, H.R. 4775 puts in place a number of streamlining measures without rolling back any of the existing provisions and without impeding our progress and it will go a long way and finally bring in some order into the implementation phase of the Clean Air Act.

[The prepared statement of Mr. Sadredin follows:]

**Testimony of Seyed Sadredin  
Executive Director/Air Pollution Control Officer  
San Joaquin Valley Air Pollution Control District**

**Before the U.S. House of Representatives  
Committee on Energy and Commerce  
Subcommittee on Energy and Power**

**Written Testimony on "H.R. 4775, Ozone Standards Implementation Act of 2016"  
April 14, 2016**

Chairman Whitfield, Ranking Member Rush, and Members of the Committee, my name is Seyed Sadredin and I currently serve as the Executive Director/Air Pollution Control Officer of the San Joaquin Valley Air Pollution Control District. It is an honor and a pleasure to be here before you today to provide testimony and answer your questions. For nearly 35 years, I have served as a public health official charged with implementing air quality management programs in the bountiful and beautiful central valley of California.

I am here today to express my gratitude to your committee for taking thoughtful and reasonable action to enact common sense changes to the Clean Air Act. As a public health official and on behalf of all of the elected officials serving on the Governing Board of the San Joaquin Valley Air Pollution Control District, I urge strong and bipartisan support for H.R. 4775, Ozone Standards Implementation Act of 2016.

The *Clean Air Act Modernization Proposal* developed by the San Joaquin Valley Air Pollution Control District presents a five prong legislative solution that preserves the federal government's ability to routinely reevaluate and set health protective air quality goals based on sound science while avoiding current duplicative requirements and confusion (see Attachment). The proposed changes would also require strategies that lead to the most expeditious air quality improvement while considering technological and economic feasibility. We are pleased that many of our recommendations for modernizing the Clean Air Act are included in H.R. 4775, which we feel will update the Clean Air Act in a manner that reflects today's realities without any roll back of health-protective measures. More specifically, the San Joaquin Valley Air Pollution Control District supports the H.R. 4775 provisions that accomplish the following:

***Streamlines the Transition Between Standards:*** Since the 1970's, EPA has established numerous ambient air quality standards for individual pollutants. We have now reached a point where various regions throughout the nation are subject to multiple iterations of standards for a single pollutant. Currently, we are subject to four standards for ozone and four standards for PM2.5. Each of these standards requires a separate attainment plan which leads to multiple overlapping requirements and deadlines. For instance, in the San Joaquin Valley we are on the verge of having to promulgate a total

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of 10 active State Implementation Plans. This results in a great deal of confusion, costly bureaucracy, and duplicative regulations, all without corresponding public health benefits.

H.R. 4775 helps reduce the current chaotic nature of the transition between standards by requiring that EPA issue guidance on implementing new standards in a timely manner and extending the timeframe to review new standards from 5 years to 10 years. In the San Joaquin Valley, these provisions will reduce the current chaotic nature of the transition between standards. The streamlining remedies provided in H.R. 4775 will not delay aggressive efforts to reduce air pollution and improve public health in the San Joaquin Valley.

***Reinforces Economic Feasibility Considerations in Implementing Clean Air Act Mandates:*** Although the Clean Air Act is currently silent on considering economic feasibility in setting new air quality standards, EPA and others have argued that economic feasibility is incorporated in the implementation phase. Our experience, however, shows that meaningful consideration of economic feasibility is nearly impossible when faced with formula-based milestones and deadlines in the Clean Air Act that are set without considering technological achievability and economic feasibility.

Meeting the new standards that approach background concentrations call for transformative measures that require time to develop and implement. These transformative measures require new technologies that in many cases are not yet commercially available or even conceived. The formula-based deadlines and milestones that were prescribed in the Act 25 years ago now lead to mandates that are impossible to meet. H.R. 4775 will amend the Clean Air Act to require control measures that lead to the most expeditious attainment of health based standards while taking into account technological achievability and economic feasibility.

***Eliminates a Contingency Mandate that is Detrimental to Expeditious Attainment of Standards and Public Health Improvement:*** A classic case of the well-intentioned provisions that were included in the Clean Air Act over 25 years ago that are now leading to unintended consequences is the requirement for contingency measures in areas classified as "extreme" nonattainment. By definition, a region is classified as extreme nonattainment if, despite implementing all available control measures, reductions achieved are not enough to meet the standard. The only way a region can meet the contingency requirements is to hold back on implementing clean air measures and save them for later as a contingency. Of course, this would result in delays in cleaning the air and reducing air pollution. As currently written, the requirements in the Clean Air Act that require extreme areas to include all available measures to ensure expeditious attainment and the requirement for holding back measures as contingency are contradictory. H.R. 4775 eliminates the mandate for holding back measures as contingencies in areas classified as extreme nonattainment.

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***Allows for Consideration of Drought and Extraordinary Stagnation as Exceptional Events:*** Currently, the Clean Air Act does not allow stagnation or lack of precipitation to qualify as exceptional events. The west coast recently experienced drought conditions that had not been experienced since the late 1800s with some locations breaking records over 100 years old. The extended stagnation associated with the weather emergency overwhelmed the state's control strategy and will drive particulate matter planning for years to come. Until the exceptional weather conditions experienced due to the recent drought, the San Joaquin Valley Air Pollution Control District was on track to attain the 1997 annual PM2.5 standard before the federally mandated deadline of December 2014. The District's 2008 PM2.5 Plan satisfied all federal implementation requirements for the 1997 PM2.5 standard at the time of adoption and demonstrated attainment based on projected 2012-2014 PM2.5 levels. All emission reduction commitments under that plan have been fulfilled. Due to the extreme drought, stagnation, strong inversions, and historically dry conditions experienced over the winter of 2013/14, the Valley could not show attainment even if the Valley eliminated all sources of air pollution and had zero emissions of PM2.5 released into the atmosphere for the following year (2014).

In excluding stagnation as exceptional events, we believe that the intent of the Congress at the time was to only prohibit consideration of regularly occurring stagnant weather conditions which could vary on a day-to-day basis. Extraordinary circumstances that arise from 100-year droughts should qualify as exceptional events. H.R. 4775 allows consideration of extraordinary stagnation as a potential exceptional event if all the necessary findings and documentation as prescribed by EPA are prepared and submitted.

In addressing challenges related to implementing the new national ambient air quality standard for ozone recently promulgated by the United States Environmental Protection Agency (U.S. EPA), it is important to hear from regions throughout the nation that have worked over the last four decades to comply with the federal mandates under the Clean Air Act and attain the previous standards. In my opinion, a closer examination of those efforts can provide valuable lessons as we continue our work to chart an effective course for expeditious attainment of the health-based ambient air quality standards and the resulting benefit in improved public health.

Since its adoption, the Clean Air Act has led to significant improvements in air quality and public health benefits throughout the nation. With an investment of over \$40 billion, air pollution from San Joaquin Valley businesses has been reduced by over 80%. The pollution released by industrial facilities, agricultural operations, and cars and trucks is at a historical low, for levels of all pollutants. San Joaquin Valley residents' exposure to high smog levels has been reduced by over 90%.

After more than 25 years since the last amendments to the Clean Air Act in 1990, our experience shows that many well-intentioned provisions are leading to unintended

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adverse consequences. Without action to address these issues, the Clean Air Act sets many regions up for failure and economic devastation as the new federal standards encroach on background pollution concentrations. The antiquated provisions of the Clean Air Act are now leading to confusion, and lack of updated congressional directive has rendered courts and non-elected government bureaucrats as policy makers. We urge the Congress and the President to take bipartisan action to modernize the Act.

The new ozone and PM2.5 standards established by EPA approach the background pollution concentrations in many regions throughout the nation including the San Joaquin Valley. As currently written, the Act does not provide for consideration of technological achievability and economic feasibility in establishing deadlines for attaining the associated federal mandates. When enacting the last amendment to the Act over 25 years ago, Congress did not contemplate the reality that we face today. It is hard to imagine that the Congress, with a nearly unanimous vote to pass the Clean Air Act, envisioned a scenario where after reducing pollution by over 80% and imposing the toughest air regulations on stationary and mobile sources of emissions, a region is left with an enormous gap in meeting the new standard – a gap so large that it cannot be filled by the formula-based deadlines prescribed in the Act. Through decades of implementing increasingly stringent air quality regulations, even the smallest sources have not been immune from regulation and the costs associated with implementation of the Clean Air Act. During most of the winter, Valley residents are banned from using their fireplaces, and other regulations impose limits on consumer products and the time that lids can be off of paint cans, just to name a few examples.

The reality that we face today sets up regions such as the San Joaquin Valley for failure leading to costly sanctions and severe economic hardship. We face these dire consequences despite having already done all of the following:

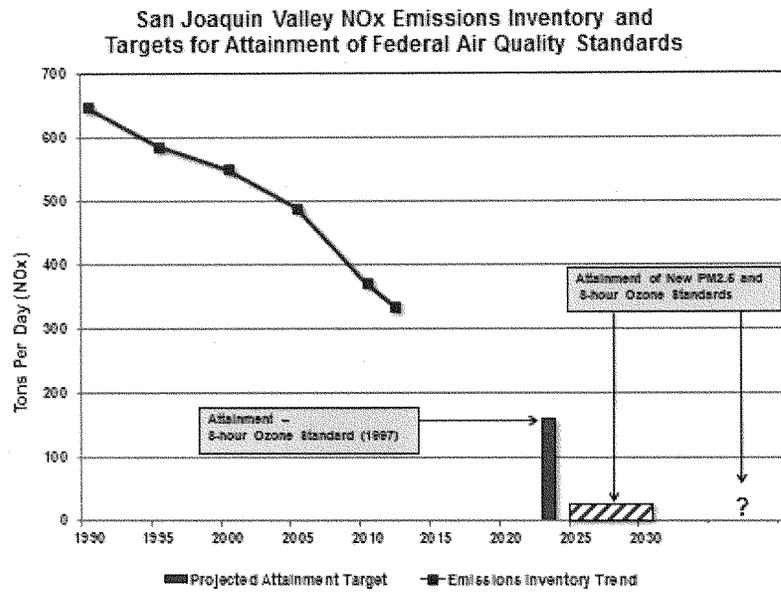
- ✓ Toughest air regulations on stationary sources (600 rules since 1992)
- ✓ Toughest air regulations on farms and dairies
- ✓ Tough air regulations on what residents can do within the confines of their homes (residential water heaters, residential HVAC furnaces, charbroilers, ban on fireplace installation and use)
- ✓ \$40 billion spent by businesses on clean air
- ✓ Over \$1 billion dollars of public/private investment on incentive-based measures reducing over 100,000 tons of emissions
- ✓ Toughest regulations on cars and trucks
- ✓ Toughest regulations on consumer products
- ✓ Reduced emissions by 80% - but need another 90% reduction in emissions to meet the new standard

The background ozone concentration in the San Joaquin Valley is estimated to be greater than 50 ppb with some estimates as high as 60 ppb. The new ozone standard set at 70 ppb leaves little or no room for man-made local emissions. Additionally, the latest federal PM2.5 standards of 35  $\mu\text{g}/\text{m}^3$  (24-hour) and 12  $\mu\text{g}/\text{m}^3$  (annual) also

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approach natural background levels. Meeting these new standards requires a virtual ban on fossil-fuel combustion or emissions (see Figures 1 and 2).

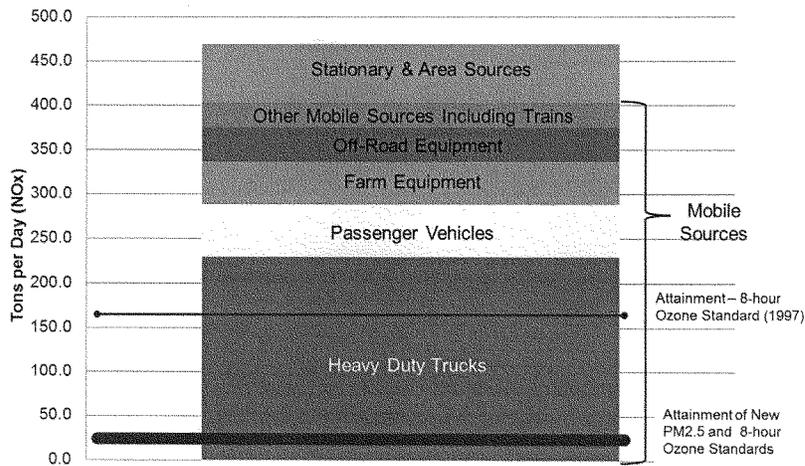
**Figure 1: San Joaquin Valley NOx Emissions and Targets for Attainment of Federal 8-hour Ozone Standards**



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**Figure 2: San Joaquin Valley NOx Emissions by Source Category and Targets for Attainment of New Federal Ozone and PM2.5 Standards**

## Meeting Federal Air Quality Standards



Eliminating fossil fuel emissions from all industrial, agricultural, and transportation activities is a daunting task. Nonetheless in our region, we are committed to develop and deploy the needed transformative measures as expeditiously as possible. We support the well-intentioned concepts in the Clean Air Act that call for routine review of health-based air quality standards, clean air objectives that are technology-forcing, and clean-air deadlines that ensure expeditious clean-up and timely action. However, success requires fine-tuning of the federal Clean Air Act to ensure rapid progress towards meeting the standards without unduly penalizing regions with mature air quality programs and disadvantaged communities.

I thank you for considering this important legislation. We support and want to retain the core elements in the Act that serve to protect public health through the establishment and pursuit of science-based ambient air quality standards. The modifications proposed in H.R. 4775 will provide the administrative relief that is necessary without delaying our ongoing efforts to clean the air as expeditiously as possible and improve public health.

*Attachment: Clean Air Act Modernization Proposal (8 pages)*

## Federal Clean Air Act Modernization Proposal

Since its adoption, the Clean Air Act has led to significant improvements in air quality and public health benefits throughout the nation. In many areas of the nation, air pollution levels have been reduced to historical lows. We support the well-intentioned concepts in the Clean Air Act that call for routine review of health-based air quality standards, clean air objectives that are technology-forcing, and clean-air deadlines that ensure expeditious clean-up and timely action.

The Clean Air Act was last amended in 1990. Over the last 25 years, local, state, and federal agencies and affected stakeholders have learned important lessons from implementing the law and it is clear now that a number of well-intentioned provisions in the Act are leading to unintended consequences. This experience can inform efforts to enhance the Clean Air Act with much needed modernization. The following proposal is designed to provide specific language aimed at improving the Act's effectiveness and efficiency.

**1. PROBLEM:** Since the 1970's, EPA has established numerous ambient air quality standards for individual pollutants. We have now reached a point where various regions throughout the nation are subject to multiple iterations of standards for a single pollutant. For instance, there are currently 4 pending standards for ozone and 4 pending standards for PM2.5. Each of these standards requires a separate attainment plan which leads to multiple overlapping requirements and deadlines. This in turn results in a great deal of confusion, costly bureaucracy, and duplicative regulations, all without corresponding public health benefits.

**SOLUTION:** When a new standard is published, the old standard for that pollutant should be subsumed. States should be allowed to develop a single attainment plan that harmonizes increments of progress and other milestones without allowing for any rollback or backsliding.

**PROPOSED AMENDMENTS:** To avoid duplicative requirements and confusion, the RFP milestones must be synchronized when a new standard is published, for any region with a pending implementation plan for an older version of the standard for that pollutant. Towards that end, the first RFP milestone for the new standard should be aligned with the next required milestone for the old standard. The reductions required for aligned milestones shall be either 3 percent of the baseline for the new standard or the RFP emission reduction targets established under the existing plan, whichever is greater.

For ozone, add new subsection 182(k) as follows:

**(k) RFP Milestone Alignment for Areas with Pending Attainment Plans**

*Notwithstanding any other provisions of this section, the RFP milestones and emission reduction targets in areas that have submitted a plan to the Administrator for the older version of a standard for the same pollutant being addressed by a new standard shall be set as follows:*

*The first RFP milestone for the new standard shall be set at the next RFP milestone date for the existing standard addressed in the current plan. Subsequent milestones will be every three years from the first milestone until attainment. The reductions required at the aligned milestones that address more than one standard shall be either 3 percent of the baseline for the new standard or the RFP emission reduction targets established under the current plan for the older standard, whichever is greater.*

For particulates, add new subsection 189(c)(4) as follows:

**(4) RFP Milestone Alignment for Areas with Pending Attainment Plans**

*Notwithstanding any other provisions of this section, the RFP milestones and emission reduction targets in areas that have submitted a plan to the Administrator for the older version of a standard for the same pollutant being addressed by a new standard shall be set as follows:*

*The first RFP milestone for the new standard shall be set at the next RFP milestone date for the existing standard addressed in the current plan. Subsequent milestones will be every three years from the first milestone until attainment. The reductions required at the aligned milestones that address more than one standard shall be either those required for the new standard or the RFP emission reduction targets established under the current plan for the older standard, whichever is greater.*

**2. PROBLEM:** Mobile and stationary sources throughout the nation have now been subject to multiple generations of technology forcing regulations that have achieved significant air quality benefits. Meeting the new standards that approach background concentrations call for transformative measures that require time to develop and implement. These transformative measures require new technologies that in many cases are not yet commercially available or even conceived. The formula-based deadlines and milestones that were prescribed in the Act 25 years ago now lead to mandates that are impossible to meet.

**SOLUTION:** In establishing deadlines and milestones, the Act should be amended to require control measures that lead to the most expeditious attainment of health based standards while taking into account technological and economic feasibility. These deadlines and milestones should also consider background pollution concentrations and

the region's geography, topography, and meteorology that affect pollutant formation and dispersion.

**PROPOSED AMENDMENTS:**

In relation to RFP targets for ozone, amend subsection 182(b)(1)(A)(ii)(III) as follows:

*the plan reflecting a lesser percentage than 15 percent includes all measures that can feasibly be implemented in the area, in light of technological achievability and economic feasibility.*

In relation to RFP targets for ozone, amend subsection 182(c)(2)(B)(ii) as follows:

*an amount less than 3 percent of such baseline emissions each year, if the State demonstrates to the satisfaction of the Administrator that the plan reflecting such lesser amount includes all measures that can feasibly be implemented in the area, in light of technological achievability and economic feasibility.*

In relation to RFP targets for ozone, amend subsection 182(e) as follows:

*Each State in which all or part of an Extreme Area is located shall, with respect to the Extreme Area, make the submissions described under subsection (d) of this section (relating to Severe Areas), and shall also submit the revisions to the applicable implementation plan (including the plan items) described under this subsection. ~~The provisions of clause (ii) of subsection (c)(2)(B) of this section (relating to reductions of less than 3 percent), the provisions of paragraphs [6] (6), (7) and (8) of subsection (c) of this section (relating to de minimus [7] rule and modification of sources), and the provisions of clause (ii) of subsection (b)(1)(A) of this section (relating to reductions of less than 15 percent)~~ shall not apply in the case of an Extreme Area. For any Extreme Area, the terms "major source" and "major stationary source" includes [8] (in addition to the sources described in section 7602 of this title) any stationary source or group of sources located within a contiguous area and under common control that emits, or has the potential to emit, at least 10 tons per year of volatile organic compounds.*

In relation to RFP targets for particulates, amend subsection 189(c)(1) as follows:

*Plan revisions demonstrating attainment submitted to the Administrator for approval under this subpart shall contain quantitative milestones which are to be achieved every 3 years until the area is redesignated attainment and which demonstrate reasonable further progress, as defined in section 7501(1) of this title, and which take into account technological achievability and economic feasibility, toward attainment by the applicable date.*

In relation to the attainment deadlines for ozone:

Amend section 181(a) by adding the following new subsection 181(a)(6):

*Notwithstanding table 1, if an area is already classified as extreme for an existing standard, then the area shall be classified as extreme at the time of designation for the new standard.*

Amend section 181(a) by amending table 1 as follows:

TABLE 1

<b>Area class</b>	<b>Design value*</b>	<b>Primary standard attainment date**</b>
Marginal	0.121 up to 0.138	3 years after November 15, 1990
Moderate	0.138 up to 0.160	6 years after November 15, 1990
Serious	0.160 up to 0.180	9 years after November 15, 1990
Severe	0.180 up to 0.280	15 years after November 15, 1990
Extreme	0.280 and above	20 years after November 15, 1990 <u>As prescribed in section 181(a)(7)</u>

Amend section 181(a) by adding the following new subsection 181(a)(7):

*Areas shall attain the standard as expeditiously as possible with the most effective measures that take into account technological achievability and economic feasibility. The area shall quantify reductions needed to achieve attainment consistent with section 182(e)(5). Every 5 years after the plan is approved by the Administrator, the area shall demonstrate that all measures that are technologically achievable and economically feasible are implemented or will be included in the plan to ensure expeditious implementation. The plan shall also include measures for advancing the development and deployment of new technologies.*

Amend section 182(e)(5) as follows:

*(5) New technologies*

*The Administrator may, in accordance with section 7410 of this title, approve provisions of an implementation plan for an Extreme Area which anticipate development of new control techniques or improvement of existing control technologies, and an attainment demonstration based on such provisions, ~~if the State demonstrates to the satisfaction of the Administrator that—~~*

*~~(A) such provisions are not necessary to achieve the incremental emission reductions required during the first 10 years after November 15, 1990; and~~*

~~(B) the State has submitted enforceable commitments to develop and adopt contingency measures to be implemented as set forth herein if the anticipated technologies do not achieve planned reductions.~~

~~Such contingency measures shall be submitted to the Administrator no later than 3 years before proposed implementation of the plan provisions and approved or disapproved by the Administrator in accordance with section 7410 of this title. The contingency measures shall be adequate to produce emission reductions sufficient, in conjunction with other approved plan provisions, to achieve the periodic emission reductions required by subsection (b)(1) or (c)(2) of this section and attainment by the applicable dates. If the Administrator determines that an Extreme Area has failed to achieve an emission reduction requirement set forth in subsection (b)(1) or (c)(2) of this section, and that such failure is due in whole or part to an inability to fully implement provisions approved pursuant to this subsection, the Administrator shall require the State to implement the contingency measures to the extent necessary to assure compliance with subsections (b)(1) and (c)(2) of this section.~~

~~Any reference to the term "attainment date" in subsection (b), (c), or (d) of this section which is incorporated by reference into this subsection, shall refer to the attainment date for Extreme Areas.~~

**3. PROBLEM:** The Act as it relates to the demonstration of Reasonable Further Progress or Rate of Progress treats all precursors the same, regardless of their potency in harming public health or achieving attainment. Driven by a rapidly expanding body of scientific research, there is now a growing recognition within the scientific community that from an exposure perspective, the National Ambient Air Quality Standards metrics for progress are a necessary but increasingly insufficient measure of total public health risk associated with air pollutants. In particular, control strategies for sources of PM<sub>2.5</sub> and ozone do not necessarily account for qualitative differences in the nature of their emissions. For PM<sub>2.5</sub>, toxicity has been shown to vary depending on particle size, chemical species, and surface area. In the case of ozone, differences in the relative potency of ozone precursors, VOCs in particular, is not captured by a strict, mass-based approach to precursor controls.

**SOLUTION:** The Act should be amended to allow states to focus efforts on meeting new standards in the most expeditious fashion through deployment of scarce resources in a manner that provides the utmost benefit to public health. Towards that end, we recommend a more strategic approach in which public health serves as the key factor in prioritizing control measures, regulated pollutants, and sources of emissions. In establishing Reasonable Further Progress or Rate of Progress, the Act should give a greater weight to pollutants that have greater impact on achieving attainment and improving public health. Additionally, in evaluating Reasonably Available Control Technology (RACT), measures that reduce precursors with more impact on ozone formation should be given higher scores than measures that may reduce greater amounts of less potent ozone precursors.

For example, VOC compounds vary significantly in their contribution to the formation of ozone in the San Joaquin Valley. Similarly, NOx emissions reductions have been demonstrated to be approximately 20 times more effective than VOC emissions reductions in reducing the formation of ozone in the San Joaquin Valley. We therefore recommend that in demonstrating Reasonable Further Progress, EPA allow for an alternative approach that can demonstrate equivalent reductions in ozone concentrations as compared to the straight requirement of 3% per year reduction of VOCs and/or NOx.

**PROPOSED AMENDMENTS:**

Amend Section 182:

*(C) NOx control*

*The revision may contain, in lieu of the demonstration required under subparagraph (B), a demonstration to the satisfaction of the Administrator that the applicable implementation plan, as revised, provides for reductions of emissions of VOC's and oxides of nitrogen (calculated according to the creditability provisions of subsection (b)(1)(C) and (D) of this section), that would result in a reduction in ozone concentrations at least equivalent to that which would result from the amount of VOC emission reductions required under subparagraph (B). Within 1 year after November 15, 1990, the Administrator shall issue guidance concerning the conditions under which NOx control may be substituted for VOC control or may be combined with VOC control in order to maximize the reduction in ozone air pollution. In accord with such guidance, a lesser percentage of VOCs may be accepted as an adequate demonstration for purposes of this subsection. The Administrator shall allow the use of NOx reductions in lieu of VOC reductions. The credit for NOx reductions shall be weighted in proportion to their effectiveness in reducing ozone concentrations in relation to the effectiveness of VOC reductions as demonstrated by the attainment modeling submitted with the plan.*

**4. PROBLEM:** Requiring contingency measures in extreme nonattainment areas is irrational and unnecessary. The Act requires all attainment plans to include contingency measures, defined as extra control measures that go into effect without further regulatory action, if planned emissions controls fail to reach the goals or targets specified in the attainment plan. While requiring backup measures was a well-intentioned provision, it does not make sense in areas that have been classified as "extreme" non-attainment for ozone. These areas, by definition, have already implemented all available and foreseeable measures and still need a "black box" of future measures to define and employ. The term "black box" refers to reductions that are needed to attain the standard, but technology to achieve such reductions does not yet exist. No measures are held in reserve in areas that are classified as "extreme" non-attainment for ozone. With no stones left unturned in such plans, requiring contingency measures in such areas makes no sense.

**SOLUTION:** We recommend that the Act be amended to eliminate the requirement for contingency measures in areas classified as “extreme” non-attainment by EPA.

**PROPOSED AMENDMENTS:**

Add to 172(c)(9) as follows:

**(9) Contingency measures**

*Such plan shall provide for the implementation of specific measures to be undertaken if the area fails to make reasonable further progress, or to attain the national primary ambient air quality standard by the attainment date applicable under this part. Such measures shall be included in the plan revision as contingency measures to take effect in any such case without further action by the State or the Administrator.*

*Notwithstanding this or other sections, contingency measures shall not be required for extreme ozone nonattainment areas.*

**5. PROBLEM:** The Act requirements for severe and extreme ozone nonattainment areas to address vehicle-related emissions growth must be clarified. Section 182(d)(1)(A) requires such areas to develop enforceable transportation control measures (TCMs) and transportation strategies “to offset any growth in emissions from growth in vehicle miles traveled ... and to attain reduction in motor vehicle emissions as necessary.” An area’s vehicle miles traveled (VMT) may increase due to increases in population (i.e., more drivers), people driving further (i.e., sprawl), or increases in pass-through traffic (i.e., goods movement).

Historically, EPA’s section 182(d)(1)(A) approach has allowed the use of vehicle turnover, tailpipe control standards, and the use of alternative fuels to offset the expected increase in VMT. This has allowed for the actual emissions reductions occurring from motor vehicles to be considered in meeting the applicable requirements. A recent Ninth Circuit Court decision, however, has called EPA’s current approach for demonstrating the offsetting of vehicle mile-related emissions growth into question, and has forced EPA to reevaluate its approach. Any change in approach that would require regions to offset vehicle growth regardless of population growth, and without recognition of emission reduction measures such as vehicle turnover and tailpipe control standards, would have a significant impact on many regions’ ability to develop an approvable attainment strategy and, under a strict interpretation, would actually render attainment impossible. Many TCMs and transportation strategies have already been implemented in nonattainment areas, and remaining opportunities are scarce and extremely expensive to implement, with relatively small amounts of emissions reductions available. A less inclusive section 182(d)(1)(A) approach would effectively penalize nonattainment areas for having population growth, and would not give credit to the significant emissions reductions being achieved from motor vehicles.

To illustrate this issue, such an interpretation applied to the District’s 1997 8-hour ozone standard attainment plan would require the elimination of 5.1 million vehicles, while the vehicle population of the Valley is projected to be only 2.6 million vehicles in 2023.

EPA recently established new guidance to address this issue that provides a potential path for reasonably addressing this CAA requirement. However, the path provided under this guidance will undoubtedly be challenged in court as it is utilized by regions like the San Joaquin Valley in the coming years. To provide certainty moving forward, the CAA should be amended to clearly include the methodology for reasonably satisfying this requirement.

**SOLUTION:** The Act should be amended to allow states to take credit for all transportation control measures and strategies and not punish areas that have implemented transportation control measures and strategies that have achieved early reductions in emissions.

**PROPOSED AMENDMENTS:**

**(1) Vehicle miles traveled**

*(A) Within 2 years after November 15, 1990, the State shall submit a revision that identifies and adopts specific enforceable transportation control strategies and transportation control measures to offset any growth in emissions from growth in vehicle miles traveled or numbers of vehicle trips in such area and to attain reduction in motor vehicle emissions as necessary, in combination with other emission reduction requirements of this subpart, to comply with the requirements of subsection [5] (b)(2)(B) and (c)(2)(B) of this section (pertaining to periodic emissions reduction requirements). The State shall consider measures specified in section 7408(f) of this title, and choose from among and implement such measures as necessary to demonstrate attainment with the national ambient air quality standards; in considering such measures, the State should ensure adequate access to downtown, other commercial, and residential areas and should avoid measures that increase or relocate emissions and congestion rather than reduce them. As new ozone standards are established, for areas that have implemented early transportation control strategies and transportation control measures, the baseline for demonstrating compliance under this subsection shall remain fixed at 1990 independent of the baseline date for the new plan.*

Mr. WHITFIELD. Thank you very much.

And our next witness is Mr. Ali Mirzakhali, who is Director of the Division of Air Quality for the Delaware Department of Natural Resources & Environmental Control.

Thank you very much for being with us and you're recognized for 5 minutes.

#### STATEMENT OF ALI MIRZAKHALILI

Mr. MIRZAKHALILI. Thank you very much. Chairman Whitfield, Ranking Member Rush, and members of the subcommittee, my name is Ali Mirzakhali and I serve as Delaware's Director of Air Quality. Thank you for the opportunity to testify on H.R. 4775, the Ozone Standards Implementation Act of 2016.

Since the Clean Air Act was last amended over 25 years ago, it has prevented literally hundreds of thousands of premature deaths as well as averted millions of incidents of morbidity including, for example, heart disease, chronic bronchitis and asthma.

The health benefits associated with this landmark legislation have far outweighed the costs of reducing pollution by more than 30 to 1.

Moreover, we have acquired these health benefits over the same period as our Nation's gross domestic product has grown. It is fair to say that the Clean Air Act has not only been one of our Nation's most effective environmental statutes, it will likely go down in history as one of the most effective domestic laws ever passed.

Accordingly, it is imperative that consideration of any significant amendment to the act be deliberate and thoughtful and ensure that fundamental tenets of the legislation, which is protection of public health and welfare, remain intact.

Unfortunately, after reviewing H.R. 4775, Delaware has concluded that it cannot support this bill. I believe the bill substantially weakens the existing Clean Air Act by delaying important deadlines and considerably altering the process of setting health-based national ambient air quality standards.

One of my primary concerns with H.R. 4775 is Section 3(b), which would revise the criteria in the act for establishing health-based NAAQS by allowing the consideration of technological feasibility in determining the level of the standard.

I believe this provision could unravel the entire framework of the Clean Air Act. Congress and the courts, including the United States Supreme Court, have been very clear over the past several decades on the issue of setting the NAAQS, requiring the EPA to set these standards solely on the basis of health so that communities will know whether or not the air they are breathing is safe.

Costs and other factors such as technological feasibility have never been allowed to be considered in these critically important decisions. Once the health-based standards are set, the act appropriately allows cost and other factors including technological feasibilities to be considered as States develop implementation strategies to meet the standard.

By removing this important firewall, separating the setting of the standards from their implementation, the public will never know what level of air quality is truly safe.

Imagine an oncologist discovering through the best medical tests that her patient has cancer, but because the treatment is not feasible she tells the patient he simply has a bad case of flu.

The diagnosis is not dependent on the feasibility of the treatment. I am also very troubled by Section 2 of the bill, which would delay deadlines for implementation of 2015 ozone standard by up to 8 years.

Arbitrarily extending the compliance deadlines would leave the old, outdated and unprotective standard in effect, resulting each year in hundreds of premature deaths on top of many thousands of morbidity and related impacts.

To make matters worse, Section 3(a) would permanently lengthen the NAAQS review cycle from 5 to 10 years, bar EPA from completing any review of those standards before October 26 of 2025.

I am concerned with Section 3(d) of H.R. 4775, which appears to reward the regulative community with no consideration of health of our citizens for EPA delays in publishing important guidelines.

The bill would allow industries to meet preconstruction permit requirements based upon an outdated standard if EPA were unable or unwilling to publish its rules and guidance at the time—at the same time it promulgates its health-based standard.

One way for Congress to overcome these delays is to ensure that EPA has sufficient resources to do its job. The provisions of Section 3(f) and (g) of the bill are also troubling because they would weaken the progress requirement of the Clean Air Act by allowing States under the guise of economic feasibility and technological achievability to circumvent these important requirements.

It will seriously interfere with Delaware's and other downwind States' ability to provide our citizens with clean air.

In Delaware, we are meeting all of our deadlines and taking our responsibilities seriously. We fully expect the same from others.

In conclusion, the proposed legislation would undercut requirements of the Clean Air Act that are crucial to obtaining healthy air quality as expeditiously as practicable.

Further, the proposed amendments would wholly change the thrust of the Clean Air Act from expeditious protection of public health to one of delay.

Delaware supports efficient and expeditious implementation of NAAQS. H.R. 4775 bill, however, would weaken and delay public health protection. My State, therefore, must oppose this bill.

Thank you for the opportunity to testify and I am happy to answer any questions.

[The prepared statement of Mr. Mirzakhali follows:]



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TESTIMONY OF ALI MIRZAKHALILI  
 ON "H.R. 4775, OZONE STANDARDS IMPLEMENTATION ACT OF 2016"  
 BEFORE THE  
 UNITED STATES HOUSE OF REPRESENTATIVES  
 ENERGY AND COMMERCE SUBCOMMITTEE ON ENERGY AND POWER  
 APRIL 14, 2016

Chairman Whitfield, Ranking Member Rush, and Members of the Subcommittee, my name is Ali Mirzakhali and I serve as Delaware's Director of Air Quality. I also serve as Chairman of the Ozone Transport Commission's (OTC) Stationary and Area Sources Committee and Co-Chair of National Association of Clean Air Agencies' (NACAA) Permitting and New Source Review Committee. In addition, I am the immediate past Chair of the Mid-Atlantic Regional Air Management Association (MARAMA). Thank you for the opportunity to testify on H.R. 4775, the Ozone Standards Implementation Act of 2016.

Since the Clean Air Act was last amended over 25 years ago, it has prevented literally hundreds of thousands of premature deaths, as well as averted millions of incidences of morbidity, including, for example, heart disease, chronic bronchitis and asthma. The health benefits associated with this landmark legislation have far outweighed the costs of reducing

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pollution by more than 30 to 1. Moreover, we have accrued these health benefits over the same period as our nation's gross domestic product has grown. It is fair to say that the Clean Air Act has not only been one of our nation's most effective environmental statutes, it will likely go down in history as one of the most effective domestic laws ever passed.

Accordingly, it is imperative that consideration of any significant amendments to the Act be deliberate and thoughtful, and ensure that the fundamental tenets of the legislation—protection of public health and welfare—remain intact. Unfortunately, after reviewing H.R. 4775, Delaware has concluded that it cannot support this bill. I believe the bill substantially weakens the existing Clean Air Act by delaying important deadlines and considerably altering the process for setting health-based National Ambient Air Quality Standards (NAAQS). My perspective is based on over three decades of struggle to bring healthful air to Delaware citizens, notwithstanding the fact that our state is downwind of most others and subject to significant air pollution transport. I would like to spend the next few minutes sharing my perspective with you.

One of my primary concerns with H.R. 4775 is Section 3(b), which would revise the criteria in the Act for establishing health-based NAAQS by allowing the consideration of “technological feasibility” in determining the level of the standards. I believe this provision could unravel the entire framework of the Clean Air Act.

Congress and the courts, including the United States Supreme Court, have been very clear over the past several decades on the issue of setting the NAAQS. Under the existing Clean Air Act, EPA is required to set NAAQS solely on the basis of health so that communities will know whether or not the air they are breathing is safe. Costs and other factors, such as

“technological feasibility,” have never been allowed to be considered in these critically important decisions. Once the health-based standards are set, the Act appropriately allows costs and other factors, including technological feasibility, to be considered as states develop implementation strategies to meet these standards. By removing this important “firewall” separating the setting of the standards from their implementation, the public will never know what level of air quality is truly safe. Imagine an oncologist discovering, through the best medical tests, that her patient has cancer but, because the treatment is not “feasible,” she tells the patient he simply has a bad case of the flu. The diagnosis is not dependent on the feasibility of the treatment.

I am also very troubled by Section 2 of the bill, which would delay deadlines for implementation of the 2015 ozone standard by up to eight years. By arbitrarily extending the compliance deadlines, it would leave the old, outdated ozone standard in effect. This action would not only provide citizens with a false sense of “health” security, but also unnecessarily subjects them to serious health and welfare problems, including premature mortality. According to EPA, every year of delay in meeting the 2015 ozone standards can cause hundreds of premature deaths, on top of many thousands of morbidity and related impacts. Under this provision, my seven-year-old son would not be afforded the protection of the revised ozone standard until he is about to enter college. This is just wrong. To make matters worse, Section 3(a) would permanently lengthen the NAAQS review cycle from five years to 10 and, in fact, bar EPA from completing any review of the ozone standard before October 26, 2025.

I am also concerned with Section 3(d) of H.R. 4775, which appears to reward the regulated community—with no consideration for the health of our citizens—for EPA delays in publishing important guidelines. The bill would allow industries to meet preconstruction permit requirements based upon outdated standards if EPA were unable or unwilling to publish its rules and guidance at the same time it promulgated its health-based standards. While states have long urged EPA to expedite its process for issuing guidance to accompany new or revised health-based air quality standards, these delays have not significantly interfered with our ability to work with industry to comply with important permitting requirements. One way for Congress to overcome these delays is to ensure that EPA has sufficient resources to do its job. Additionally, the amnesty provided to sources that submit a “complete application” prior to the designation under Section 2(b)(1) is contrary to long-standing practices; moreover, the exemption is so open-ended that it appears permanent and thus subject to abuse.

The provisions in Sections 3(f) and (g) of the bill are also troubling because they would weaken the “progress” requirements of the Clean Air Act. By allowing states, under the guise of “economic feasibility” and “technological achievability,” to circumvent these important requirements, it will seriously interfere with Delaware’s and other downwind states’ ability to provide our citizens with clean air. Economic feasibility is already addressed under Section 172(c)(1) of the Clean Air Act under the definition of “reasonably available control technology.” In Delaware, we are meeting all of our deadlines and taking our responsibilities seriously. We fully expect the same from others.

Finally, the proposed amendments to Section 319(b)(1)(B) appear to be an attempt to allow rebranding of poor air quality by excluding data that may have been caused by inversions,

hot days or dry days. The implication is that air quality professionals only need to concern themselves with providing good air quality on good days.

In conclusion, the proposed legislation would undercut requirements of the Clean Air Act that are crucial to obtaining healthy air quality as expeditiously as practicable. Further, the proposed amendments would wholly change the thrust of the Clean Air Act from expeditious protection of public health to one of delay. Delaware supports efficient and expeditious implementation of National Ambient Air Quality Standards. H.R. 4775, however, would weaken and delay public health protection. My state, therefore, must oppose this bill. If Congress were to amend the Clean Air Act, I would urge you to instead consider amendments to directly address climate change, control legacy fleets and grandfathered sources, and strengthen the “good-neighbor” provisions dealing with air pollution transport.

Thank you for the opportunity to testify. I am happy to answer any of your questions.

Mr. WHITFIELD. Thank you very much.

And our next witness is Mr. Misael Cabrera, who is the Director of the Arizona Department of Environmental Quality, and you're recognized for 5 minutes.

#### STATEMENT OF MISAEEL CABRERA

Mr. CABRERA. Chairman Whitfield, Ranking Member Rush and members of the committee, my name is Misael Cabrera and I am the director of the Arizona Department of the Environmental Quality.

I greatly appreciate the opportunity to share testimony today. As the lead State challenging the 2015 ozone standard in the court, Arizona does not support 70 parts per billion as the appropriate ozone standard.

We believe that the new standard is simply not achievable in many areas of our State. Although the Clean Air Act has five mechanisms to bring nonattainment areas into compliance or provide relief, these mechanisms are inadequate for Arizona and likely other Western States.

These mechanisms include improving air quality through State regulation, designating rural transport areas, designating interstate or international transport areas and demonstrating exceptional events.

I will discuss each mechanisms and its shortcomings in the context of a rural county in Arizona. Yuma County is located in the southwest corner of Arizona bordered by both California and Mexico.

The county contains a few small towns and the city of Yuma, which has an estimated population of about 100,000 and an unemployment rate of about 20 percent.

Yuma is predominantly an agricultural community and despite its lack of urbanization or industrialization, Yuma County will be designated as nonattainment under the new ozone standard.

As you may know, precursors for ozone include volatile organic compounds and oxides of nitrogen. According to EPA's 2011 National Emissions Inventory, industrial sources account for only 0.2 percent of the total VOC emissions and 5.3 percent of NOx emissions within the county. All other sources are either naturally occurring or not regulated by the State.

No matter how many local emissions controls are placed on Yuma County businesses, Yuma County will not achieve compliance under the new standard.

In addition, Yuma County would not qualify for the rural transport mechanism because the Clean Air Act states that a rural area seeking relief cannot be adjacent to or include any part of a metropolitan statistical area, defined by the U.S. Census as an entire county comprising 50,000 people or more.

The Cross-State Air Pollution Rule often mentioned as a relief mechanism is yet another option that does not apply to Yuma County. Although 20 percent of ozone concentrations in Yuma County emanate from California manmade sources, the rule only helps downwind nonattainment areas receive emissions reductions from upwind attainment areas.

This approach will not work for Yuma County because California has already implemented the most stringent controls in the country, is still unable to achieve compliance with the standard and has no emissions reductions to contribute downwind.

Further, the exceptional events rule is of dubious value to Yuma County, if not the whole country. Although Arizona has been a national leader in the development of exceptional event documentation or dust events, the process for documenting and receiving EPA approval of ozone-exceptional events has not been well explained, will almost certainly be resource intensive and is difficult to predict.

The best case scenario for Yuma is that our agency can make an international transport demonstration, given that EPA's own modeling shows that international sources are responsible for 68 percent of ozone emissions affecting Yuma on modeled exceedance days.

Unfortunately, that demonstration is only valid after the area has been designated as nonattainment and has exceeded the 3-year deadline.

This means Yuma would still have to comply with higher nonattainment classification requirements—requirements that would limit economic growth in a high unemployment area in perpetuity as a consequence of emission sources that originate primarily outside of Arizona and/or outside of Arizona's jurisdiction and control.

Yuma County is but one of many such counties in Arizona and the West. For all these reasons, Arizona is challenging the new ozone standard in court.

We also request that consideration be given to interstate and international transport demonstrations before areas are classified as nonattainment.

Thank you, and I am happy to answer any questions.

[The prepared statement of Mr. Cabrera follows:]

**Testimony**  
**Subcommittee on Energy and Power**  
**House Committee on Energy and Commerce**  
**Thursday, April 14, 2016**  
**by**  
**Misael Cabrera, Director**  
**Arizona Department of Environmental Quality**

Mr. Chairman, members of the Committee. My name is Misael Cabrera. I am the Director of the Arizona Department of Environmental Quality and I greatly appreciate the opportunity to offer testimony today.

As the lead state challenging the 2015 ozone standard in the courts, Arizona does not support 70 parts per billion (ppb) as the appropriate ozone standard. We believe that the new standard is simply not achievable in many areas of our State. Although the Clean Air Act has five mechanisms to bring nonattainment areas in to compliance, these mechanisms are inadequate for Arizona and likely other Western states. These mechanisms include: improving air quality through State regulation until the new standard is attained; designating rural transport areas; designating interstate or international transport areas; and demonstrating exceptional events. I will discuss each mechanism and its shortcomings in the context of a small county in rural Arizona.

Yuma County is located in the southwest corner of Arizona, bordered by both California and Mexico. The county contains a few small towns and the City of Yuma, which has an estimated population of about 100,000 and an unemployment rate of almost 20%. Yuma is predominantly an agricultural community, and despite its lack of urbanization, Yuma County is projected to be designated as nonattainment for the 2015 ozone standard.

As you may know, volatile organic compounds (VOCs) and oxides of Nitrogen (NOx) in the presence of sunlight react photo-chemically to produce ozone. According to EPA's 2011 National Emissions

Inventory, industrial sources account for only 0.2% of total VOC emissions, and 5.3% of NOx emissions within the County. All other sources are either naturally occurring, or not regulated by the State. No matter how many local emissions reductions are achieved, Yuma County simply will not be able to achieve compliance with the new standard.

In addition, Yuma County would not qualify for the rural transport mechanism because the Clean Air Act states that a rural area seeking relief cannot be adjacent to or include any part of a Metropolitan Statistical Area (MSA), defined by the U.S. Census as an entire county comprising of 50,000 people or more.

The Cross-State Air Pollution Rule often mentioned as a relief mechanism is yet another option that does not apply to Yuma County. Although 20% of ozone concentrations in Yuma County emanate from California manmade sources, the rule only helps downwind nonattainment areas receive emissions reductions from upwind *attainment* areas. This approach will not work for Yuma County because California has already implemented the most stringent controls in the Country, is still unable to achieve compliance with the standard, and has no emissions reductions to contribute downwind (see Attachment A).

Further, the exceptional events rule is of dubious value to Yuma County, if not the whole country. Although Arizona has been a national leader in the development of exceptional event documentation for dust events, the process for documenting and receiving EPA approval of ozone exceptional events has not been explained, will be almost certainly resource intensive, and is difficult to predict.

The best case scenario for Yuma is that our agency can make an international transport demonstration given that EPA's own modeling shows that international sources<sup>1</sup> are responsible for 68% of ozone emissions affecting Yuma on modeled exceedance days (Attachment B – EPA Ozone Map & Data).

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<sup>1</sup> Includes natural and manmade sources outside of the modeling domain.

Unfortunately, that demonstration is only valid after the three year marginal attainment deadline is exceeded and Yuma would still have to comply with higher nonattainment classification requirements – requirements that would limit economic growth in a high unemployment area in perpetuity as a consequence of emission sources that originate primarily outside of Arizona or outside of Arizona’s jurisdiction and control.

Yuma County is but one of many such counties in Arizona and the West. For all these reasons, Arizona is challenging the new ozone standard. We also request that consideration be given to interstate and international transport demonstrations before areas are classified as nonattainment.

Thank you and I am happy to answer any questions.

Mr. WHITFIELD. Well, thank you very much.

And our last witness today is Mr. Alan Matheson, who is the executive director for the Utah Department of Environmental Quality.

Thanks for being with us and you're recognized for 5 minutes.

#### STATEMENT OF ALAN MATHESON

Mr. MATHESON. Thanks, and I'll, Mr. Chairman, just note initially that Mr. Cabrera is credible, despite the fact that he has far too much hair for this panel.

Mr. Chairman Whitfield, Ranking Member Rush, members of the committee, I am Alan Matheson, the executive director of the Utah Department of Environmental Quality.

Improved air quality is a high priority for Utah. Under the direction of Governor Gary Herbert, we have taken aggressive action to clean our air—imposing stringent new control requirements, expanding public transportation, implementing travel-reduction strategies and a public education campaign and conducting research to understand Utah's unique atmospheric chemistry. The results have been meaningful.

In the appropriate pursuit of cleaner air, we need to ensure that our regulatory system is rationally aligned with that goal. Today, I share Utah's concerns with the periodic review cycle of the National Ambient Air Quality Standards—or NAAQS—the implementation schedule for the ozone standard, and the challenges our State has in meeting the new 70 parts per billion threshold.

In general, extending the 5-year NAAQS review cycle so that it better aligns with the prescribed NAAQS implementation time lines is appropriate. An area designated as moderate nonattainment for ozone has 8 years from the date the NAAQS is set to achieve attainment.

At the very least, there should be 8 years between NAAQS reviews to accommodate this compliance schedule. Extending the review cycle to 10 years would more closely align it with the prescribed planning period of an area designated as serious nonattainment for ozone.

Further, EPA has been unable to provide States with timely and necessary implementation guidance under the current 5-year NAAQS review cycle. The implementation rule for the 2008 ozone NAAQS was published in March 2015, only seven months before the ozone standard was lowered to 70 parts per billion in October.

As another example, new PM 2.5 nonattainment areas were designated in 2009. State implementation plans for those areas were due to EPA December 2014, but EPA has yet to promulgate the guidance establishing what is required in those plans.

EPA cannot even review for completeness the plans that they have received. Extending the time line for implementing the 2015 ozone NAAQS will allow better coordination among States, tribes, and the Federal Government.

One of the areas in Utah experiencing difficult challenges with ozone and expected to be classified as nonattainment is the energy-rich Uinta Basin. The unique chemistry underlying winter ozone formation differs from the typical summer urban chemistry anticipated by the Clean Air Act of 1990.

In addition, this region has a complex mix of State, tribal, and EPA air jurisdictions. Utah has coordinated a significant multi-agency study into the causes of winter ozone and is working with EPA and the Ute Tribe in developing State, tribal, and Federal implementation plans for the area.

These efforts take an extraordinary amount of time and an extension of the implementation period is needed. Under the Clean Air Act, another review of the ozone NAAQs will occur in 2020. If EPA sets a new standard then, it will hamper the coordination efforts that are already underway.

Background ozone levels present an additional challenge in meeting the new 70 part per billion standard. International transport can, at times, account for up to 85 percent of the 8-hour ambient ozone concentration in some Western States. Many areas in the West have little chance of identifying sufficient controls to achieve attainment, leading to severe consequences.

Utah recommends that EPA work with States to determine what portion of ozone pollution and its chemical precursors is coming from background ozone and to clarify how exceptional events and international transport will affect attainment designations and compliance.

Making the right choices to improve air quality in ozone non-attainment areas will depend on how well we understand the science, and our understanding of science needs to improve. The tools available to States to account for nonanthropogenic ozone are administratively burdensome and subject to second guessing, often due to a lack of reliable supporting data.

Effort spent analyzing uncontrollable pollution to satisfy EPA's administrative requirements is simply administrative overhead that does nothing to improve air quality or people's health.

The Department of Environmental Quality's mission is to safeguard public health and the environment and our quality of life by protecting and enhancing the environment, and it is a mission that we take seriously.

We must address the public health impacts of ozone with reasoned approaches. As we move forward with this more stringent ozone standard, EPA needs to have in place the necessary tools to allow States to succeed.

Thank you very much.

[The prepared statement of Mr. Matheson follows:]

**Alan Matheson**  
Executive Director  
Utah Department of Environmental Quality

**Testimony before the  
Energy and Power Subcommittee of the  
Energy and Commerce Committee**  
*“A state perspective on implementing the 2015 Ozone standard  
revision”*

**April 14, 2016**

**Alan Matheson  
Executive Director  
Utah Department of Environmental Quality**

**Testimony before the  
Energy and Power Subcommittee of the  
Energy and Commerce Committee  
*“A state perspective on implementing the 2015 Ozone standard revision”***

**April 14, 2016**

Mr. Chairman Whitfield, Ranking Member Rush, and Members of the Committee:

I am Alan Matheson, the Executive Director of the Utah Department of Environmental Quality. Improved air quality is a high priority for Utah. Under the direction of Governor Gary Herbert, we have taken aggressive action to clean our air: imposing new control requirements; expanding public transportation; implementing travel-reduction strategies and a public education campaign; and conducting research to understand Utah's unique atmospheric chemistry.

In the appropriate pursuit of cleaner air, we need to ensure that our regulatory system is rationally aligned with that goal. Today, I share Utah's concerns with the periodic review cycle of the National Ambient Air Quality Standards (NAAQS), the implementation schedule for the ozone standard, and the challenges our state has in meeting the new 70 ppb threshold.

Q In general, extending the 5-year NAAQS review cycle so that it better aligns with the prescribed NAAQS implementation timelines is appropriate. An area designated as moderate nonattainment for ozone has eight years from the date the NAAQS is set to achieve attainment. At the very least, there should be eight years between NAAQS

reviews to accommodate this compliance schedule. Extending the review cycle to 10 years would more closely align it with the prescribed planning period of an area designated as serious nonattainment for ozone.

Further, EPA has been unable to provide states with timely and necessary implementation guidance under the current 5-year NAAQS review cycle. The implementation rule for the 2008 Ozone NAAQS was published in March, 2015, only 7 months before the ozone standard was lowered to 70 ppb in October. As another example, new PM<sub>2.5</sub> nonattainment areas were designated in 2009; State Implementation Plans for those areas were due to EPA December, 2014, but EPA has yet to promulgate the guidance establishing what is required in the plans. EPA cannot even review for completeness the plans they received.

- Q Extending the timeline for implementing the 2015 Ozone NAAQS will allow better coordination among the State, tribes, and the federal government. One of the areas in Utah expected to be classified as nonattainment is the energy-rich Uinta Basin, which suffers from wintertime ozone. The unique chemistry underlying winter ozone formation differs from the typical summer urban chemistry anticipated by the Clean Air Act (CAA) of 1990. In addition, this region has a complex mix of state, tribal, and EPA air jurisdictions. Utah has coordinated a significant multi-agency study into the causes of winter ozone and is working with EPA and the Ute Tribe in developing a SIP/FIP/TIP for the area. These efforts take an extraordinary amount of time, and an extension of the implementation period is needed. Under the

CAA, another review of the ozone NAAQs will occur in 2020. If EPA sets a new standard then, it will hamper the coordination efforts that are already under way.

- Q Background ozone levels present an additional challenge in meeting the new 70 ppb standard. International transport can, at times, account for up to 85% of the 8-hour ambient ozone concentrations in western states. Many areas in the west have little chance of identifying sufficient controls to achieve attainment, leading to severe consequences. Utah recommends that EPA work with states to determine what portion of ozone pollution and its chemical precursors is coming from background ozone and to clarify how exceptional events and international transport will affect attainment designations and compliance.
- Q Making the right choices to improve air quality in ozone nonattainment areas will depend on how well we understand the science; and our understanding of the science needs to improve. The tools available to states to account for non-anthropogenic ozone are administratively burdensome and subject to second guessing, often due to a lack of reliable supporting data. Effort spent analyzing uncontrollable pollution to satisfy EPA's administrative requirements is simply administrative overhead that does nothing to improve air quality or people's health.

The Department of Environmental Quality's mission is to safeguard public health and our quality of life by protecting and enhancing the environment, a mission we take seriously. We must address the public health impacts of ozone with reasoned approaches. As we move forward with this more stringent ozone standard, EPA needs to have in place the necessary tools to allow states to succeed. The remainder of this

testimony, submitted in written form, provides more detail regarding Utah's perspective on implementing the 2015 Ozone standard.

**Written testimony submitted to the Energy and Power Subcommittee of the Energy and Commerce Committee**

***“A state perspective on implementing the 2015 Ozone standard revision”***

**The effect of jurisdictional complexity in the Uinta Basin.**

The Uinta Basin lies in the northeast corner of Utah and is bounded on the north by the Uinta Mountains, on the south by the Tavaputs Plateau, on the west by the Wasatch Range, and on the east by elevated terrain that separates it from Piceance Basin in Colorado. Duchesne and Uintah Counties occupy most of the Basin, and the Uintah and Uray reservation covers a significant portion of Basin lands.

Increased oil and gas exploration and production in the Uinta Basin has contributed to the increase in the precursor gases that lead to the formation of ozone during wintertime temperature inversions. Most scientific studies of ozone have focused on summertime ozone in urban areas; and the summer ozone-formation chemistry is well characterized. Wintertime ozone, on the other hand, is a relatively new phenomenon, limited to a few isolated basins in the intermountain west, and its causes are not fully understood. Preliminary evidence suggests that high concentrations of ozone in the Basin during the winter only occur when the ground is snow-covered, a temperature inversion traps emissions close to the ground, and the skies are sunny. The traditional strategies for solving summertime ozone pollution will not work in the Uinta Basin because of the unique nature of wintertime ozone.

The Utah Division of Air Quality (DAQ) is leading a multi-year effort to bring together knowledgeable scientists to study the wintertime ozone phenomenon. DAQ has partnered with local governments, industry, local health departments, the Bureau of Land Management (BLM), EPA, the Ute Tribe, National Oceanic Atmospheric Administration (NOAA), Utah State University, University of Utah, and a number of other universities in both the United States and Canada to determine the causes of wintertime ozone, identify control strategies to reduce emissions, and encourage industry to take proactive steps to cut emissions.

The Uinta Basin Winter Ozone Study (UBOS) began in 2011 to characterize emission sources, identify chemical pathways unique to the Basin, and develop effective mitigation measures. This collaborative study continues to bring together the best and the brightest in the fields of atmospheric research, air modeling, emissions source testing, and analysis.

This ongoing study is important for understanding the atmospheric chemistry responsible for winter ozone and developing control strategies that reduce the precursor gases that contribute to its formation. Over the past few years of study, much has been

learned about the unique winter chemistry that exists in the Basin. Research has shown that VOCs are the ozone precursor most likely to produce ozone in the region. Scientists are working to determine which VOCs are key to forming ozone in the Basin, where these emissions are located in the atmosphere, how their location impacts their ability to mix and react, and which meteorological conditions set the stage for the formation of ozone.

Due to the complex chemistry that creates ozone and the vast variation in VOC reactivity, ozone-control strategies must target reductions of specific emissions. Otherwise, there is the potential that emissions reductions will not be effective or can even be counterproductive. Research continues in the Uinta Basin today.

In combination with understanding the chemistry, a significant effort is underway to collect an emissions inventory for the oil and gas production in the Basin. This has required coordination with the oil and gas producers, EPA, the Ute Tribe, and the BLM. The goal is an emissions inventory that spatially, temporally, and chemically characterizes the entire Basin. This inventory will allow development of appropriate and effective mitigation strategies for ozone and other air pollutants that can form via this unique wintertime chemistry. This effort has required multiple resources, immense coordination, and will require continued support to maintain.

Jurisdictional issues complicate air pollution regulation in the Basin. Energy production areas are scattered over federal, state, and tribal lands. Each of these agencies has jurisdiction over the production areas located on their respective lands, and each has differing air regulations that apply depending on the amount of pollution emitted. Utah has jurisdictional responsibility for the lands outside of Indian Country, where approximately 90 percent of the population is located.

Approximately two-thirds of currently producing oil and gas wells, three quarters of the gas production, and half of the oil production in the Uinta Basin are located in Indian Country where the tribes and the EPA have regulatory authority. The Tribe is challenged with educating and training staff to support the increased need for an air program and increased regulation. As EPA looks to develop site-specific rules in the form of a Federal Implementation Plan, its resources to support implementation of a minor source permitting program are also limited.

Significant time and effort is required to address the co-challenges of a fairly new and complex winter ozone issue that is just beginning to be understood, and coordinating a sound regulatory approach among different agencies with sometimes-unclear jurisdiction within the same airshed. The ozone pollution issue in the Basin was just being discovered when the 2008 ozone standard was promulgated. EPA designated the area as unclassifiable due to a lack of certified air monitoring data. Nevertheless, the state began to address the ozone levels in the Basin. The Division of Air Quality

performed scientific studies, developed new statewide rules, joined the Ozone Advance program, and established voluntary seasonal ozone controls. H.R. 4775, Ozone Standards Implementation Act of 2016, which would change the mandatory review of ozone NAAQS from 5 to 10 years, would allow time for additional research, appropriate coordination among the jurisdictions, and full operation of the proactive ozone-reduction measures prior to the next designation process. With the promulgation of the 2015 ozone standard, EPA stated that with the implementation of recent regulations, the majority of areas that would be nonattainment for that standard would reach attainment by 2025. The additional time provided by H.R. 4775 would allow resource-limited states to focus on attainment strategies before having to evaluate their air monitoring data for the next designation process.

**Recent scientific developments regarding background ozone levels in the United States, including summaries of the relevant portions of EPA's Integrated Science Assessment of Ozone and Related Photochemical Oxidants.**

The EPA has been studying ozone in the eastern U.S. for decades, and the mechanisms of ozone formation and transport pathways are well understood there. This process is just beginning in the western U.S. where mountainous topography, unique meteorology, forest fires, stratospheric intrusion, distinct emissions sources, highly variable emissions density, and international transport play an important role in ozone formation. Unfortunately, just at the time when improved models, emission inventories, and research on western ozone issues are needed, EPA is facing funding constraints that will limit its ability to support new technical work, and will likely decrease its current efforts. Funding is also decreasing for important research activities at the National Oceanic and Atmospheric Administration (NOAA) and for grants to support research at universities. States such as Utah do not have the resources to make up for the decreases in federal funding for these important technical tools.

Emissions from Asia are affecting ozone levels in the western U.S., especially in the spring, and this impact is increasing. Cooper, 2010 estimated an increase of 0.63 ppbv per year, which would be around 6 ppb over ten years. This Asian impact is often cited as the reason the west is not seeing the reductions in ozone trends over the last 20 years that have been observed in the eastern states.

- *Increasing springtime ozone mixing ratios in the free troposphere over western North America*, O. R. Cooper, et al., published in *Nature* (Vol 463, January 21, 2010) examines the influence of Asian transported ozone on western North America. The rate of increase in ozone concentrations over the last 20 years is greatest when measurements are more heavily influenced by direct transport from Asia with an average increase of 0.63 ppbv/yr. The paper suggests that western North America is particularly sensitive to rising Asian emissions and that

the observed increase in springtime background concentrations may hinder compliance with its ozone air quality standard.

- *Long-term ozone trends at rural ozone monitoring sites across the United States, 1990–2010*, Cooper, O. R., R.-S. Gao, D. Tarasick, T. Leblanc, and C. Sweeney (2012), *J. Geophys. Res.* (Vol 117, Issue D22, 27, November 2012), reports on long term ozone trends (1990-2010) across the U.S. and finds that while eastern sites are generally seeing decreases in ozone concentrations as a result of national emissions controls, the western sites are not. The paper discusses the concept that increasing background ozone flowing into the western U.S. is counteracting domestic emission reductions.

Western wildfires significantly affect ozone levels throughout the intermountain west. This impact is highly variable and can positively, or in some cases negatively, effect ozone formation as the fire emissions plume ages. Though complex, understanding this impact is increasingly important as the ozone standard becomes more stringent.<sup>1</sup> Ozone levels can increase significantly due to “stratospheric intrusions” under specific meteorological conditions. This phenomenon typically occurs in spring and summer seasons in mountainous terrain where energetic storm systems can fold a pocket of stratospheric ozone into the lower troposphere (ozone levels are much higher in the stratosphere). This entrained ozone can radically increase ozone levels locally and significantly increase surface level ozone over multi-state regions downwind of the event. Researchers have found that stratospheric intrusion can play a major role (at times reaching 50 to 60 percent) in elevating springtime ozone events over high altitude regions in the western U.S., posing a challenge for meeting the ozone standards.<sup>2</sup> Ozone increases with elevation because its concentration increases vertically through the lower atmosphere (troposphere). Near-surface ozone tends to be titrated by oxides of nitrogen released from sources at the surface and subject to other scavenging processes, while ozone aloft can be enhanced by stratospheric ozone intrusion and ozone that has been transported long distances without loss. Mountainous terrain pushing into this higher-elevation ozone band can, therefore, experience higher ozone concentrations that cannot be controlled by local actions.

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<sup>1</sup> *Ozone production from wildfires: A critical review*, Daniel A. Jaffe and Nicole Wigder, *Atmospheric Environment*, Vol 51 (2012) 1-10.

<sup>2</sup> *Springtime high surface ozone events over the western United States: Quantifying the role of stratospheric intrusions*, Lin M., A. M. Fiore, O. R. Cooper, L. W. Horowitz, A. O. Langford, Hiram Levy II, B. J. Johnson, V. Naik, S. J. Oltmans, C. Senff, *Journal of Geophysical Research*, Vol 117, November 2012.

**The interpretation of background and “policy relevant background” for ozone in the NAAQS process.**

Background ozone is important to consider in addressing ozone. In general, it refers to the level of ozone that is not controllable by a regulatory agency and would include ozone precursor emissions from biogenic and other non-anthropogenic sources. It could also include precursor emissions from anthropogenic international sources. This latter definition is termed policy relevant background (PRB). PRB is determined using a photochemical transport model.

PRB from non-anthropogenic sources is not constant. It varies from season to season and from episode to episode. It also varies from place to place. In the Integrated Science Assessment for the current ozone NAAQS review, EPA uses the mean PRB for broad regions and this may not be reflective of the PRB that is occurring during high ozone episodes in the intermountain west. PRB also increases with elevation. Higher ozone levels in the upper troposphere are more readily mixed to ground level at higher elevations and this could be an important factor in ozone levels in mountain communities and also higher-elevation forests.

While the concept of PRB considers the impact from international sources, there is no domestic mechanism to address this increasing impact. Asian emissions are increasing background ozone concentrations in the intermountain west in the spring. Cooper (Nature, 2010) estimated an average increase of 0.63 ppbv/yr from 1995-2008. EPA has considered the current impact from Asia through the concept of PRB, but the final NAAQS is a fixed standard even though the PRB continues to increase. Modeling to determine PRB has shown the highest values occur in the intermountain west where the 4th high values are estimated to be 50 to 60 ppb.<sup>3</sup>

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<sup>3</sup> *Improved estimate of the policy-relevant background ozone in the United States using the GEOS-Chem global model with 1/2 x 2/3 horizontal resolution over North America*, Atmospheric Environment, Vol 45, (2011) 6769-6776.

**The Utah Department of Environmental Quality's assessment of background ozone concentrations and their importance relative to the NAAQS, including the consequences of a "nonattainment designation."**

Ozone levels in the intermountain west are not decreasing as much as would be expected based on the significant emission reductions that have occurred over the last twenty years. Figure 1 shows ozone trends at rural western national parks. Many of these parks, such as Canyonlands in Utah, are located far from any significant emission sources. The current ozone standard is shown. As can be seen from this figure, ozone values have remained fairly constant over the last 20 years and are routinely above the 70 ppb standard. It is also apparent from this figure that the problem is widespread throughout the intermountain west and is not limited to parks that are close to urban areas or to energy-producing areas.

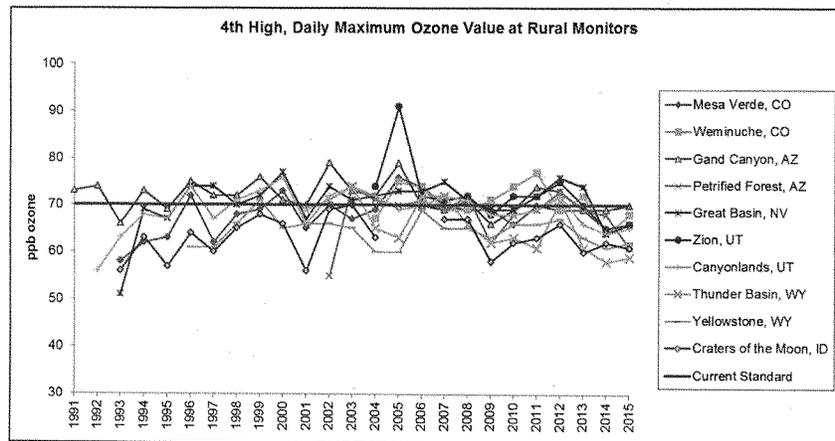


Figure 1

Source: EPA Air Quality System

Additionally, the Utah Division of Air Quality (DAQ) conducted a special ozone study focused on monitoring ozone in three regions of Utah: the mountain valleys east of the Wasatch Front with a focus on the Park City area; the Tooele Valley; and rural western Utah. Ozone concentrations at the mountain valley sites during 2012 were moderate to high with eight of ten sites having at least one day when ozone concentrations exceeded 75 ppb. The highest ozone was found at three sites in the Park City area (Parleys Summit, Snyderville and Silver Summit) and Heber where there were four to ten days with ozone exceeding 75 ppb. For comparison, Salt Lake City experienced seven days with ozone exceeding 75 ppb. In general, ozone in the Park City area of Summit County was equal to or higher than ozone in Salt Lake City and at other urbanized Wasatch

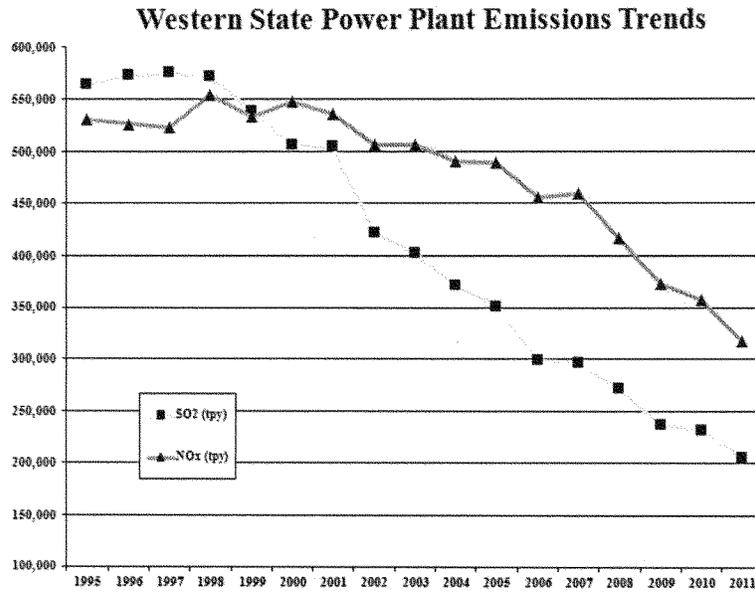
Front sites. Ozone in Morgan and Huntsville was moderately high, but generally lower than ozone observations at the DAQ site in Harrisville. High ozone in the Park City area was most strongly influenced by transport of ozone and ozone precursors from Salt Lake City. Analysis of dominant wind patterns and timing of maximum daily ozone suggests clear transport of pollutants from Salt Lake City, up the Parleys Canyon corridor and into the Park City area and Kamas. Ozone formation at all mountain valley sites was also likely enhanced by increased ultraviolet radiation at higher elevation sites, which is supported by solar radiation data. Smoke from wildfires and biogenic emissions volatile organic compounds in mountain forests also may have impacted ozone at mountain valley sites.

In the Tooele Valley, ozone concentrations in Erda and East Erda were significantly higher than ozone at the DAQ site in Tooele. Erda was one of the highest ozone sites in all of Utah during 2012 and the three-year average of the 4th highest 8-hour ozone concentrations was 77 ppb, equaled only by the DAQ site in Salt Lake City. High ozone in the northern portion of the Tooele Valley was likely influenced by Great Salt Lake; high albedo off the lake surface likely enhanced ozone formation and routine off-shore lake winds blew air from Great Salt Lake into Tooele Valley. Ozone concentrations at Badger Island, a site on a causeway in the middle of Great Salt Lake, were the highest observed in Utah with thirteen days exceeding 75 ppb. Ozone concentrations at Badger Island typically formed earlier in the day and persisted longer into the afternoon than at Tooele Valley sites.

Ozone concentrations at rural Utah sites, except at Antelope Island where ozone was very high, were typically lower than other Utah sites. Peak seasonal ozone concentrations occurred in May and early June at all rural sites and maximum 8-hour ozone concentrations exceeded 75 ppb at least once at all sites except Nephi where ozone concentrations peaked at 75 ppb. Badger Springs, in extreme southwestern Utah, was one of the highest ozone sites in Utah; 8-hour ozone concentrations exceeded 75 ppb on ten days. The 4th highest 8-hour ozone concentration exceeded 70 ppb at all rural Utah sites. High ozone concentrations in rural Utah were potentially influenced by regional transport of ozone, springtime emissions of biogenic volatile organic compounds, stratospheric ozone intrusion and wildfire smoke.

The eastern U.S. has seen significant improvements in ozone levels. One of the major strategies to reduce regional ozone levels in the eastern U.S. has been to reduce nitrogen oxide (NOx) emissions from power plants. Federal motor vehicle standards and non-road engine standards have also reduced NOx emissions substantially throughout the country. As a result of these significant emission reductions, ozone levels have been improving throughout the eastern U.S.. Equivalent NOx emission reductions have also been occurring at western power plants as can be seen in Figure 2, and mobile source

emission reductions have also been substantial, but there have not been corresponding decreases in ozone levels in the west.



Data from EPA Clean Air Markets Division

Figure 2

One explanation of ozone trends in the intermountain west is that U.S. anthropogenic emissions are only part of the problem. Current research suggests that increased international ozone transport is counteracting domestic emissions reductions in the west (Cooper, et. al. *Long-term ozone trends at rural ozone monitoring sites across the United States, 1990-2010*, J. Geophys. Res., 117).

The consequences prescribed in the CAA for a nonattainment area are significant. Nonattainment area permitting rules require offsetting emission reductions for any new major source in a nonattainment area. The reductions must occur within the nonattainment area. These rules would effectively prevent development in rural areas that are designated nonattainment because there are no existing sources that could provide this offset. For example, the monitor in Canyonlands National Park, located in San Juan County, Utah, has measured ozone levels above 70 ppb. San Juan County is the largest county in the state measuring 7,933 square miles. This is close in size to the

entire state of New Jersey (8,722 sq miles). San Juan County's population was 15,772 in 2015.<sup>4</sup> The point source inventory for the entire county is less than 400 tons/yr NO<sub>x</sub> and less than 100 tons/yr VOC. Economic opportunity in this part of Utah, including portions of the Navajo Nation, could be stifled because there would be no possibility to construct a new major source even though ozone levels at Canyonlands are not caused by local emissions.

Mandatory measures are established for moderate, serious, severe, and extreme ozone nonattainment areas.<sup>5</sup> If an area starts as a marginal area but is not able to attain the standard, it is progressively bumped up to a higher classification over time, requiring progressively more stringent control measures, even if those measures do not help the ozone problem in the area.<sup>6</sup> These measures include a 15% mandatory VOC reduction for moderate areas followed by a 3% reduction per year for serious and above areas, vehicle emission and inspection programs, fuel reformulations, reasonably available control technology requirements for stationary sources, and traffic control measures.<sup>7</sup> These measures make little sense in rural western counties, may be impossible to implement, and may do little to reduce ozone levels even in the urban areas where background levels are high. In rural areas where biogenic (natural source) emissions are the majority of the inventory, the mandatory VOC reductions are especially problematic because reductions in anthropogenic VOC are unlikely to have any effect on ambient ozone concentrations.

If an area is unable to attain a NAAQS, mandatory sanctions apply to highway funding for the state.<sup>8</sup> These sanctions would have severe consequence on an area that had no ability to solve the underlying ozone problem.

Another consideration in meeting the ozone standard in the western states is a significant correlation between high wildfire years and high ozone years. EPA has indicated that this impact could potentially be addressed through the exceptional event process used to exclude infrequent exceedances of the standard that do not have an

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<sup>4</sup> "State & County Quick Facts", United States Census Bureau (retrieved April 7, 2016).

<sup>5</sup> 42 U.S.C. § 7511a (2015).

<sup>6</sup> 42 U.S.C. § 7511.

<sup>7</sup> 42 U.S.C. § 7511a.

<sup>8</sup> 42 U.S.C. § 7509(b).

anthropogenic origin.<sup>9</sup> This approach is problematic for several reasons, even with the recently promulgated rule revisions and guidance for exceptional events.

- The technical demonstrations that are required to show that high pollution levels are due to an exceptional event are extensive; and it has been very difficult to get EPA's concurrence, even for relatively straightforward cases of particulate matter exceedances caused by high-wind events. Utah does not have the resources to develop an exceptional event demonstration for every potential event during a high fire year. EPA would need corresponding resources to review the demonstrations and would also need to implement internal policies to ensure that demonstrations could be approved.
- During a high fire year, it is likely that many days or weeks could be affected by fire smoke and it would strain the exceptional event process to address longer-term events.
- During high fire years, it is likely that regional impacts affect multiple states. However, the current exceptional event process is best suited to address local impacts within a single state's jurisdiction.

#### **Recommendation**

Mechanisms to account for background ozone that cannot be controlled should have been put in place, including technical and regulatory tools, before the more stringent ozone standard was implemented. Funding is also needed to improve the technical tools that are available to western states when developing their SIPs, as well as to support the important research currently underway to better understand the causes of background ozone in the intermountain west. Otherwise, states such as Utah will not be able to develop successful state implementation plans and will be set up to continuously violate the ozone standard.

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<sup>9</sup> U.S. Envtl. Prot. Agency, *Overview of EPA's Updates to Air Quality Standards For Ground-Level Ozone* 1 (Oct. 1, 2015); see also 40 C.F.R. § 50.14 (Dec. 28, 2015).

Mr. WHITFIELD. Thank you, Mr. Matheson, and we appreciate the statements from all of you, and at this time I would like to recognize the gentleman from Texas, Mr. Olson, for 5 minutes of questions.

Mr. OLSON. I thank the Chair.

My first questions are for Dr. Shaw. As you know, this bipartisan bill got Mr. Costa from California to sign up on it yesterday. It would require the EPA to review air quality standards every 10 years instead of every 5.

It would also make sure that EPA actually puts out timely guidance on how to implement the rule when they do make a change. It ensures we avoid the mess of the last decade.

Lower standards in 2008—rules to make those happen 2015. Seven months later new standards. That should never ever happen again.

Do you think that these changes in this bill will help States clean up the air in a more straightforward way and more health benefits with this law—this new bill?

Mr. SHAW. Thank you, Congressman.

Yes, the reason that I am encouraged by the effort that is underway here is because I sincerely believe that it will enhance our ability to have more meaningful environmental regulations that do indeed help to protect the health of those individuals that we are sworn to help to protect.

I believe that this planning time frame will help us to analyze and do the heavy lifting to understand better what is causing the respiratory health issues, to be able to develop plans to make sure those are being addressed and those regulations will indeed have a reasonable likelihood of yielding those environmental and health benefits.

So I think that providing that time frame and requiring a more detailed analysis of the standard before it is lowered will be very helpful.

Otherwise, we tend to have—find ourselves in a cycle where we lower the standard trying to achieve the health benefits that we failed to the last time we lowered the standard and I think there's some science that needs to be done to answer that.

Mr. OLSON. Is it true too that ozone concentrations are lower when—as medical reactions are higher in Texas so there's no coordination between more ozone and health, correct?

Mr. SHAW. That's correct. In the State of Texas we have a higher asthma hospitalizations in the winter time during our low ozone concentrations and nationally as well we have seen significant reductions in ozone concentrations and yet the level of asthma continues to increase.

Mr. OLSON. Sounds like need more studies.

As you know, last year EPA decided to pick a new standard of—well, they had a goal between 70 and 60 parts per billion. They chose 70. Their advisor said that rule net range would keep people healthy.

Under our bipartisan bill, we call on EPA to give secondary consideration to whether a standard is achievable. It doesn't tell them to set an unhealthy standard but it keeps them available—it keeps

that technology available, that edge, so they know they're protecting our air.

Do you think this bill is a reasonable approach?

Mr. SHAW. I do. I think that, you know, one of the other things that EPA has talked about is that even in absence of this standard being lowered that I believe that you talked about 85 percent of counties would achieve the standard by doing nothing.

I think that there is an opportunity for us to provide reason to this and let the market and let some of these innovations take place and I think that this bill helps to ensure that we are investing our environmental efforts from the State from dollars and from what we are asking our regulated community to invest to actually lead those health benefits that we look at—that we are looking for.

Mr. OLSON. Thank you. And now Mr. Sadredin. Wow. Seventy parts per billion really hurts the San Joaquin Valley, huh?

As was mentioned, one section of this bill deals with what's called exceptional events. That part of the law is designed to make sure that our communities aren't punished for pollution they can't control such as droughts or fires.

But, as you know, EPA does not provide relief relating to certain events beyond an area's control. My question is, Can you explain why this exception is so important to this change for your county?

Mr. SADREDIN. Thank you, Congressman Olson.

In 2012, San Joaquin Valley was on the verge of meeting the 65 microgram per cubic meter standard for PM and then we had the drought that I am sure you heard about, have experienced it in other regions, where we had concentrations never seen before in terms of the magnitude of PM concentrations that we were monitoring throughout the valley.

Unfortunately, the Clean Air Act as it is written right now, it says you cannot take into account a stagnation or precipitation.

Now, this is another one of those well-intentioned provisions that is leading to unintended consequences. I think the Congress, when they put that in there, they meant, you know, you cannot come on a daily basis.

Well, say, today is hot, today is stagnation. So this is an exceptional event on a daily basis. But when you have a situation like we experienced in San Joaquin Valley where we had a 100-year drought, conditions that had not been seen before for 100 years, and they have already gone away this year thanks to El Niño and almost a normal weather condition, the language in H.R. 4775 simply says that when you have extraordinary circumstances such as what we experienced in California you should not be held responsible, have the valley businesses, residences be penalized for something that we have zero control over.

Mr. OLSON. And so you're saying 100-year drought is exceptional. Is that right?

Mr. SADREDIN. That is all we are asking, yes.

Mr. OLSON. Wow. I yield back. Thank you.

Mr. WHITFIELD. The gentleman yields back. At this time, I will recognize the gentleman from Illinois, Mr. Rush, for 5 minutes.

Mr. RUSH. Well, thank you, Mr. Chairman.

Mr. Mirzakhali, as I referred to in my opening statement, the ozone standards have not been updated since 2008. H.R. 4775

would further delay any new standards from being implemented for up to another 8 years.

Are there any health implications that would be impacted if this bill were to become law and we waited for a period of almost 16 years before updating these standards?

Mr. MIRZAKHALILI. Thank you, Mr. Rush. Obviously, the sequence of events that takes place by setting the standard—when the standard is set, the designations take place, the States begin taking action to reduce their emissions.

We depend on our upwind State emissions reductions to help us achieve attainment. If they are not designated, if they are not implementing measures to reach attainment, we are not going to—as a downwind State, we are not going to see the benefit.

Moreover, the standard—we are telling the people probably an untruth saying that standard—they are being protected by the ozone standards. We issue forecasts. We issue air quality alerts.

We issue advisories based on the standard. If the standard is not protective, the forecast obligation is not going to tell people the whole story.

Mr. RUSH. What are the implications, Mr. Mirzakhali—what would the implications be if we were to extend the renew period for all air pollutant standards from every 5 years to 10 years?

For instance, there is a concern that new developments in scientific research in regards to health impacts may occur more frequently than every decade.

Also, just because the EPA is required to review the data every 5 years does not mean that the agency must automatically update the standards every 5 years.

Do you have any comments on—

Mr. MIRZAKHALILI. Absolutely. The 5-year review—we need to follow science. The decision regarding the standards should be science-driven.

As everybody here on the panel has talked about, we need additional information. We need to do research and we need to be informed by that—by the research.

We can't just arbitrarily prohibit and prevent EPA to lengthen the time that they go back and revisit the standard to some period of time because it is not convenient.

I think 5 years has been a good timer and tied with—if we want an alignment with implementation your marginal areas have to come in with 3 years of the standard.

So if you are going to—one could argue that there should be a 3-year review of the standard as opposed to a 5-year. As the new science becomes available, EPA doesn't have to, and they have a number of occasions, not changed the standard.

They have reviewed it, said science doesn't indicate that we need to change the standards and they have moved on. That's the case with carbon monoxide. That is the case with the last time there was a motion for reconsideration of the 75 standard.

We are not happy with 70 ppb. I don't think it was—you know, I would have been happier with a lower standard. We think that some of the science indicated that 65 would have been a more protective standard.

However, EPA followed the science advisory committee's recommendation and adopted that. And so we are trying to implement that. They should not be barred from implementation. There should not be a provision that would delay the review of available scientific data that will come before it.

Mr. RUSH. H.R. 4775 would also change the reporting requirements for States by allowing them to claim, quote, exceptional events, end of quote.

Can you discuss the practical implications of changing air quality monitoring protocols in ways that could lead to under reporting of poor air quality conditions and how this might impact mostly health and environmental conditions for an affected community?

Mr. MIRZAKHALILI. I just go back to what triggered the—prompted the Clean Air Act and us, the Congress, acting on adopting clean air measures. The northern Pennsylvania event was an exceptional event. It killed people. We had a bad inversion that caused a high air quality event and a number of people died as a result of air pollution.

Just because meteorology is adverse it doesn't mean air pollution doesn't occur and you should be dismissed. The language that is being proposed here it opens the door that we say if there is a hot day we don't—it doesn't count. An inversion doesn't count.

So we are reduced to managing air quality on good days and I don't think that's the way you intend us to do.

Mr. RUSH. Thank you. I yield back.

Mr. WHITFIELD. Gentleman's time has expired. At this time I will recognize the gentleman from Texas, Mr. Barton, for 5 minutes.

Mr. BARTON. Thank you, Mr. Chairman.

I am going to ask most of my questions to Chairman Shaw, but if anybody wants to answer them, they can. I just know him a little bit better.

What was the original ozone standard set back in 1971?

Mr. SHAW. The standard has, obviously, changed over time and we had a 1-hour standard and the number was 120 parts per billion, I believe, was the standard.

Mr. BARTON. It was over 100.

Mr. SHAW. Yes. Yes.

Mr. BARTON. But it was set in a different way on a 1-hour.

Mr. SHAW. Correct.

Mr. BARTON. We've changed it to an 8-hour.

Mr. SHAW. That is correct.

Mr. BARTON. And has consistently gone lower every time it's been set. Isn't that correct?

Mr. SHAW. That's correct.

Mr. BARTON. How low can it go? I mean, why not just put into law every 5 years we are going to reduce it 5 parts per billion and be done with all this? Because that is what happens, basically.

Mr. SHAW. It is certainly part of where I am encouraged by a longer time period between the review. But that is most effective if that is a more thorough review because as I alluded to earlier it is my perception that we are in a cycle to where we are—the process that is being used by EPA to determine whether to lower the standard is flawed and this is certainly characterized and captured in our comments we submitted.

But we are looking at epidemiological studies that show a correlation and therefore they are assuming that there must be a causal relationship.

And yet, in order to get clinical studies to show an impact on the ability of people to bring air in and out of their lungs they had to subject folks to 6—over 6 and a half hours per day of moderate to extreme exercise while being exposed to levels we are talking about just to get a measurable degradation in lung function.

And by the way, those levels were reversible. Those weren't permanent. And so in order to get any response they had to have people exercise it in a way that—I won't speak for you but certainly I can't do on a regular basis and it is—while we agree that EPA used them as a surrogate for the sensitive populations, it is unreasonable to expect people to be exposed to that.

And the key point I am making, Congressman, is that EPA is continuing to lower the standard but we are continuing to get the same result. If you lower the standard over and over again but you're not providing those health benefits then one would question maybe we are missing something.

Mr. BARTON. Well, now, the standard is parts per billion. Isn't that right?

Mr. SHAW. That is correct.

Mr. BARTON. And we are going from 75 parts per billion to 70. So we are changing it five parts per billion. Can I tell the difference? If I breathe the air right now, can I tell the difference between 70 parts per billion and 75 parts per billion?

Mr. SHAW. I would argue that in order for EPA to get a measurable difference that you would have to follow that protocol and exercise rigorously for 6 and a half hours each day while you were being exposed to that in order to potentially, and not all parties would show a measurement. So, unlikely that you would experience that.

Mr. BARTON. I tried to exercise for 6 and a half hours, that would kill me. That would be a measurable impact on my health.

Mr. SHAW. I am with you, Congressman.

Mr. BARTON. What is the sensitivity of the best air quality monitors—in other words, the variance—they measure parts per billion plus or minus—it used to be about 10 parts per billion, but it may be better now.

Mr. SHAW. We are better than that now, and certainly we can measure to the parts per billion and that is getting—you know, the science an ability to monitor is improving significantly.

Unfortunately, that doesn't necessarily—because you can measure it to a finer detail it doesn't necessarily mean that you're—that you are better able to understand what those implications are.

We can measure it very accurately. But the bigger errors aren't in the measuring the concentration at the monitor. The bigger errors are the fact that folks that we are comparing them to that are hospitalized and/or unfortunately, pass away we are tying them to a monitor that they may never have been around.

And in fact, in all likelihood someone who is in a hospital or, unfortunately, passing away likely didn't spend their final days exercising 6 and a half hours a day.

In fact, they probably spent most of their time indoors, which we, as a general population, spend about 90 percent of our time indoors where ozone levels are about 30 percent, I believe, of ambient and we are exposed to much other pollutants in the indoor environment than we see in the ambient environment.

And so in all likelihood, any environmental input into that person's hospitalization and mortality were effectively something besides ozone and I think that is where we need EPA to assess and help us to come up with —

Mr. BARTON. Let me ask Mr. Cabrera a question.

What do you do in these rural counties like you mentioned where the natural occurring ozone is probably higher than the standard? You just—there is nothing you can do. What—I mean—

Mr. CABRERA. Congressman Barton, that is exactly why we are challenging the standard in court.

There are many areas that would be forced to put requirements on industry for air pollution that they did not create and that the State cannot regulate, and that puts rural counties in a very odd position.

We have looked at this very, very hard. Our stance as an agency is typically to cooperate with EPA whenever we can and on this particular issue we have looked at all of the mechanisms for relief that EPA provides and none of them work well for Arizona.

And so rather than holding counties accountable for air pollution that they did not create, we decided to challenge the standard in court.

Mr. BARTON. Thank you.

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

At this time, I will recognize the gentleman from New Jersey, Mr. Pallone, for 5 minutes.

Mr. PALLONE. Thank you, Mr. Chairman.

I wanted to ask my questions of Mr.—is it pronounced Mirzakhali? OK.

I see you share many of my concerns about this bill. In my opinion, H.R. 4775 is a major rollback of valuable Clean Air Act protections and will give any area that has air quality problems numerous new avenues to avoid cleaning up the air.

So, first, I would like to ask some questions about the air quality monitoring provision. Exceptional events—large wildfires, for example—are accounted for now in air monitoring. I mean, that is true. Do you want to just briefly explain that?

Mr. MIRZAKHALILI. Certainly. Thank you, Congressman.

Right now, the policy—as exceptional events come into play when we look at the air quality and see what—whether or not the violator attained the standard or met the standard and that is the communication that we make back to our community.

During certain events—you know, Canadian wildfires, for instance, contributed—caused a problem for certain areas in our region—we were able to go back, make the case those are exceptional events and eliminate those—reading those air quality data points from our overall assessment of air quality and attainment/non-attainment.

So to go back and say well, and that is very limited—EPA works on it. They have—they're working on the guidance. There was just

recently a meeting where they brought up and trying to address Mr. Sadredin's and others' issues regarding, you know, what should or should not be exceptional events.

But I think what this proposed language does, it creates a big gaping road for inversions, fires, having hot days and those are not supposed to be considered exceptional events. We are supposed to protect the public from—

Mr. PALLONE. So then if now you expand this definition, you know, this—these exemptions, what are some of the real world implications for such a policy change?

Mr. MIRZAKHALILI. Well, ozone is formed during the hot days and require hot days to create ozone. It's a secondary pollutant. You need VOC and NOx in the presence of sunlight and hot temperatures.

So if you take out days we eliminate hot ozone days. So we can—we can declare victory that way and before that we have met the standard whereas we are not meeting the standard.

Mr. PALLONE. So for downwind States like yours and mine also, by the way, I am concerned that this change, you know, makes the air quality problems from transport a lot worse.

I mean, is it possible that downwind States could receive additional air pollution? I mean, they are likely going to receive a lot more air pollution.

Mr. MIRZAKHALILI. Absolutely. Like I mentioned, if the trigger for controls is by designation on air quality, nonattainment areas usually have to implement more requirements, and to the extent that they are not part of the planning, if they manage—if the open area manages to exclude their poor air quality that is based on exceptional events they will not be required to implement the reduction strategies that would then directly benefit the downwind areas such as ours and your State, obviously.

Mr. PALLONE. All right. So as I understand it, the monitoring data is also used to report the daily air quality index, which gives people warnings when the air pollution is at unsafe levels.

So how would expanding what can be considered an exceptional event impact those alerts to the public? Would it lead to fewer warnings or would the public wonder why the numbers of warnings of bad air quality days are increasing while their area was declaring that they were meeting the air quality standards? I mean—

Mr. MIRZAKHALILI. It certainly would create a confusion and mixed messages to the public. You know, we provide access to air quality data to the public.

Our monitoring stations are—you know, you can go online to our Web site and get near real-time air quality data and they will see it is measuring, you know, above the standard and yet we are saying well, that this doesn't count.

Mr. PALLONE. Well, is there any justification for this change other than making bad air quality look good to avoid controlling air pollution or what is the justification other than that?

Mr. MIRZAKHALILI. That is what I get, and that is why we are not supporting it. I believe there are instances that are truly exceptional events that EPA already considers.

But to open it up to the extent that is being proposed is not warranted.

Mr. PALLONE. All right. Well, I just—I want to thank you, because as I see it this Section 3(h) would create a loophole that would allow localities to disregard dangerous air pollution and, basically, the bill requires the EPA and the States to pretend that real harmful air pollution doesn't exist and isn't hurting our kids when in fact it may very well be.

So thank you very much. Thank you, Mr. Chairman.

Mr. WHITFIELD. Chair recognizes the gentleman from Illinois, Mr. Shimkus, for 5 minutes.

Mr. SHIMKUS. Thank you. This has been a great hearing. I am sorry, I just had to step out.

So I want to start with Mr. Mirzakhali. I am sorry if I butcher it. I am Shimkus. I get it butchered all the time, too.

The—you don't question anybody on the panel with you and their concern about air quality, do you? I mean, all your colleagues there, in essence, you don't—you don't question that they are doing their best for the air quality of the areas that they represent?

Mr. MIRZAKHALILI. Absolutely not. I copy their programs quite often. I go through—

Mr. SHIMKUS. Let me go on because—yes, I mean, this is great testimony that we have heard from some of your colleagues, and Mr. Sadredin, I think we would pull up—I would encourage people to look at his testimony and look at the two charts he refers to in his testimony.

I don't know if you can pull it up. We are having trouble, and so that is why I was bouncing back and forth.

The reality is in San Joaquin Valley the success of what you have been doing is undeniable, and you are coming before us.

Then you go to chart two, then you are coming to us and it says, "Even if I stop all this activity, I can't meet it." Is that how I observe your opening statement and your testimony?

Mr. SADREDIN. Yes. Thank you, Congressman.

As we speak today, the San Joaquin Valley is on the verge of having 10 active State implementation plans for 10 different standards for ozone and particulate matter.

There is nothing in this bill that would take this impossible mandate that is before us as we speak that by next August our region is required to put a new State implementation plan together to reduce emissions down to zero from all these sources, very near zero, and even then it is questionable whether we meet the standard because the background concentration that we have.

So when people talk about this bill rolling back or holding back requirements, there is nothing like that. Just meeting the current standards we have to go to the Nth degree of throwing more than the kitchen sink because we've already thrown that in.

Mr. SHIMKUS. And let me go to Mr. Cabrera because I saw you shaking your head when the ranking member was talking.

I mean, you are in the same position, in essence. So what do you do?

Mr. CABRERA. There is very little that we can do. And so to answer the question about the exceptional events, the Clean Air Act and the rule will regulate an area that exceeds the standard on four days only the same as an area that exceeds the standard every day.

So an area that exceeds the standards on four days of the year versus an area that exceeds that standard every single day of the year get treated the same and that is the reason why you need exceptional events.

Mr. SHIMKUS. Yes, and Congressman Olson showed me a picture of an exceptional event in Texas and actually told me that there were 10 exceptional events that he could speak to.

How many of those got kind of a waiver or whatever the EPA does to say OK, we will take that into consideration, Dr. Shaw?

Mr. SHAW. I don't have that number but I will speak to it general and it is challenging and it is uncertain whether you're going to have success.

It takes an awful lot of personnel input to get there and oftentimes before you get there the damage is done from that.

And so I can't speak, unfortunately, to the number of those that were successful. But in general those are some of the challenges with those exceptional events.

Mr. SHIMKUS. So Mr. Mirzakhali, part of the—why I focused on you at first because in your opening statement you made a comment—this is why we find this debate troubling—that even though there is not technologically a feasible way to get to a level, you are testifying that we should meet it anyway.

Mr. MIRZAKHALILI. What I said was—

Mr. SHIMKUS. That is what you said in your opening statement.

Mr. MIRZAKHALILI. I said that in setting the health—air quality standard should be independent of technological feasibility because so the science indicates—

Mr. SHIMKUS. Yes, so even though there is not technology to get there, they need to have that as a standard. That is why we have—let me go real quick. I am almost done with—I only have 30 seconds, and I apologize.

So the other issue that I have dealt with numerous times is the public domain doesn't understand the multiple different environmental rules and regs that are—that are imposed upon air quality folks in this country.

So here we are talking about ozone, PM. So the public out there, the C-SPAN viewers are saying, "What's the deal? It's one air provision."

Well, we know it's not, right? You guys deal with it, and I always bring it up and I am going to do it again. You are dealing with MACT. It was mentioned in some opening. We got mercury air toxics.

We have got air quality standards for particulate matter. We have got cooling water intake rule. We have coal ash startup shutdown malfunctions, Clean Power Plan, ozone rule.

This is just one of a multitude of a cavalcade of rules and regulations that are imposed upon people who are trying to protect the air quality for their citizens and they—you all need help and you all need a delay in implementing this and that is why this is—this is a good bill and I appreciate my colleague for bringing it forward and I yield back my time.

Mr. WHITFIELD. At this time, the Chair recognizes the gentleman from California, Mr. McNerney, for 5 minutes.

Mr. MCNERNEY. Well, I thank the chair. You know, the San Joaquin Air Pollution Control District has done an excellent job over the years and I think should be a model for some of the districts across the country.

For example, the last couple years have been some of the cleanest on record. Would you discuss some of the accomplishments of the Air District and how you have attained those accomplishments?

Mr. SADREDIN. Yes. Thank you, Congressman McNerney.

We have been doing this, as you know, for over three decades now in San Joaquin Valley.

But, unfortunately, as we speak today, the congressman mentioned, you know, when was the first ozone standard published—1979, when our ozone standard—we made significant reductions in emissions and we are just barely in the process of meeting that standard because the way the Clean Air Act is constructed if you have 1 hour of exceedance—

Mr. MCNERNEY. But, I mean, that wasn't my question. How did you meet those?

Mr. SADREDIN. Well, we have imposed the toughest regulations on valley businesses from small Ma and Pa operations, service stations, paint shops, all the way to our largest power plant refinery that we have.

Mr. MCNERNEY. Have you—have you been able to use technology—new technology? Has there been incentive for you to use new technology that you've implemented?

Mr. SADREDIN. Yes. We support regulations or mandates that force technology. But we have to take a close look at, you know, where we are at this juncture in our history. This is not 25 years ago when cars did not have catalytic converters and there was a lot of low-hanging fruit.

There is nothing in this bill, in my opinion, that would hold us back in continuing to push technology because of the current standards. There is nothing in this bill that would make us go back and have any of these tough regulations that we have imposed to roll them back.

Technology has been the savior. As we have moved forward, more technology is available. But today, unfortunately, even if money were not object, technology does not exist today even on the drawing board to get to some of the reductions that we need.

And as I said, even if we eliminated everything, just say we don't have technology, let's shut down agriculture—let us shut down all businesses, it will be difficult to meet the standard.

Mr. MCNERNEY. You have mentioned that the new standards will be detrimental to public health. Could you explain that?

Mr. SADREDIN. I said that there are a number of provisions in the Clean Air Act right now that are detrimental to public health and a couple of them are being addressed by this bill.

The obvious one, which is a classic case of well-intentioned provisions that has led to unintended consequences is a requirement that extreme ozone nonattainment areas such as ours have to have contingency measures.

Of course, contingencies make sense. Everybody said, Whatever you do let's have a contingency measure in place. But an extreme

nonattainment area by definition is an area that has to throw everything in the mix in their plan.

There is not an A list of measures that we say oh, let's just do those and hold back. Some of those measures were contingency ARB's policy and the way the rule is written will force areas like ours to not put in place all the technology that is available.

Hold some of it back for contingencies later. To me, that is detrimental to public health.

The other thing that is detrimental to public health the way the Clean Air Act is constructed right now it does not distinguish the fact that various pollutants have different impact on public health.

Not all PM 2.5, for instance, has the same impact. Some of it is ammonium nitrate, which might be, you know, respiratory irritant, whereas you have diesel carcinogens which cause cancer, toxic.

In the Clean Air Act, it says you treat them all the same and waste a lot of resources and efforts on reducing pollutants that have much less benefit to public health versus what we could do with others.

And then, finally, the whole bureaucracy of having 10 plans—it takes a lot of resources that are diverted from being able to do things to actually reduce air quality and improve public health. To me, those provisions are detrimental to public health.

Mr. MCNERNEY. Thank you. Mr. Mirzakhali, does Delaware have any regions that are having difficulty meeting standards because of noncontrollable sources?

Mr. MIRZAKHALILI. Certainly. Our struggle with ozone are—is mainly I attribute to emissions that are outside of our jurisdiction and are transport related.

Mr. MCNERNEY. So have you been able to work with the EPA to develop the flexibility you need to deal with that?

Mr. MIRZAKHALILI. What we have—we have been struggling with EPA trying to get them to actually expand in nonattainment areas. That was a case that we delegated with EPA, saying that more areas outside of Delaware should be designated because they contribute to our nonattainment.

As nonattainment be subject to the requirements of—that we are subject to to get—put the emissions reductions in place in order for us to attain.

We are not successful in that effort but by delaying the standards, by not implementing the reductions Mr. Sadredin's problems aren't going to go away and if the emissions reductions don't take place in upwind areas our problems aren't going to go away. In order to solve air pollution we need to reduce air pollution.

Mr. MCNERNEY. Thank you, Mr. Chairman.

Mr. WHITFIELD. The Chair will recognize the gentleman from Ohio, Mr. Latta, for 5 minutes.

Mr. LATTA. Thank you, Mr. Chairman, and very good hearing today and thanks to our panelists for being here today.

If I could start, Mr. Sadredin, if you would like to respond if you can remember exactly what Mr. Mirzakhali comments on—exceptional events. Could you comment maybe on what he had commented on?

Mr. SADREDIN. Yes. There are a couple of areas that I don't agree with, let's say.

First, Congress, even 25, 40 years ago when the act was passed recognized the fact that exceptional event provisions make sense because there are times when everything is overwhelmed by things you have no control over and regions should not be penalized.

The misunderstanding that I see in some of the discussions there is that somehow what is in this bill or allowing a more reasonable approach to an exceptional event is being characterized as misleading the public or not letting the public know what's going on.

There is nothing with exceptional events that says you do not measure air quality and do not report to the public what the air quality actually is, and if you have programs like we do, working with the school districts on bad air quality—to stay indoor—whether that air quality is bad because of an exceptional event or a source of air pollution, those things will stay in effect and the public is fully aware of those.

The only thing that an exceptional event provision that says it will keep the area being penalized from having had this violation that they have no control over—and, as you know, there a number of penalties, sanctions in the Clean Air Act when you don't meet the standards—as was mentioned, if you have one day of exceedance in the region you still have all the requirements applying to you.

It is just when you have an exceptional event we say don't hold that against us for the sanctions and other obligations that come into play.

There is nothing in this bill that would take that away in terms of communicating to the public what true air quality is and all the protections that you need to put in place with respect to that.

Mr. LATTA. Thank you very much.

If I could turn to Mr. Matheson, and this has come up before. But when you see that the National Park Service released data that at many national parks—this is the Joshua Tree National Park, Sequoia, Kings Canyon National Parks, even Yosemite—had ozone exceedances in 2015 you note in your written testimony that many rural Western national parks, the canyon lands in Utah are located far from any emission sources yet routinely are above the new ozone standard levels of 70 parts per billion.

And so I guess my question is are you concerned that from many parts of the western United States there may be few if any options I know we just heard a little bit about, but what options are there then to complying with this—these regulations? How do you do it?

Mr. MATHESON. It is a significant challenge, and I know the Western States Air Resources Council, which is the 15 States in the West and their air directors, have been looking at this issue and they found that there has been some recent research suggesting that there are 12 counties in six States in the inter-mountain West where the design values exceed the 70 parts per billion but the human in-State contribution to that pollution is 10 percent or less.

Mr. LATTA. Let me interrupt for one second because, again, I am from Ohio. We have 88 counties. My home county is one of the top 10 counties in size. It's 619 square miles.

I noticed Yuma County—I did a quick check—is 5,519 square miles. You know, we are looking at size differences and you are

lumping everybody together as a county. How do you adjust for that and how do you account for it? How are you going—

Mr. MATHESON. And I will give you another example in Utah. San Juan County, where Canyonland National Park is far away from any urban areas, it's about the size of New Jersey, has a population under 16,000. The industrial emissions for NOx are 400 tons a year total. For VOC it is 100 tons a year total.

So if you look at the standards that are applied based on ozone formation typically in the East and in urban areas, the requirements are looking at fuel reformulation, looking at emission testing for cars, control requirements on business, traffic controls, et cetera. Those provisions don't apply and don't work in a county like San Joaquin County that does at times exceed the 70 parts per billion.

Now, we are committed to clean air and we are looking at every option available. But at times those options just aren't available. We have seen many situations in the southwestern part of the State where we measure the air mass coming into the State, and it is above the standard.

It goes through the metropolitan area of St. George and measured on the other side. The ozone is just the same. And in fact, if you measure at night, ozone goes down because of NOx scavenging.

It's a—you have a chemical reaction that takes some of the ozone out of the air. So, again, we are finding it hard to justify how in the East you reduce NOx and VOCs and ozone has gone down. In many parts of the West, we have dramatically reduced NOx and VOCs and over the last 20 years ozone has stayed relatively constant.

Mr. LATTA. Thank you very much. My time has expired.

Mr. WHITFIELD. At this time, the Chair recognizes the gentleman from New York, Mr. Tonko, for 5 minutes.

Mr. TONKO. Thank you, Mr. Chair, and certainly having worked, before entering Congress, on a number of environmental and energy concepts, it is nice to know that we can protect the environment and public health and grow the economy and that they are not mutually exclusive.

In fact, they do indeed support each other, and I know that Representative Rush had quizzed some of you about the 5-year review cycle, the rationale there, and citing some of the experiences.

I would like to dig a little deeper into that and, if I could, as you, Mr. Mirzakhali, the—about some of the 5-year cycle.

Were there significant amounts of new research and scientific knowledge that informed the recent revision to this standard?

Mr. MIRZAKHALILI. I am sorry. Could you repeat that?

Mr. TONKO. Yes. Are there significant amounts of new research and scientific knowledge that informed the recent revision to this standard?

Mr. MIRZAKHALILI. Absolutely. There was a wealth of additional studies. I don't recall the exact number of additional studies that were a part of the record of the decision.

But CASAC considered all of those and there are—we are getting at additional studies coming out every day. Right now, a new study that came out tying air pollution to preterm, for instance.

It is—need to be considered. They need to be in front of the scientific community and inform EPA of our policy decisions.

Mr. TONKO. So if we create this construct of a 5-year window or have, new and significant research can become available. Is it fair to say that delay of this proposal—of the proposed—of this proposed legislation would hinder the agency's ability to ensure the latest science being incorporated into EPA's decisionmaking?

Mr. MIRZAKHALILI. It would certainly bar them from using it and will not—as is the agency is—can review it in a timely manner and make revisions as necessary. What lengthening the cycle would do is just set it aside until the time comes up.

Mr. TONKO. And under the current law, if EPA finds that a change is not warranted in that 5-year cycle does it have to revise the standard?

Mr. MIRZAKHALILI. No, they do not.

Mr. TONKO. Is it correct that the recently revised standard is consistent with the recommendations of the Clean Air Scientific Advisory Committee and the latest science?

Mr. MIRZAKHALILI. It is.

Mr. TONKO. In fact, that committee, I concluded, I believe, that the latest science supports a standard within a range of 70 parts per billion down to 60 parts per billion. So EPA's standard is on the high end of that range.

The purpose of these standards is to establish a level of air quality that adequately protects public health based on the latest scientific knowledge.

The increase to a 10-year review cycle would undermine that effort. The current 5-year cycle provides a reasonable amount of time for the development of new research.

So the intent of this bill, I believe, is to obstruct EPA from performing its duty to promote public health by increasing the length of its review cycles. But I see the possibility for that to backfire.

Apparently, EPA has discretion to not change standards and in its last revision it decided on the high end of the range suggested by the independent Clean Air Scientific Advisory Committee.

And after a 10-year span existing standards will no longer be based on the latest scientific evidence and proposed regulations may have to be even more ambitious to meet future long-term public health needs.

Now, you may be changing the standard less often but the changes may have to be much more drastic. So do you think that may be a possibility, what I just said?

Mr. MIRZAKHALILI. I completely agree with your assessment.

Mr. TONKO. I think that, you know, what we have here is an opportunity for us to move forward with science and technology to assist us in strengthening the outcomes and would strongly encourage the community to—your given technical community to encourage us to do the most effective outcome here.

Mr. MIRZAKHALILI. I completely agree. I think it is—the large number of health care community out there that also agrees with you.

Mr. TONKO. And erring with that great growing sentiment I think is the way that will allow us to achieve the best results. So with that, Mr. Chair, I yield back and thank you.

Mr. WHITFIELD. Gentleman yields back. At this time, the Chair recognizes the gentleman from West Virginia, Mr. McKinley, for 5 minutes.

Mr. MCKINLEY. Thank you, Mr. Chairman.

Let me try to understand. I want to cut to the chase a little bit on this. I think the whole rationale for lowering from 75 to 70, as I recall, with McCarthy and others who have come in and testified, was it was to improve our health, particularly address asthma.

Is that a fair statement, that that is generally why they lowered it from 75 to 70? I am hearing that from testimony.

But yet, we have—time and time again others have come in here and said there is not relationship between ozone and asthma.

We have—Utah State came out with a report on that. A Los Angeles study came out in 2011 on it. Johns Hopkins just came out a couple years ago, said there was no connection. So I am troubled with the rationale of lowering it from 75 to 70 when there is no connection, especially when we hit rural areas or States with non-attainment zones and the impact of it.

I don't think—and I refer to a lot of Mildred Schmidt—I don't think the lady on the street understands what has just happened when we've lowered this.

So for Mildred Schmidt—in West Virginia I have got the most—these are the absolute latest, just printed today, that our capital this year hit 72. Another city was 74. My city was 72. Another community was 77.

Morgantown, home of the Mountaineers, 74. I am just troubled with where we are going with this. I guess it is fundamentally goes to that—just because Government can change or modify a regulation doesn't mean that it should. It has the power to do that but why are we doing this.

So let me ask the question. If you are in a nonattainment county, what are you supposed to do? It is my understanding we can't get air permits—or excuse me, you won't be able to get a construction permit.

In West Virginia, in these towns I just referred we are the 51st unemployment rate in the Nation. We are the eighth most impacted by regulations in the country and yet we are just now going to put another layer on it that I am not sure is going to improve public health.

Mr. SADREDIN. I believe you bring an important issue to the light here that is really at the heart of this legislation that is before you which really gets to the implementation phase of the Clean Air Act.

People could argue where the standards should be set or where it shouldn't be. There could be—there are various opinions on that. But there is a misnomer out there that people equate cleanup in the air and improved public health by just setting a new standard.

But the realities that we face today after 25 years, after 40 years is that we are—the best way you can describe it—the process that we face right now when standards change it's the chaos that leads to a lot of litigation, a lot of delay and no cleanup in the air.

And then they, I think, the more—what this bill essentially does it doesn't say ultimately the 70, if that's the best standard, will not take effect. It just says let's bring some order to the process.

We have, in our case, 10 other State implementation plans already for the existing plans that we have to deal with. Let's deal with those and then in 8 years there's no rollback, no change in the progress that we have made. Let's bring some order into the implementation phase of it.

Mr. MCKINLEY. But, Dr. Shaw, if I could—you touched on something that has been dear to my heart because I think many people—I was a professional engineer before I came here, one of just two in Congress and we dealt with a lot of indoor air quality—and so the fact that you mentioned the 90 percent I am with you.

That is exactly what it is. We focus a lot on indoor air quality. Are we chasing the wrong rabbit here? Should we really be looking at indoor air quality versus the exterior?

Because if we are spending 90 percent of the time indoors, where should we—so I would like to hear from you in the time remaining. Which should we be addressing? Which rabbit should we be chasing?

Mr. SHAW. Thank you, Congressman. You used one of my favorite adages and that is that we are chasing the wrong rabbit and that is the reason that I am so motivated and why my staff has dedicated significant resources to trying to better understand both the ozone standard as well as helping to try to provide some input into a better process.

Because what we do know is, as you point out, there's dubious connections between the respiratory health issues that we are trying to address at this point and the ozone standard.

The justification for lowering the ozone standard to try to improve asthma is primarily associated with epidemiological studies, looking at the correlation between ozone and people's hospitalization associated with that.

Those don't hold up uniformly across the country and certainly I think we are missing the opportunity to chase the right rabbits and we need to find out if it is indeed indoor air quality, which I think probably plays a large part to that, or it is ozone plus something else or it's something else in the ambient environment. But just simply lowering the ozone standard, I am convinced, is not going to give us the health benefits that we seek.

Mr. MCKINLEY. Thank you very much. I yield back my time.

Mr. WHITFIELD. Gentleman yields back. At this time, I will recognize the gentlelady from Florida, Ms. Castor, for 5 minutes.

Ms. CASTOR. Good morning, everyone, and thank you, Mr. Chairman, for calling this important hearing on the Clean Air Act, and I hope the committee and this Congress will not weaken the Clean Air Act or undermine the important progress America has made in cleaning our air since the 1960s.

The Clean Air Act does require EPA every 5 years to review the air quality standards that govern the air we breathe and the law says make revisions as appropriate.

So last October after thousands of studies and comments and recommendations from the Independent Clean Air Scientific Advisory Committee, the EPA proposed lowering the air quality standards by 7 percent, from 75 parts per billion to 70 parts per billion.

This is an important revision and it keeps America on the track of continuing to make progress, and if you look back since the

Clean Air Act was adopted in the 1960s and then amended in the '70s and especially the '90s we have been able to—we have the strongest economy in the world and we have been able to make progress still with better air to breathe.

And this is especially important because it has such great consequences for our families and neighbors back home. We have been able to reduce smog across country. According to the American Lung Association, inhaling smog pollution is like getting a sunburn on your lungs and it often results in immediate breathing trouble. And long-term exposures to smog pollution is linked to chronic asthma and other respiratory and lung diseases, reproductive and developmental harm and even premature death.

The American Lung Association has determined that there are currently almost 150 million Americans living in areas with levels of smog pollution that are linked to health problems.

It is particularly harmful to children whose lungs are still developing, particularly harmful to older adults because of their age and all of our bodies become increasingly susceptible to the assault from dirty air and it is particularly harmful to our neighbors and communities of color and in low income areas that often struggle with environmental justice issues because they live and their children grow up next to industrial plants and other large-scale polluters.

But you have to compliment the industrial community in America. They have been able to make great progress, and the ag community too.

So it's a balance, as we move forward. But I am concerned that the bill we are considering today is really going to throw a wrench into the progress that we are making and despite the importance of continuing to make progress, this is not—this rule and these new standards aren't going to happen overnight.

They say States will have between 2020 and 2037 to begin to—or to address it and to make progress, and I know the EPA has said, "We are going to work with the States."

After reviewing the bill, it is clear to me that H.R. 4775 would drastically alter the Clean Air Act to weaken air quality protections. It would allow more pollution and threaten the public health.

The bill also undercuts our national ambient air quality standards process for all other pollutants. That is not appropriate.

These proposed changes would undermine significantly the features of the Clean Air Act that have driven important progress in improving air quality and public health.

And I have one specific problem that I wanted to ask Mirzakhali about. It is the definition of exceptional events for air pollution such as it would expand that definition to include hot days, drought and stagnant air.

And, unfortunately, what we used to think of as exceptionally hot days is now your typical summer day in Florida and in other places.

So what's the practical impact of including these types of occurrences in the definition of exceptional events?

Mr. MIRZAKHALILI. You are spot on, Congresswoman. It is why declaring those conditions which are required to create pollution as an exceptional event you are essentially barring—defining a—you

must also define clean air and not—you know, whereas before was—there were exceptional events they were subject to rigorous demonstration to EPA in order to exclude them from assessing the air quality designation.

Here, we are just—it broadly opens up the definition to exactly what you suggested, which is hot days, inversions can be now included in a definition of an exceptional event. They are everyday events. They are not—they can't be considered and shouldn't be considered exceptional.

Ms. CASTOR. Well, I share your concern and, as climate change continues to exacerbate droughts and heat waves, these events are becoming even more common and I have to say this is America, we can do this together with industry and with all of you as technological experts in concert with the Environmental Protection Agency and the Congress. But we shouldn't take a step backwards and we shouldn't undermine the Clean Air Act and not continue to move forwards.

Mr. WHITFIELD. The gentlelady's time has expired.

At this time, we'll recognize the gentleman from Texas, Mr. Flores, for 5 minutes.

Mr. FLORES. Thank you, Mr. Chairman.

I want to talk about the impact of the conflicting regulations that have been proposed by the EPA on State resources. I will start with you, Mr. Sadredin.

You testified that your local air district is subject to four standards for ozone and four standards for fine particulate matter and that each standard, quote, requires a separate attainment plan which leads to multiple overlapping requirements and deadlines, unquote.

And so how does your agency harmonize all of these overlapping requirements?

Mr. SADREDIN. Unfortunately, under the current state of the act with the current framework, we are not able to do that, which causes a great deal of confusion for the public, for the businesses that have to comply with these redundant requirement with multiple deadlines and time lines that they have to comply with.

What we hope this process would allow by giving some additional time before the next standard kicks in that perhaps we could make a case to EPA that if we took the most stringent parts from all these eight standards that we are subject to, put them in a single plan with a single set of regulations to be able to do that.

So that is why I don't think this legislation rolls back anything. It just gives us the time to do it right and do it in a harmonious fashion.

Mr. FLORES. So what you have to deal with now requires significant staff and resources and you've got—so you are spending all this time and resources on these conflicting plans and are we getting any corresponding health benefits out of this?

Mr. SADREDIN. We are not, because as I was trying—when Congressman McNerney asked me about your accomplishments the reason that I mentioned the 1-hour ozone standard is that we have been working on the existing standards, throwing in the kitchen sink at all of them. Simply setting a new standard will not clean the air.

We still have to get to zero emissions with the existing standards. The new standards just make it impossible even if we get to zero emissions meet the standards.

Mr. FLORES. Right. Right. The prior questioner talked about rolling back—that the bill rolls back several regulations. Does it—Mr.—Dr. Shaw, does it roll back any regulations?

Mr. SHAW. No, it does not. As I understand and read the bill, it does not roll back. It simply provides for additional time with the implementation of the latest standard but it does not roll back those requirements that are in place.

There is a lot of technological advancements that are—that are in place that will continue to be in place and those areas that can meet this standard likely will. The challenge is those areas that are having difficulty because the technology is not there will be additionally penalized. And so this does not slow down the progress that we see underway to meet the current standards.

Mr. FLORES. Back to the same question that I asked Mr. Sadredin—sorry, I am messing your name up—what is the impact of the multiple—the conflicting standards on your resources?

Mr. SHAW. Certainly it takes a huge impact on staff resources but also I think it's important to add to—the comments are that it also prevents us or minimizes our ability to work cooperatively to find those things—when we work and engage with the regulated community to find approaches that make sense for multiple pollutants that we are trying to obtain.

It's often misperceived that what you do to reduce one pollutant also reduces others. Oftentimes, that's not the case. There's sometimes a parasitic component to that and raising one lowers another, lowering one raises another.

Mr. FLORES. Mr. Cabrera, any comments from you on the multiple standards that exist today?

Mr. CABRERA. Well, we just want to clarify that the Clean Air Act has an escalation so you have time lines to meet the various standards.

You have 3 years, then 6 years, then 9 years, and there is increasing regulation on businesses every time you don't meet the standard. And that is why the background issue, the international transport issue is so big because you would be increasing standards on localities that have not caused the air pollution in the first place.

Mr. FLORES. OK. And Mr. Matheson, would you like to comment on the conflicting standards?

Mr. MATHESON. Thank you. We share some of those concerns and I think we've been talking generally about two different issues.

One is the standard itself and its health impacts. The other is how you implement that, and the implementation does have an impact on our air quality.

When we've got limited resources and are spending that time on paper exercises rather than on working on getting the information, the science, the data to ensure that in the unique chemistry that we see sometimes we are actually targeting those emissions that make the biggest difference, not just those that are imposed on it.

Mr. FLORES. OK. And there was some commentary that going to a 5-year review period—going to a 10-year review period from a 5-year review period causes great harm.

I look at the rollout of various standards over the years. There was 8 years between the first two—I mean, from '71 to '79 before you changed standards.

Then there was 18 years between '79 and '97, and then there was 9 years. So in all this time our environment situation has gotten better.

So it doesn't sound to me like the world ended because we weren't adhering to a 5-year standard. Do any of you all disagree with that? OK. Thank you. I yield back.

Mr. WHITFIELD. Gentleman yields back. At this time, the Chair recognizes the gentleman from Texas, Mr. Green, for 5 minutes.

Mr. GREEN. Thank you, Mr. Chairman and the ranking member. I thank the witnesses for being here today, specifically Bryan Shaw, the chair of our Texas Commission on Environmental Quality. It's always nice to have a Texan testify here.

I would also like to acknowledge Alan Matheson, cousin of our longtime colleague from this committee, former Representative Jim Matheson. I miss Jim because on my side of the aisle he voted with me a number of times.

But it is not secret in Houston we have air quality challenges. Just yesterday the EPA granted the Houston-Galveston-Brazoria region an additional year of compliance.

The region currently sits on 80 parts per billion, which is still above the 2008 ozone standard. So we needed more time.

That being said, we have come a long way in Houston since the 1970s when the ozone measure was 150 parts per billion. I think today's discussion is an invaluable exercise.

While I don't support the majority's legislation, I think there is reasonable efforts that can be made to improve implementation of NO<sub>x</sub>.

Chairman Shaw, in your testimony you stated the Clean Air Act's requirement of the EPA ignore technological and economic considerations may have made sense 40 years ago but now pollution reduction is economically burdensome.

We've repeatedly discussed the issue of technological feasibility and economic achievement. But the Supreme Court has stated the most important forum for consideration of technological and economic claims is before the State agency where you sit.

Can you—your agency consider the cost in technology in drafting a SIP?

Mr. SHAW. No, sir. We have to come up with a plan that meets the standard and we have to satisfy the model. So we have to find what approaches where we can make arguments. But we have to develop a plan that will achieve the standard.

Mr. GREEN. But are you allowed to consider the cost in technology?

Mr. SHAW. I don't believe that I have had any success or that we were asked to be able to offer to do anything besides meet the standard because of cost and technology. We basically have to find a way to get there, even including very draconian if necessary.

Mr. GREEN. My big concern is if we want to do what's technologically possible and hearing the testimony from parts of the country that just—unlike in Houston.

You know, part of our problem is that we need some better roads instead of all the dirt that flows up and dust that flows up into the air, particularly an industrial area like I represent.

So there's things we can do. But if it is not technologically possible I really do think that the State agency, as the court said, or maybe EPA ought to consider it. I am just glad we got another year so we can continue to work. But I wish I could say we would pave those places in my district in the last year. I've been working on that for a dozen years now.

But if the State can already consider it by the court order why is it not sufficiently flexible to meet the new requirements?

Mr. SHAW. I think the key there is somewhat similar to the issue here where we talk about concerns over exceptional events. It's that we have no process where we have some certainty and ability to actually get—to move the needle based on those options.

We can talk about exceptional events but those are very challenging and oftentimes the damage to the location is already done because the jobs that you need to be able to afford the new environmental benefits get impacted because you basically have to go through this process and hoping that you get some relief.

But we typically don't find that relief. And so the implications is while there may be the potential for it, it's long coming and often not available.

Mr. GREEN. What will we do in Texas for the year extension we have? Because we still don't meet the standards that, you know, that we were earlier.

Mr. SHAW. Right. Well, we will continue doing the things that we are doing, which is looking for new technologies, better ways to move forward.

We continue to try to attack 60 percent of the ozone challenges, NOx emissions from mobile sources in this area and so we have the innovative programs, the TERP program—Texas Emissions Reduction Plan—where we incentivize turning over older vehicles.

So we try to get any fruit we can, recognizing that we need a ladder or an extension bucket to get to that fruit these days.

Mr. GREEN. Well, and in my area we have industrial facilities, refineries, chemical plants. But they're stationary. You know what they're doing.

But our problem is we also have tremendous truck traffic not only from those plants but also the ship channel and so the mobile sources are an issue.

Is there a split between what the stationary sources are as compared to the mobile sources?

Mr. SHAW. About 60 percent of our NOx emissions are from the mobile side of that. So that's where—and the stationary sources have been controlled to the point where there is not—it is very difficult to find technologically and, certainly, economically feasible but technologically even feasible reductions.

And so our primary areas for opportunity are continued in the mobile sources but those we are not—we are not regulating. The Federal Government regulates those. So we can incentivize pro-

grams to turn over trades trucks and railroad locations and diesel engine retrofits.

Mr. GREEN. OK. Director Sadredin, in December '15 as part of the 2015 ozone standard the EPA released a white paper on background ozone, which discussed exceptional events.

The white paper requested comments from stakeholders. Last month, EPA had a workshop to follow up on these. During the workshop none of the participants raised the issue of drought or stagnation. Some stakeholders are interested in development of further guidelines and templates for exceptional events. A few, however, were concerned, that spending limited resources on development of exceptional events guidance.

In Texas, we know the issue of drought and in fact I am worried we are getting back into it in some cases. Would your control district consider additional guidance regarding qualifying events a worthwhile use of time or recourse?

Mr. SADREDIN. Thank you for the question. Unfortunately, EPA has closed the door on considering drought and these extraordinary conditions from being considered as exceptional events because the Clean Air Act as written is silent on that and EPA has interpreted that as meaning no, you cannot do that.

So with that door closed we didn't think that we could have any productive discussions with EPA because they've already told us no.

We just think a 100-year drought—we'll argue, well, maybe 100-year droughts that we are facing that will become ordinary because of climate change. But we are not quite there yet even if you accept that on the face value.

All this, though, says if you have extraordinary conditions such as a 100-year drought under EPA's guide, EPA ultimately will be the arbiter on that—does it qualify as an exceptional event.

You still have to follow all the procedures and guidelines that EPA has laid out for any exceptional event.

We are saying that should—the door should be open to have that discussion that this was—this was extraordinary and should qualify as an exceptional event.

Mr. GREEN. Thank you for your answer. Thank you for your time. I know I've run over a lot. Mr. Chairman, thank you.

Mr. WHITFIELD. At this time, the Chair recognizes the gentleman from Virginia, Mr. Griffith, for 5 minutes.

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

Mr. Sadredin, my understanding is is that even after a non-attainment area is redesignated as being in attainment it is still subject to EPA oversight and maintenance plans for an additional 20 years. Can you explain if I am right on that understanding and how that works?

Mr. SADREDIN. That is correct. As I have said, you know, we have made major progress over the years to meet the standards. We used to be nonattainment until 2010 for PM 10 and we came into attainment.

But what happens right after that you write a maintenance plan, which is essentially identical to a State implementation plan. You still have to maintain all of those regulations that you had in place

if all of a sudden you end up in, you know, not meeting the standard or various new requirements that kick in.

So it's a never-ending process in terms of maintaining the control and you will never have an opportunity or a circumstance where you can roll back any of the existing measures that you have put in place to come into attainment.

Mr. GRIFFITH. All right. So let me—let me see if I can clarify and go from there, and I see some other, particularly Dr. Shaw, nodding his head.

So you've now—you've now hit the attainment and you said you have to put a maintenance plan in which, to me, makes some sense. But then you said you have to keep all the controls.

Does that mean that your new—you can have a new plan that says here's what we are going to do to maintain or do you have to keep all the controls in place that were in place even if there's no evidence that a particular control was relevant to bringing you into attainment?

Mr. SADREDIN. Essentially, when you put a maintenance plan you cannot roll back any existing regulations that you had. If there is a potential scenario like that, that would be the case. That is exactly as you describe it.

But given that we have four—eight other plans to meet with there is always regulations that are needed to meet those new requirements and they can also be used to satisfy the existing maintenance plan.

Mr. GRIFFITH. And I just want to make sure that I am not miscommunicating because my wife accuses me of doing that sometimes. So as I understand it, even if there is—even if there is evidence that one of the plans had nothing to do with you coming in to attainment and may just be superfluous, you still have to maintain that particular component?

Mr. SADREDIN. Yes. There is a general legally accepted provision that once a particular control measure becomes part of a State implementation plan you can never relax that regulation.

Mr. GRIFFITH. OK. Yes, sir. My time is running out so if you could be brief.

Mr. MIRZAKHALILI. I will be—I will be quick.

Mr. GRIFFITH. You disagree?

Mr. MIRZAKHALILI. I disagree. I think, first of all, the way EPA has addressed it, the standards of clean data determination in a lot of areas get—be designated to attain them without having to develop a maintenance plan.

So there isn't another way of getting to where the requirements don't carry over. For a maintenance plan developments if the plan is—it can, it gives you the flexibility to show that you are achieving the reductions and maintaining those reductions while mixing and matching.

We can do that under our attainment plan strategies. I can take and measure out what I have to replace it with something else that gives me that reduction so that I can—I can show that attained.

Mr. GRIFFITH. OK. So the distinction would be, however, if you've got a—if you're taking something out that does nothing but you have to put something back in, based on what I am hearing from both of you but it's a legalese thing, I may still have to put some-

thing back in even if I don't think it does any good if I am taking something out that doesn't do any good because you have to replace it with something that does the same type of thing.

And so—and we could debate this all day, but it sounds like to me that while there may be a slight distinction between what the two of you are saying it is basically the same.

You still—you've still got to plan. You've got a component. You can't just eliminate that component if it turns out to be not accurate.

I've got to move on because I do have another question I want to get in and I don't have much time left. Mr. Sadredin again, when the EPA revokes a standard, do States or localities continue to be subject to obligations under those standards?

Mr. SADREDIN. I looked at Ms. McCabe's testimony and that was cited as one the streamlining measures in the act currently, that if you revoke a standard, say "no harm, no foul," you can move on. I have to say, first of all, before I comment on Ms. McCabe's testimony she has always been gracious, generous with time and creativity in helping us do everything that we need to do and we worked well together with her and with EPA.

And in fact, I was happy that in her testimony she did not object to a couple of things that are in this bill that we had advocated for the contingency measure elimination for extreme areas and also economic feasibility with relation to RFPs.

But on that particular issue relating to revocation of the standards, I think it's a bit misleading to say when the standard goes away we don't have to do anything.

As I am sitting here before you, June of this year we have to write a plan for the 2008 ozone standard, which is about to be revoked.

We have a plan in place actively for the 1997 ozone standard. We still have a plan in place for the 1979 ozone standard. Everything that is in the act remains in place when you revoke a standard.

The only thing that goes away is you can do a new transportation budget. Otherwise, every other requirement stays in place and to somehow say revoking the standard takes away requirements it's absolutely incorrect.

Mr. GRIFFITH. I appreciate it, and I yield back. That's the end of my time. Thank you, Mr. Chairman.

Mr. WHITFIELD. Chair recognizes the gentlelady from California, Mrs. Capps, for 5 minutes.

Mrs. CAPPS. Thank you. Thank you, Chairman Whitfield and Ranking Member Rush, for holding this hearing. Thank you to each of you witnesses for your testimonies today.

You know, I am sort of like the catch-up questioner now, and many of the things probably I will say or ask may have been said one way or another. But I want to make sure we get some things on the record.

Over 40 years ago, our predecessors in this place recognized they had the power to protect the health—this is about health—of all Americans and the environment in which we live.

Several landmark laws were created to do just this right about that sort of pivotal time. During the 1970s, even before we saw the creation of the National Environmental Policy Act—NEPA—the

Clean Water Act, the Safe Drinking Water Act, the Endangered Species Act—so many at that particular time.

In addition, Congress passed a significant overhaul of the Clean Air Act in 1970. All of these laws have provided the foundation for a safer, cleaner environment and have drastically improved our public health, and it goes without saying we are still benefitting from the creation of these landmark laws.

However, since the enactment of the laws we have seen countless attacks to weaken them despite the fact that we are benefitting from them, and I think this is the nature of the society in which we live.

Instead of prioritizing the public health and the environmental safety issues, we have seen push after push to marginalize these protections that are in place.

So my questions are now for you, Mr. Mirzakhali. In your testimony, you highlighted—I probably butchered your name—some serious concerns with this legislation we are discussing and I share—I will just be honest—I share many of these concerns with you.

One of my major concerns relates to Section 3(b), which changes the criteria for establishing an air quality standard from one that is based solely on protecting public health—true to confession, I am a public health nurse by background—to one that includes the consideration of the, quote—and we have been using this phrase a lot—“technological feasibility” of the standard, and my background tells you that I have always appreciated that we should recognize that protecting our health is really the number-one priority.

In fact, you stated that this provision that we are discussing today could—I quote from your testimony—unravel the entire framework of the Clean Air Act. Those are pretty strong words.

My first question—do you believe that economic or technological feasibility should be considered in the air quality standard-setting process at all? Is there a reason that we should stray from the precedent of only considering public health?

Mr. MIRZAKHALILI. I do not.

Mrs. CAPPS. You probably said this, but if you'd say it again.

Mr. MIRZAKHALILI. Yes. No, I say it again because I think it's worth repeating that the economic affordability shouldn't be something that is used to set the standard. It is the science that should dictate what the lungs can handle, how the body responds, and we are charged with protecting the sensitive individuals and the population. The standards need to reflect that.

Now, how we manage to implement that, that's where the rubber hits the road and the economic and technological feasibility come into play.

We should not put the target where an arrow lands. That is just not the way we do things—not as a nation. That's not how we've done it and that's not how we should proceed. I understand the challenges of Mr. Sadredin's exasperation with meeting a real stubborn problem with air quality.

I understand my colleagues to my left here about their issues as well and, you know, the difficulties that Mr. Shaw—that Dr. Shaw has with the science behind this. I think it's something that's going to get litigated and debated. But that's where it should end. Science should dictate where the standard is.

Mrs. CAPPS. And you've sort of said this too even just now, but why is it so important to separate the cost—consideration of cost from setting the standard?

Mr. MIRZAKHALILI. It becomes what can we afford.

Mrs. CAPPS. Right.

Mr. MIRZAKHALILI. This is the health care that we can afford. This is the health protection that we can afford and let's—and where does this slippery slope end?

On the East coast we can—we like to pay more and therefore we get better protection, better standard and some localities get—they can't afford it so they get a higher standard.

How do we do this? This is—this just doesn't make sense. There has to be a standard that science indicates is going to protect the public health and that's what we should follow.

Mrs. CAPPS. And so, again, you touched on this but is there—are we really clear in your mind of the charge to the United States Congress in the—in this area and is there a more appropriate place for the kind of consideration that is brought up in this legislation?

Mr. MIRZAKHALILI. I think the consideration for—goes to the implementation phase of it and I think it can be done administratively through how EPA implements—it does implementation rules and how us as professionals manage to meet the air quality challenges that we face.

Mrs. CAPPS. OK.

Mr. WHITFIELD. Gentlelady's time has expired.

Mrs. CAPPS. Thank you.

Mr. WHITFIELD. At this time, I recognize the gentleman from Oklahoma, Mr. Mullin, for 5 minutes.

Mr. MULLIN. Thank you, Mr. Chairman, and thank you, panel, for being here.

I don't think it's any secret where my heart lies with the EPA. I think they overreach every day and are putting more and more pressure on States, on counties, manufacturers, job creators and the whole nine yards.

And it goes into—it goes into questions what are they thinking. Are they listening? Are they paying attention to what's actually happening out there? I'd say no.

And Dr. Shaw, I'll start with you just simply because you got a hat on the table and I—Lord, I appreciate seeing that. Don't see that enough up here.

But I am kind of interested to know, you don't look like you had to be bald. Did you just choose to do it? I mean, if I wore a hat all the time, it would be sticking to my head if I was—

Mr. SHAW. My wife has breast cancer, and when the chemo took her hair I decided to lose mine in support of her.

Mr. MULLIN. Well, what's her name?

Mr. SHAW. Dana.

Mr. MULLIN. Dana. I will tell you right now, just because I feel like I stuck my foot in my mouth, I will be praying for Dana.

Mr. SHAW. Thank you. Thank you.

Mr. MULLIN. And God bless you for being such a supporting husband.

Mr. SHAW. She's got the tough role, but thank you.

Mr. MULLIN. Yes, but you're there and you're going to be walking her through the whole thing. So God bless you for that.

Switching gears just a second, you know, you're from Texas, and, even though we beat you in football all the time, I really do appreciate the idea that we work together and we have similar experiences.

Explain to me a little bit about what this ozone rule is going to do to the State and maybe even the cost that is going to require you all to take on at a time when really the—you know, we are an oil and gas State, too—at a time when really we need to be looking at shoring up our State and the jobs within it, not costing jobs by spending money where it's not needed.

Mr. SHAW. Thank you. I'll start with saying we recognize that we are not—as a State agency we are not choosing between the environment and the economy.

We have to have both or we'll have neither and a big part of what we are looking at also when we think about the public health component of this is especially for a standard that has very limited and questionable benefits.

We're at a point now with the great success we've had in lowering our pollution and cleaning up our air and water across the State and across the country is that your health impact is likely more driven by your opportunity for economic success than it is by the environment that you're faced, and we want to continue to clean that environment.

But we take very seriously that some of what we can do to help our people to have a better healthier life is to pick them up out of poverty and make sure they have good job opportunities.

And so when we look at this issue, one that has questionable scientific value for moving forward and we look at the fact that we are compounding by putting a number of regulations on top of one another and it makes it difficult both for the agencies to develop the rules but also for industry to be able to be implementing those and us to work with them, I see this as an opportunity to improve our environmental outcome as opposed to one as might be otherwise suspected as one that helps industry to compete.

I think it does help industry to have more reasonable time frames. But I am convinced if we take advantage of a length and time opportunity especially and we look at a better scientific—more rigorous scientific evaluation we'll actually get the better environmental health outcomes.

Mr. MULLIN. Well, and by the EPA's on a mission they said that the 2015 ozone standard will be reached by 2025 by just implementing the 2008 rule. So it calls into question why.

Mr. SHAW. It certainly does, and that's one of the comments I sort of alluded to earlier. Their own data suggests that most places are going to get there without the rule so why do you need the rule, especially if it's going to cause undue economic impact on a number of areas that really can't afford it.

And, quite frankly, the market does a very good job of driving innovation and we have a lot of innovation in place that if we can allow that to move forward we could instead of going through this process of developing complex rules to try to meet a standard that is very close to background in many areas—we have some areas

where 65 parts per billion is an often background—we could instead focus on what are the real environmental and health issues that are out there that need to be tackled next.

Mr. MULLIN. And just to kind of make a point here and maybe it's been brought up already, but even the National Park Service is saying that the Grand Canyon and the Sequoia National Forest where I am sure there's a tremendous amount of industry and work going there, it is going to be out of compliance with this.

So it does leave us all the question what is the motive. Other than just busy work, what is the motive behind this?

And, look, I live—my kids are the fourth generation on our farm and I want clean air and clean water, too. A creek runs in front of our place. I used to drink out of it as a kid.

I don't think we are arguing that, and we are doing—we are good stewards of the land behind us, but we don't need this rule. It's undue cost and undue harm to States and manufacturers around.

And so we'll be praying for Dana—

Mr. SHAW. Thank you.

Mr. MULLIN [continuing]. Sir, and I do sincerely mean that. God bless you for being such a supporting husband to her, and I yield back. Thank you, sir.

Mr. SHAW. Thank you.

Mr. WHITFIELD. The gentleman yields back, and that concludes the questions today except for me, and I've waited patiently for quite a while now, Mr. Rush.

But I would just like to make this comment, that certainly Congress has a lot of purposes but one purpose is to provide an opportunity for constituents who have a problem to come and petition the Government for some help, and that is what I view this panel as.

I mean, some of you are having some problems in your States of meeting a Federal requirement. I know that Mr. Mirzakhali has a different view on some of this than some of you, although he has admitted, I believe, that there are some areas in Delaware that are in nonattainment, as well, but not to the extent that we have in the San Joaquin Valley or certainly Arizona, parts of Utah, or even in Texas.

And one question I wanted to ask you, Mr. Sadredin: In the past the EPA has advised our committee that, while it doesn't consider technological and economic feasibility in setting the standard, it does consider it when implementing it. Would you agree with that, or has that been your experience?

Mr. SADREDIN. That's definitely a bit misleading and incomplete view of the world and the realities that we face. There has been a number of discussions here about economic feasibility and setting the standard.

Mr. WHITFIELD. Right.

Mr. SADREDIN. I believe that standards should be set with science only and I don't think this bill really goes away from that.

What it says is that when CASAC makes a recommendation and they give a range to the administration to consider, right now it goes through the administration.

Depending on who's in charge they make these various assumptions and set the standard where it needs to be and then they come

up with something. This really brings some order, some law into how you can actually pick within that range what is an appropriate standard.

But to your exact question, unfortunately, Supreme Court ruled that since Congress was silent economic feasibility cannot be considered. It wasn't that Congress intentionally—

Mr. WHITFIELD. Right.

Mr. SADREDIN [continuing]. And specifically said do not consider economic feasibility. But the bottom line is when the standard is set it says you have to come into attainment by such and such year.

You have X number of years. There is no cost effectiveness economic feasibility you can—argument you can use to say we are not going to meet that deadline.

Mr. WHITFIELD. Right. And that's how many of us feel and the forums indicated that that when you have laws that have been out there for a while even the Clean Air Act, relating to EPA, Congress should be able to respond to address some of these problems that are there.

Now, you know just from the questions today there are a lot of members of Congress who say because it's EPA nothing should be changed because health is the most important issue.

And yet, we do understand that poverty does have a direct impact on health. Clean air is not the only thing. And so the thing that struck me today is listening to the four of you. I mean, you all touched on it a little bit more than our gentleman friend from Delaware.

But you can't meet the standards in many areas. It cannot be done, and so what is the impact of that? What does that mean for the people in your area when you cannot meet the standard? Mr. Cabrera.

Mr. CABRERA. What it means is those requirements on business that keep business from opening up. What it means is that there's requirements on agriculture that keeps agriculture less efficient and what it means is that we are imposing restrictions on American business for pollution that's coming from international sources.

Mr. WHITFIELD. Correct. Correct.

Do you want to make a comment, Mr. Sadredin?

Mr. SADREDIN. In San Joaquin Valley, unfortunately we have a lot of communities of color with great deal of poverty, where economic well-being is the key factor in quality of life.

If we are not able to meet these standards, draconian sanctions will kick in. No new businesses can locate in the area without significant costs. We will lose highway funding, Federal takeover and then nonattainment penalties to the tune of about \$40 million a year. Right now we are paying for the 1979 1-hour rules on standards.

Mr. WHITFIELD. And Mr. Matheson, I know up in Utah, I mean, even things going on in Asia has an impact on you, right?

Mr. MATHESON. It does, and we've been able to measure that and see that in several counties we've seen pollution come in that's very close to the standard or above.

Mr. WHITFIELD. Right. We know the International Monetary Fund is having their meeting in Washington right now and they're talking about world stagnation.

They're talking about excessive regulations, and so Congress does have a responsibility when you have a predicament where a Federal standard cannot be met.

Now, this is the standard for the country but yet under the clean energy plan, which was stayed by the Supreme Court, EPA went to individual States and set different standards in the States for the States. Yet, this is the standard that applies and even when EPA looks at cost they automatically exclude any costs relating to California because California is not going to be able to meet the standard.

And so we have a real problem and one comment I would make about Mr. Olson's legislation is some have suggested that we are mandating that only—it be reviewed every 10 years.

That is not the case. 4775 does not bar EPA from setting a new national ambient air quality standard whenever they want to but they're not required to review it for at least 10 years.

Every 10 years they've got to be required instead of five. So that information is misleading.

And so I want to thank all of you for being here today. We appreciate your time and we look forward to continuing our efforts to try to pass this legislation.

I have some documents here I want to introduce into the record. Have you all seen it? You all seen that one?

So without objection, we'll enter those into the record, and did you—

[The information appears at the conclusion of the hearing.]

Mr. RUSH. I have two letters, Mr. Chairman, I'd like to enter.

Mr. WHITFIELD. OK. Without objection, we'll enter those two letters into the record, as well, and we'll keep the record open for 10 days.

[The information appears at the conclusion of the hearing.]

Mr. RUSH. All right.

Mr. WHITFIELD. And yes, well, unanimous consent for any member who wants to enter a statement in the record, we'll do that as well.

I think all of them are here, though, aren't they? Oh, I felt like all of them were here. But it's an important issue.

So that will conclude today's hearing. Thank you all once again for joining us and for your invaluable input.

Hearing is now adjourned.

[Whereupon, at 12:38 p.m., the hearing was concluded.]

[Material submitted for inclusion in the record follows:]

#### PREPARED STATEMENT OF HON. FRED UPTON

This committee takes seriously its oversight responsibilities under the 1970 Clean Air Act. It is important for us to look back and acknowledge what this law has accomplished—a 30 percent reduction in ozone levels since 1980. But it is equally important to recognize what is no longer working and needs to be fixed for the 21st century, and the agency's current ozone program with its two overlapping regulations is a prime example. Fortunately, there is a bipartisan solution that works to simultaneously protect jobs, economic growth, and public health—H.R. 4775, the "Ozone Standards Implementation Act of 2016." The legislation cuts red tape and

puts EPA's ozone program back on track towards achieving cost effective reductions for ground-level ozone.

EPA itself delayed the implementation of its 2008 ozone standard and last year the agency finally provided States with necessary implementing regulations. But instead of focusing on working with States to achieve the 2008 standard, the agency went ahead and finalized a new standard and is now requiring States to simultaneously comply with both.

Even EPA admits that the second rule would not significantly contribute to ozone reductions that are already occurring under existing regulations, but the rule instead would increase permitting and other compliance costs, as well as present administrative challenges for States and local communities. Make no mistake, counties designated as in nonattainment with EPA's ozone standard face serious limits on new economic activity. It's essentially a kiss of death for economic growth for communities in Michigan and every State. Factory expansions to new construction may have to be placed on hold until the necessary pre-construction permits are obtained. Backyard barbecues could even be limited.

And even after compliance is achieved, EPA would still impose constraints—all for reductions that EPA claims will largely occur regardless of new compliance regimes. Regulations that are unnecessarily costly and restrictive, and that result in overlapping requirements and deadlines, are the last thing job-creators in Michigan and across the country need. Businesses will go out of their way to avoid setting up shop in any area that's close to being in noncompliance.

H.R. 4775 introduces a dose of needed commonsense to EPA's ozone program. It extends the implementation schedule for the new ozone standard to allow the 2008 standard to be implemented first. It would also harmonize the new ozone standard with other existing regulations that EPA projects will reduce ozone levels across the Nation. Most importantly, the bill provides States with a reasonable path forward for implementing new ozone standards while also updating the Clean Air Act to make this law workable for States and communities in the years ahead.

A Clean Air Act that continues to drive down pollution without causing undue damage to jobs and the economy is an environmental legacy we should be striving for and one that the bipartisan Ozone Standards Implementation Act will help achieve.

#### PREPARED STATEMENT OF HON. STEVE SCALISE

Here in the United States, we have achieved something extraordinary: economic growth and expansion have not led to dirtier air. Quite the opposite, we have seen background levels of pollution steadily decline in recent years, and the quality of the air we breathe continues to improve. However, looking at the onerous regulations coming out of the Environmental Protection Agency (EPA), you might believe that no gains have been achieved. You see, EPA—through its periodic review and implementation of National Ambient Air Quality Standards (NAAQS)—seems to think that even background levels of certain pollutants must be eliminated. Which begs the question: how will this be accomplished? The short answer is: EPA has no idea.

The Ozone Standards Implementation Act of 2016 goes a long way toward bringing some clarity and sanity to the EPA rulemaking process related to ambient air quality standards. To that end, the bill requires that the new standard for ground-level ozone not be implemented until 2025—which makes sense, since EPA does not estimate that any of the benefits will be realized until that time. Further, the bill changes the review period for criteria pollutants under the Clean Air Act from 5 years to 10. This is a practical change that will give stakeholders more certainty. Instead of reviewing the criteria pollutants every 5 years, the EPA has chosen to change the standards for those pollutants every 5 years. This has resulted in a kind of intra-agency competition of which set of bureaucrats can promulgate the most stringent air quality regulations without regard for cost or economic impact. A 10-year window in which to review criteria pollutants is simply better than 5.

When it comes to transparency, I am glad that language from my Promoting New Manufacturing Act has been included in the Ozone Standards Implementation Act of 2016. As it stated last Congress, the language requires EPA to put out guidance on how to comply with the new standard at the same time the rule is published. If EPA does not do this, the standard does not take effect until the agency gives guidance. This is critically important for manufacturing investment—particularly in the petrochemical sector, in which investment decisions are made 3, 5, or even 10 years in advance—as companies need to know what the rules will look like in the

years ahead. In addition, it took EPA 7 years to put forth guidance on the ozone standard that was issued in 2008. This is unacceptable.

These much-needed changes will bring our clean air laws into the 21st Century and will send the necessary signal to the investment community that the United States is still open for business. No longer will nameless, faceless Washington bureaucrats be able to stifle American innovation. Therefore, I am proud to give my strong support to the Ozone Standards Implementation Act of 2016 and look forward to its favorable consideration by this committee and the full House of Representatives.



114TH CONGRESS  
2D SESSION

# H. R. 4775

To facilitate efficient State implementation of ground-level ozone standards,  
and for other purposes.

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## IN THE HOUSE OF REPRESENTATIVES

MARCH 17, 2016

Mr. OLSON (for himself, Mr. FLORES, Mr. SCALISE, Mr. LATTA, Mr. MCCARTHY, and Mr. CUELLAR) introduced the following bill, which was referred to the Committee on Energy and Commerce

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## A BILL

To facilitate efficient State implementation of ground-level  
ozone standards, and for other purposes.

1 *Be it enacted by the Senate and House of Representa-*  
2 *tives of the United States of America in Congress assembled,*

3 **SECTION 1. SHORT TITLE.**

4 This Act may be cited as the “Ozone Standards Im-  
5 plementation Act of 2016”.

6 **SEC. 2. FACILITATING STATE IMPLEMENTATION OF EXIST-**  
7 **ING OZONE STANDARDS.**

8 (a) DESIGNATIONS.—

9 (1) DESIGNATION SUBMISSION.—Not later than  
10 October 26, 2024, notwithstanding the deadline

1 specified in paragraph (1)(A) of section 107(d) of  
2 the Clean Air Act (42 U.S.C. 7407(d)), the Gov-  
3 ernor of each State shall designate in accordance  
4 with such section 107(d) all areas (or portions there-  
5 of) of the Governor's State as attainment, nonattain-  
6 ment, or unclassifiable with respect to the 2015  
7 ozone standards.

8 (2) DESIGNATION PROMULGATION.—Not later  
9 than October 26, 2025, notwithstanding the deadline  
10 specified in paragraph (1)(B) of section 107(d) of  
11 the Clean Air Act (42 U.S.C. 7407(d)), the Adminis-  
12 trator shall promulgate final designations under  
13 such section 107(d) for all areas in all States with  
14 respect to the 2015 ozone standards, including any  
15 modifications to the designations submitted under  
16 paragraph (1).

17 (3) STATE IMPLEMENTATION PLANS.—Not  
18 later than October 26, 2026, notwithstanding the  
19 deadline specified in section 110(a)(1) of the Clean  
20 Air Act (42 U.S.C. 7410(a)(1)), each State shall  
21 submit the plan required by such section 110(a)(1)  
22 for the 2015 ozone standards.

23 (b) CERTAIN PRECONSTRUCTION PERMITS.—

1           (1) IN GENERAL.—The 2015 ozone standards  
2 shall not apply to the review and disposition of a  
3 preconstruction permit application if—

4           (A) the Administrator or the State, local,  
5 or tribal permitting authority, as applicable, de-  
6 termines the application to be complete on or  
7 before the date of promulgation of the final des-  
8 ignation of the area involved under subsection  
9 (a)(2); or

10           (B) the Administrator or the State, local,  
11 or tribal permitting authority, as applicable,  
12 publishes a public notice of a preliminary deter-  
13 mination or draft permit for the application be-  
14 fore the date that is 60 days after the date of  
15 promulgation of the final designation of the  
16 area involved under subsection (a)(2).

17           (2) RULES OF CONSTRUCTION.—Nothing in  
18 this section shall be construed to—

19           (A) eliminate the obligation of a  
20 preconstruction permit applicant to install best  
21 available control technology and lowest achiev-  
22 able emission rate technology, as applicable; or

23           (B) limit the authority of a State, local, or  
24 tribal permitting authority to impose more  
25 stringent emissions requirements pursuant to

1 State, local, or tribal law than national ambient  
2 air quality standards.

3 **SEC. 3. FACILITATING STATE IMPLEMENTATION OF NA-**  
4 **TIONAL AMBIENT AIR QUALITY STANDARDS.**

5 (a) **TIMELINE FOR REVIEW OF NATIONAL AMBIENT**  
6 **AIR QUALITY STANDARDS.—**

7 (1) **10-YEAR CYCLE FOR ALL CRITERIA AIR**  
8 **POLLUTANTS.—**Paragraphs (1) and (2)(B) of sec-  
9 tion 109(d) of the Clean Air Act (42 U.S.C.  
10 7409(d)) are amended by striking “five-year inter-  
11 vals” each place it appears and inserting “10-year  
12 intervals”.

13 (2) **CYCLE FOR NEXT REVIEW OF OZONE CRI-**  
14 **TERIA AND STANDARDS.—**Notwithstanding section  
15 109(d) of the Clean Air Act (42 U.S.C. 7409(d)),  
16 the Administrator shall not—

17 (A) complete, before October 26, 2025, any  
18 review of the criteria for ozone published under  
19 section 108 of such Act (42 U.S.C. 7408) or  
20 the national ambient air quality standard for  
21 ozone promulgated under section 109 of such  
22 Act (42 U.S.C. 7409); or

23 (B) propose, before such date, any revi-  
24 sions to such criteria or standard.

1 (b) CONSIDERATION OF TECHNOLOGICAL FEASI-  
2 BILITY.—Section 109(b)(1) of the Clean Air Act (42  
3 U.S.C. 7409(b)(1)) is amended by inserting after the first  
4 sentence the following: “If the Administrator, in consulta-  
5 tion with the independent scientific review committee ap-  
6 pointed under subsection (d), finds that a range of levels  
7 of air quality for an air pollutant are requisite to protect  
8 public health with an adequate margin of safety, as de-  
9 scribed in the preceding sentence, the Administrator may  
10 consider, as a secondary consideration, likely technological  
11 feasibility in establishing and revising the national pri-  
12 mary ambient air quality standard for such pollutant.”.

13 (c) CONSIDERATION OF ADVERSE PUBLIC HEALTH,  
14 WELFARE, SOCIAL, ECONOMIC, OR ENERGY EFFECTS.—  
15 Section 109(d)(2) of the Clean Air Act (42 U.S.C.  
16 7409(d)(2)) is amended by adding at the end the fol-  
17 lowing:

18 “(D) Prior to establishing or revising a national am-  
19 bient air quality standard, the Administrator shall re-  
20 quest, and such committee shall provide, advice under sub-  
21 paragraph (C)(iv) regarding any adverse public health,  
22 welfare, social, economic, or energy effects which may re-  
23 sult from various strategies for attainment and mainte-  
24 nance of such national ambient air quality standard.”.

1 (d) TIMELY ISSUANCE OF IMPLEMENTING REGULA-  
2 TIONS AND GUIDANCE.—Section 109 of the Clean Air Act  
3 (42 U.S.C. 7409) is amended by adding at the end the  
4 following:

5 “(e) TIMELY ISSUANCE OF IMPLEMENTING REGULA-  
6 TIONS AND GUIDANCE.—

7 “(1) IN GENERAL.—In publishing any final rule  
8 establishing or revising a national ambient air qual-  
9 ity standard, the Administrator shall, as the Admin-  
10 istrator determines necessary to assist States, per-  
11 mitting authorities, and permit applicants, concu-  
12 rrently publish regulations and guidance for imple-  
13 menting the standard, including information relating  
14 to submission and consideration of a preconstruction  
15 permit application under the new or revised stand-  
16 ard.

17 “(2) APPLICABILITY OF STANDARD TO  
18 PRECONSTRUCTION PERMITTING.—If the Adminis-  
19 trator fails to publish final regulations and guidance  
20 that include information relating to submission and  
21 consideration of a preconstruction permit application  
22 under a new or revised national ambient air quality  
23 standard concurrently with such standard, then such  
24 standard shall not apply to the review and disposi-  
25 tion of a preconstruction permit application until the

1 Administrator has published such final regulations  
2 and guidance.

3 “(3) RULES OF CONSTRUCTION.—

4 “(A) Nothing in this subsection shall be  
5 construed to preclude the Administrator from  
6 issuing regulations and guidance to assist  
7 States, permitting authorities, and permit appli-  
8 cants in implementing a national ambient air  
9 quality standard subsequent to publishing regu-  
10 lations and guidance for such standard under  
11 paragraph (1).

12 “(B) Nothing in this subsection shall be  
13 construed to eliminate the obligation of a  
14 preconstruction permit applicant to install best  
15 available control technology and lowest achiev-  
16 able emission rate technology, as applicable.

17 “(C) Nothing in this subsection shall be  
18 construed to limit the authority of a State,  
19 local, or tribal permitting authority to impose  
20 more stringent emissions requirements pursu-  
21 ant to State, local, or tribal law than national  
22 ambient air quality standards.

23 “(4) DEFINITIONS.—In this subsection:

1           “(A) The term ‘best available control tech-  
2           nology’ has the meaning given to that term in  
3           section 169(3).

4           “(B) The term ‘lowest achievable emission  
5           rate’ has the meaning given to that term in sec-  
6           tion 171(3).

7           “(C) The term ‘preconstruction permit’—

8                   “(i) means a permit that is required  
9                   under part C or D for the construction or  
10                   modification of a major emitting facility or  
11                   major stationary source; and

12                   “(ii) includes any such permit issued  
13                   by the Environmental Protection Agency  
14                   or a State, local, or tribal permitting au-  
15                   thority.”.

16           (e) CONTINGENCY MEASURES FOR EXTREME OZONE  
17 NONATTAINMENT AREAS.—Section 172(c)(9) of the Clean  
18 Air Act (42 U.S.C. 7502(c)(9)) is amended by adding at  
19 the end the following: “Notwithstanding the preceding  
20 sentences and any other provision of this Act, such meas-  
21 ures shall not be required for any nonattainment area for  
22 ozone classified as an Extreme Area.”.

23           (f) PLAN SUBMISSIONS AND REQUIREMENTS FOR  
24 OZONE NONATTAINMENT AREAS.—Section 182 of the  
25 Clean Air Act (42 U.S.C. 7511a) is amended—

1 (1) in subsection (b)(1)(A)(ii)(III), by inserting  
2 “and economic feasibility” after “technological  
3 achievability”;

4 (2) in subsection (c)(2)(B)(ii), by inserting  
5 “and economic feasibility” after “technological  
6 achievability”; and

7 (3) in paragraph (5) of subsection (e), by strik-  
8 ing “, if the State demonstrates to the satisfaction  
9 of the Administrator that—” and all that follows  
10 through the end of the paragraph and inserting a  
11 period.

12 (g) PLAN REVISIONS FOR MILESTONES FOR PARTIC-  
13 ULATE MATTER NONATTAINMENT AREAS.—Section  
14 189(e)(1) of the Clean Air Act (42 U.S.C. 7513a(c)(1))  
15 is amended by inserting “, which take into account techno-  
16 logical achievability and economic feasibility,” before “and  
17 which demonstrate reasonable further progress”.

18 (h) EXCEPTIONAL EVENTS.—Section 319(b)(1)(B)  
19 of the Clean Air Act (42 U.S.C. 7619(b)(1)(B)) is amend-  
20 ed—

21 (1) in clause (i)—

22 (A) by striking “(i) stagnation of air  
23 masses or” and inserting “(i)(I) ordinarily oc-  
24 ccurring stagnation of air masses or (II)”;

25 (B) by inserting “or” after the semicolon;

- 1           (2) by striking clause (ii); and
- 2           (3) by redesignating clause (iii) as clause (ii).
- 3           (i) REPORT ON EMISSIONS EMANATING FROM OUT-
- 4 SIDE THE UNITED STATES.—Not later than 24 months
- 5 after the date of enactment of this Act, the Administrator,
- 6 in consultation with States, shall submit to the Congress
- 7 a report on—
- 8           (1) the extent to which foreign sources of air
- 9 pollution, including emissions from sources located
- 10 outside North America, impact—
- 11           (A) designations of areas (or portions
- 12 thereof) as nonattainment, attainment, or
- 13 unclassifiable under section 107(d) of the Clean
- 14 Air Act (42 U.S.C. 7407(d)); and
- 15           (B) attainment and maintenance of na-
- 16 tional ambient air quality standards;
- 17           (2) the Environmental Protection Agency’s pro-
- 18 cedures and timelines for disposing of petitions sub-
- 19 mitted pursuant to section 179B(b) of the Clean Air
- 20 Act (42 U.S.C. 7509a(b));
- 21           (3) the total number of petitions received by the
- 22 Agency pursuant to such section 179B(b), and for
- 23 each such petition the date initially submitted and
- 24 the date of final disposition by the Agency; and

1 (4) whether the Administrator recommends any  
2 statutory changes to facilitate the more efficient re-  
3 view and disposition of petitions submitted pursuant  
4 to such section 179B(b).

5 **SEC. 4. DEFINITIONS.**

6 In this Act:

7 (1) ADMINISTRATOR.—The term “Adminis-  
8 trator” means the Administrator of the Environ-  
9 mental Protection Agency.

10 (2) BEST AVAILABLE CONTROL TECH-  
11 NOLOGY.—The term “best available control tech-  
12 nology” has the meaning given to that term in sec-  
13 tion 169(3) of the Clean Air Act (42 U.S.C.  
14 7479(3)).

15 (3) LOWEST ACHIEVABLE EMISSION RATE.—  
16 The term “lowest achievable emission rate” has the  
17 meaning given to that term in section 171(3) of the  
18 Clean Air Act (42 U.S.C. 7501(3)).

19 (4) NATIONAL AMBIENT AIR QUALITY STAND-  
20 ARD.—The term “national ambient air quality  
21 standard” means a national ambient air quality  
22 standard promulgated under section 109 of the  
23 Clean Air Act (42 U.S.C. 7409).

24 (5) PRECONSTRUCTION PERMIT.—The term  
25 “preconstruction permit”—

1 (A) means a permit that is required under  
2 part C or D of title I of the Clean Air Act (42  
3 U.S.C. 7470 et seq.) for the construction or  
4 modification of a major emitting facility or  
5 major stationary source; and

6 (B) includes any such permit issued by the  
7 Environmental Protection Agency or a State,  
8 local, or tribal permitting authority.

9 (6) 2015 OZONE STANDARDS.—The term “2015  
10 ozone standards” means the national ambient air  
11 quality standards for ozone published in the Federal  
12 Register on October 26, 2015 (80 Fed. Reg. 65292).

○

**Written Statement of Janet McCabe  
Acting Assistant Administrator  
Office of Air and Radiation  
U.S. Environmental Protection Agency**

**Legislative Hearing on H.R. 4775, the Ozone Standards  
Implementation Act of 2016**

**Energy and Commerce, Energy and Power Subcommittee  
United States House of Representatives  
April 14, 2016**

Chairman Whitfield, Ranking Member Rush, members of the subcommittee, I appreciate the opportunity to provide written testimony on H.R. 4775, the Ozone Standards Implementation Act of 2016. Although the Administration does not have an official position on this bill, I would like to make several basic points that I hope will assist the committee as you consider this legislation that the EPA views as unnecessary and harmful to public health and the environment.

The bill under consideration would delay designations and implementation of the 2015 ozone health standard for 10 years. The bill would also extend the review cycle for all National Ambient Air Quality Standards (NAAQS) to 10 years and change other aspects of the overall NAAQS process. The delays in this bill would jeopardize progress toward cleaner air and delay health protections for millions of Americans, including children, older adults, and people with asthma. For ozone, EPA estimates that meeting the 70 ppb standard will yield health benefits valued at \$2.9 billion to \$5.9 billion annually in 2025 nationwide, not counting the health benefits that will be achieved in later years in California. These benefits include the value of avoiding 320 to 660 premature deaths, 230,000 asthma attacks in children and 160,000 days when kids miss school. By delaying the designations process, the bill would also deny citizens in potential nonattainment areas the information they need about air quality to protect their families from ozone exposure.

Ozone is one of the criteria pollutants for which the Clean Air Act requires EPA to set national air quality standards. The other criteria pollutants include particle pollution (PM2.5 and PM10), carbon monoxide (CO), sulfur oxides (SO<sub>2</sub>), nitrogen oxides (NO<sub>x</sub>), and lead (Pb). These pollutants are harmful to public health and the environment, and are associated with a

variety of health effects, including asthma, heart attacks and premature death as well as effects on the environment.

The two step process of a science-based NAAQS review every five years followed by implementation is a system that works. The EPA and state, local, and tribal co-regulators share a long history of managing air quality under the Clean Air Act, supported by a wealth of previously issued EPA rules and guidance.

For ozone specifically, existing and proposed federal measures like vehicle standards and power plant rules are resulting in substantial reductions in ozone pollution nationwide, which will not only help improve air quality and public health but also help many areas meet the revised standards. We expect that the vast majority of U.S. counties outside of California will meet the 2015 NAAQS by 2025 without having to take additional action beyond federal measures to reduce emissions.

The overall framework and policy approach reflected in the implementing regulations for the 2008 ozone standards provide an effective and appropriate template for the general approach states would follow in planning for attainment of the 2015 ozone NAAQS. Planning and implementation work to meet the 2015 ozone standard will build on the progress states have already made to implement the 2008 standards. In particular for areas where states are still actively working toward attaining the 2008 ozone NAAQS, the EPA is committed to helping air agencies identify and take advantage of potential planning and emissions control efficiencies that may occur within the horizon for attaining the 2015 standards. Following past precedent, the EPA intends to propose to revoke the 2008 standards and provide transition rules to help avoid any potential regulatory inefficiencies as states begin implementing the Clean Air Act's requirements for the 2015 standards.

The bill under consideration would stall that cooperative process and delay implementation of the 2015 ozone NAAQS. People in areas with air quality that would not meet the new standard would breathe unhealthy levels of ozone for longer – 10 years or more. The science tells us that breathing air that contains ozone can cause serious health effects. So do the stories of many Americans who wrote to us during the public comment period on the 2015 ozone standard. Exposure to ozone can harm the respiratory system (the upper airways and lungs), aggravate asthma and other lung diseases, and is linked to premature death from cardiovascular and respiratory causes. People most at risk from breathing air containing ozone include people with asthma, children, older adults, and people who are active outdoors, especially outdoor workers. These health impacts pose significant costs on American families and workers, and can adversely affect their daily lives through missed school and work and the need to constrain regular activities.

This bill would specifically delay the next ozone review until 2025, which would potentially delay further public health benefits and also potentially delay benefits to ecosystems and public welfare. Ozone has serious implications for important natural resources such as our National Parks, and can affect plant diversity, damage vegetation and crops, and reduce carbon sequestration.

This bill has other implications for the ozone NAAQS process. It would delay infrastructure State Implementation Plan (SIP) submissions for ozone, including measures to address interstate transport, by 8 years (to 2026 rather than 2018). This would delay requiring new efforts by states to improve downwind air quality in areas that are not meeting or are having trouble maintaining the 2015 ozone NAAQS.

The bill also says that the 2015 ozone NAAQS shall not apply to the review and disposition of certain preconstruction permit applications. In effect, areas with unhealthy ozone levels would for a substantial period of time lack significant planning requirements and new source review requirements for meeting the health-based standard. This would mean that for 10 years, new significant sources of the pollutants that cause ozone pollution could be constructed and operated without regard for the public health standard that has been established by the EPA as necessary to protect public health.

The bill's effects are not limited to the Ozone NAAQS. It also makes a number of changes to the process for reviewing and implementing all six existing NAAQS. These changes would introduce uncertainty into a long-standing, proven approach for protecting public health and welfare. These changes would extend the mandatory, science-based review cycle for all six NAAQS from 5 to 10 years; change the definition of exceptional events to allow inclusion of certain events, including droughts, that may have not been previously considered exceptional events for air quality planning purposes; allow the Administrator to consider technological feasibility as a secondary consideration when revising a NAAQS; and limit consideration of preconstruction permit applications until after EPA has issued final NAAQS implementation and guidance; among others.

A 10-year NAAQS review cycle would delay incorporation of the latest science into Agency decision making. Experience shows that a substantial amount of new relevant research can become available in 5 years. For example, the 2015 ozone standard review included more than 1,000 new studies that were published since EPA last reviewed the standards in 2008. A 10-year review cycle would deny the American public any additional health protection indicated by the latest science. It is worth noting that under the current schedule, when the scientific evidence does not support a revision to the standard, EPA has the option and has exercised the option, both to streamline the review and to retain the existing standard.

Changing definitions to allow more events to qualify as "exceptional events" could allow regularly occurring events, such as hot summer days or recurring drought conditions to be ignored when determining whether an area is violating the NAAQS. Defining them as exceptional events does not change the impact that these conditions have on human health. In addition, these changes are not necessary because EPA is already making efforts to improve the exceptional events process and make sure that states are able to apply the existing tools in the Clean Air Act to when considering the impact of certain events on air quality.

Adding consideration of technological feasibility as a secondary consideration under section 109 would undermine the health-based decision-making which has been central to the success of the NAAQS. Setting a primary NAAQS is about defining what clean, healthy air is. The current NAAQS implementation process allows for consideration of costs as well as technical feasibility. Despite repeated assertions that achieving clean air was just not feasible, American

ingenuity has consistently risen to the challenge and made our country the leader in both clean air and clean air technology. That approach has been very successful for both the health of Americans and our economy. Based on the Agency's experience it is highly likely that new emissions controls or strategies are developed and deployed over time, but we may not have the data to include those technologies in our analysis at the time of the review.

One provision would require EPA to issue implementation rules and guidance concurrent with a revision to the NAAQS. The requirement is based on a false premise. New EPA implementation guidance and rules are not always necessary to enable a new or revised NAAQS to be implemented. EPA has existing rules and guidance that were put in place when implementing prior standards for ozone that can be useful in implementing the new standard. Furthermore, requiring such guidance to be issued concurrently with the standard could lead to an outcome in which EPA would effectively have to decide what the standard was before completing the public process in order to determine whether such guidance was necessary for that standard and develop it in time to be released with that standard. This would also make it challenging for the public to provide informed comment on proposed implementation guidance. We have been working successfully to streamline and make more timely the issuance of necessary implementation rules and guidance.

In closing, the Clean Air Act requires the EPA to set primary air quality standards that protect public health with an "adequate margin of safety" including the health of at-risk groups. Science-based air standards have a proven record of success. Setting and implementing national standards for air pollution has made the air cleaner for all Americans, which in turn has helped Americans live longer, healthier lives. Since 1970, the economy has grown over 200 percent while emissions of key pollutants have decreased nearly 70 percent. National average ozone levels have gone down 33 percent since 1980, and 95 percent of areas originally designated nonattainment for the 1997 ozone standards now meet those standards. The NAAQS process works to improve public health protection across the country and provide the requisite margin of safety the law requires – including for children, who are one of the groups most at risk from air pollution. Forty-five years of clean air regulation have shown that a strong economy and strong environmental and public health protection go hand-in-hand. In fact, as the world's largest producer and consumer of environmental protection technologies worldwide, the United States' environmental technologies and services industry supported 1.7 million jobs in 2008, generating approximately \$300 billion in revenues and exported goods and services worth \$44 billion. EPA is committed to ensuring that these successes will continue while we work to deliver clean air for Americans across the country.

April 8, 2016

The Honorable Kevin McCarthy  
2421 Rayburn House Office Building  
Washington, DC 20515

Dear Congressman McCarthy:

I write to you as a member of the San Joaquin Valley Air Pollution Control District Environmental Justice Advisory Group (EJAG). Since its inception in 2008, EJAG has worked hard to provide advice to policy makers and to advocate for effective clean air strategies at the local, state, and federal level to ensure environmental justice and improved public health in disadvantaged communities throughout the San Joaquin Valley.

I am writing to express my support of H.R. 4775, Ozone Standards Implementation Act of 2016 which would modernize the Clean Air Act and allow the San Joaquin Valley to continue to make air quality progress while enhancing economic opportunity in environmental justice communities. Given the large number of disadvantaged communities in the San Joaquin Valley, it is imperative that the limited resources that are available be used as efficiently as possible to improve air quality and public health while improving the economic vitality of our communities.

The San Joaquin Valley's efforts to meet the standards set by the Clean Air Act have led to significant improvements in air quality. However, it has been 25 years since the Clean Air Act was modified and during that time much has been learned that can enhance clean air policies going forward. The modest Clean Air Act modifications proposed in H.R. 4775 will reduce the confusion and chaotic transition between standards, add technological and economic feasibility considerations, and eliminate outdated provisions without rolling back the core elements of the Clean Air Act that serve to protect public health. Failure to enact these common sense changes will set our region up for failure resulting in devastating economic sanctions without any corresponding benefit to air quality. If enacted, H.R. 4775 will enable the Valley to continue to focus resources on developing and implementing transformative measures that are necessary to meet the health-based air quality standards without wasting resources on unnecessary bureaucratic and administrative mandates.

Given the importance of this issue to our region and significant economic and environmental challenges facing our environmental justice communities, I thank you for your support of H.R. 4775

  
Derek Williams  
Vice-Chair, Environmental Justice Advisory Group

Cc: San Joaquin Valley Legislative Delegation

April 8, 2016

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2421 Rayburn House Office Building  
Washington, DC 20515

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Given the importance of this issue to our region and significant economic and environmental challenges facing our environmental justice communities, I thank you for your support of H.R. 4775

Sincerely,

[REDACTED]  
Marvin Dean  
Member, Environmental Justice Advisory Group

**Environmental Justice  
Advisory Group**



**San Joaquin Valley**  
AIR POLLUTION CONTROL DISTRICT

April 8, 2016

The Honorable Kevin McCarthy  
2421 Rayburn House Office Building  
Washington, DC 20515

Dear Congressman McCarthy:

I write to you as a member of the San Joaquin Valley Air Pollution Control District Environmental Justice Advisory Group (EJAG). Since its inception in 2008, EJAG has worked hard to provide advice to policy makers and to advocate for effective clean air strategies at the local, state, and federal level to ensure environmental justice and improved public health in disadvantaged communities throughout the San Joaquin Valley.

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Given the importance of this issue to our region and significant economic and environmental challenges facing our environmental justice communities, I thank you for your support of H.R. 4775

Sincerely,



Jack Lemar  
Member, Environmental Justice Advisory Group

Cc: San Joaquin Valley Legislative Delegation



**Industrial Energy Consumers of America**  
*The Voice of the Industrial Energy Consumers*

1776 K Street, NW, Suite 720 • Washington, D.C. 20006  
 Telephone 202-223-1420 • [www.ieca-us.org](http://www.ieca-us.org)

March 22, 2016

The Honorable Pete Olson  
 Vice Chairman, Subcommittee on Energy and Power  
 Committee on Energy and Commerce  
 U.S. House of Representatives  
 2133 Rayburn House Office Building  
 Washington, DC 20515

***Re: IECA Supports H.R. 4775, the "Ozone Standards Implementation Act of 2016"***

Dear Congressman Olson:

On behalf of the Industrial Energy Consumers of America (IECA), we support passage of H.R. 4775, the "Ozone Standards Implementation Act of 2016." There are several reasons why more time is needed on implementing the ozone standards. States are struggling to meet the existing 2008 standard, deep concerns remain regarding the significant transport of ozone from China and its precursors, the role of ozone background levels need to be better understood, and the fact that EPA admits there is no identified technology available to meet the standards are all sound justifications for this legislation.

Mounting EPA regulatory costs have made it very difficult for manufacturing companies to compete with global competitors, thereby impacting U.S. jobs. For example, while China's manufacturing jobs have increased by 31.5 percent since 2000, U.S. manufacturing jobs have declined by 21.6 percent. Furthermore, the 2015 U.S. manufacturing trade deficit stands at \$627 billion and 61 percent of the deficit is with one country, China.<sup>1</sup>

H.R. 4775 would phase-in implementation of the 2008 and 2015 ozone standards, while extending to 2025 the date for final designation of the 2015 standard. The bill would also change the mandatory review of NAAQS from 5 to 10 years, authorize the EPA Administrator to consider technological feasibility as a secondary consideration when revising NAAQS, ensure that states may seek relief with respect to certain exceptional events, and direct EPA to submit a report to Congress within 2 years regarding the impacts of foreign emissions on NAAQS compliance and related matters.

IECA supports cost-effective action to reduce ozone emissions in a manner that will not impair manufacturing competitiveness. Thank you for your leadership on this important issue.

Sincerely,

Paul N. Cicio  
 President

cc: House Committee on Energy and Commerce

<sup>1</sup> Global Patterns of U.S. Merchandise Trade, U.S. Department of Commerce,  
<http://tse.export.gov/TSE/TSEOptions.aspx?ReportID=1&Referrer=TSEReports.aspx&DataSource=NTD>.



CAL DOOLEY  
PRESIDENT AND CEO

April 13, 2016

The Honorable Bill Flores  
U.S. House of Representatives  
Washington, DC 20515

The Honorable Pete Olson  
U.S. House of Representatives  
Washington, DC 20515

The Honorable Bob Latta  
U.S. House of Representatives  
Washington, DC 20515

The Honorable Steve Scalise  
U.S. House of Representatives  
Washington, DC 20515

The Honorable Henry Cuellar  
U.S. House of Representatives  
Washington, DC 20515

Dear Representatives Flores, Olson, Latta, Scalise, and Cuellar:

On behalf of the members of the American Chemistry Council (ACC), we offer our strong support for H.R. 4775, the "Ozone Standards Implementation Act of 2016." Your bipartisan legislation will help ensure thoughtful, reasonable implementation of new air quality standards and will support U.S. manufacturing investment and job growth.

As you know, U.S. Environmental Protection Agency's new ozone National Ambient Air Quality Standards (NAAQS) took effect on December 28, 2015. Manufacturers wanting to build or expand a facility must obtain a permit showing that their project will comply. Yet it often takes years for EPA to provide the necessary rules and guidance – delays that can put U.S. investment and jobs at risk.

Unfortunately, EPA issued the 2015 ozone standards without addressing the overlap with the 2008 standards. As a result, states are being burdened with duplicative and wasteful implementation timelines and activities. A sensible process would let states finish work on the 2008 standards first.

H.R. 4775 will help. It sets a ten-year interval for NAAQS reviews, requires EPA to issue guidance concurrent with any new standards, and leaves the 2008 permitting requirements in effect until nonattainment area designations for the new standards are made. These and other provisions will provide greater regulatory certainty to state air-quality agencies and businesses alike.

Thank you for taking this important step to improve the implementation process for new air rules. We look forward to the bill's hearing this Thursday in the Subcommittee on Energy and Power.

Sincerely,

A black rectangular redaction box covering the signature of Cal Dooley.

Cal Dooley

For more information about National Park Service air resources, please visit <http://www.nature.nps.gov/air/>.

## 2015 Ozone Standard Exceedances in National Parks

The National Park Service (NPS) actively monitors ozone at its parks from April to October. Ozone measurements are compared with the National Ambient Air Quality Standard (NAAQS) for ozone. The Environmental Protection Agency (EPA) sets this standard as the level at which the ozone in the air becomes unhealthy.

The level of the NAAQS for ozone in 2015 was 75 part per billion (ppb), daily maximum 8-hour average. The NPS tracks the days when the standard is exceeded in the parks. The table below displays the parks and the ozone values along with the number of days where the daily maximum 8-hour average ozone concentration exceeded 75 parts per billion (ppb)<sup>†</sup>. The thumbnail on the right links to a map of parks with 2015 ozone exceedances.



Map of 2015 Ozone Exceedances (Click photo to enlarge)

National Park	2015 Season								Total Count	Max 8-hr O <sub>3</sub> (ppb)	4 <sup>th</sup> highest max 8-hr O <sub>3</sub> (ppb)
	April	May	June	July	Aug.	Sept.	Oct.				
Acadia-Cadillac Mountain	0	0	0	0	1	1	0	2	83	70	
Acadia-McFarland Hill	0	0	0	0	0	1	0	1	76	65	
Cape Cod-Cape Cod	0	0	0	0	0	2	0	2	77	71	
Joshua Tree National Park-Black Rock	6	4	8	1	4	0	0	23	91	85	
Joshua Tree National Park-Pinto Wells	2	1	2	0	0	0	0	5	84	77	
Joshua Tree National Park-Cottonwood Canyon	0	0	2	1	0	0	0	3	85	74	
Mojave National Preserve-Kelso Mountains	0	0	7	0	1	0	0	8	82	78	
Sequoia and Kings Canyon National Parks-Ash Mountain	1	4	15	6	17	9	1	53	90	86	
Sequoia and Kings Canyon National Parks-Lower Kaweah	0	1	10	2	9	1	0	23	86	83	
Yosemite National Park-Turtleback Dome	0	0	0	0	0	1	0	1	83	73	

Validation Level: 2 2 2 2 2 2 2 2 2 2 2

Validation Level 2 indicates preliminary data. Validation Level 3 indicates final, validated data. Counts of days with an 8-hour average ozone greater than 75 ppb may change after the data is fully validated. The ozone season runs from April to October. In the detailed Ozone Standard Exceedance table, more limited numbers of locations and days are provided for readability.

<sup>†</sup>This page references the 2015 NAAQS of 75 ppb daily maximum 8-hour average ozone concentration. The ozone standard is violated when the 8-hour average of the annual fourth-highest daily maximum 8-hour average ozone concentration is greater than 75 ppb, which occurs when the 8-hour average exceeds 75 ppb. An exceedance occurs when the daily maximum 8-hour average is greater than 75 ppb.

- Good
- Moderate
- Unhealthy for Sensitive Groups
- Unhealthy
- Very Unhealthy

### Annual Exceedance Summaries

[2015](#) | [2014](#) | [2013](#) | [2012](#) | [2011](#) | [2010](#) | [2009](#) | [2008](#) | [2007](#) | [2006](#) | [2005](#) | [2004](#)  
[2003](#) (pdf, 137 KB) | [2002](#) (pdf, 146 KB) | [2001](#) (pdf, 136 KB) | [2000](#) (pdf, 133 KB)

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### Compiled Exceedance Summaries

- Exceedance days in parks; 1989–2010 ([pdf, 273 KB](#)) ([csv, 7 KB](#))
  - Annual maximum ozone concentrations; 1989–2010 ([pdf, 314 KB](#)) ([csv, 10 KB](#))
  - 3-year average maximum ozone concentrations; 1991–2010 ([pdf, 301 KB](#)) ([csv, 9 KB](#))
- 

### Related Links

- [Ozone Health Advisories](#)
- [Current Ozone & Weather Data](#)
- [Map of current ozone conditions across the United States](#)
- [Ozone Health Effects](#)

Last Updated: March 16, 2016



Resolution Number 07-8  
Approved September 17, 2007  
Sun Valley, Idaho

Revised March 23, 2010  
Sausalito, California

Revised September 17, 2013  
Arlington, Virginia

As certified by  
R. Steven Brown  
Executive Director

**ON THE NEED TO ENSURE THAT UP-TO-DATE, PROTECTIVE NATIONAL AMBIENT AIR QUALITY STANDARDS AND IMPLEMENTATION RULES ARE TIMELY PROMULGATED AND IMPLEMENTED**

WHEREAS, the Clean Air Act (CAA) requires the United States Environmental Protection Agency (U.S. EPA) to set primary and secondary National Ambient Air Quality Standards (NAAQS) for carbon monoxide, lead, nitrogen dioxide, particulate matter, ozone, and sulfur dioxide (criteria pollutants) that, “allowing an adequate margin of safety”, are requisite to protect public health and welfare, and to review and revise the standards, as appropriate, every five years; and

WHEREAS, since the NAAQS program was established in 1970, there has been ample scientific evidence demonstrating harm to public health in parts of the country from exposure to ambient concentrations of criteria pollutants, particularly to children, the elderly, asthmatics, and other sensitive populations; and

WHEREAS, the U.S. EPA has determined that existing criteria pollutant levels in certain areas of the country have adverse effects on public welfare, including reduced forest growth and crop yield and degraded scenic vistas; and

WHEREAS, the Environmental Council of the States (ECOS) recognizes the collective progress made by states in reducing levels of all criteria pollutants and their precursors in the ambient air; and

WHEREAS, ECOS further recognizes that many states and local agencies throughout the country have struggled to meet their obligations to attain various NAAQS, and are facing significant resource constraints, given the current economic situation; and

WHEREAS, State Implementation Plans (SIPs) are key to achieving ambient air quality standards and a SIP Reform Workgroup comprised of representatives of ECOS, the National Association of Clean Air Agencies, and U.S. EPA has been working together to identify SIP reforms that would streamline and improve the SIP process through the development and issuance of more timely NAAQS implementation guidance and other measures.

NOW, THEREFORE BE IT RESOLVED THAT THE ENVIRONMENTAL COUNCIL OF THE STATES:

Urges U.S. EPA to reassess, as required by the Clean Air Act, and revise as appropriate, existing NAAQS in order to ensure that NAAQS reflect current scientific information;

Further urges U.S. EPA, after giving serious consideration to the recommendations of U.S. EPA's appointed independent scientific review committee, to set all new or revised NAAQS at levels that provide an adequate margin of safety to public health;

Calls on U.S. EPA to consider all relevant, well-conducted studies when setting new or revised NAAQS standards;

Urges U.S. EPA to make all underlying data used to develop a proposed NAAQS easily accessible to the public;

Urges U.S. EPA to work with states to identify needed SIP process improvements and methods for effecting them, and to revise the SIP process so as to foster cost-effective, efficient, and multi-pollutant NAAQS implementation strategies and;

Calls on U.S. EPA and U.S. Congress to recognize the state and local agency resources needed to implement the programmatic changes necessary to meet new and revised NAAQS;

Urges U.S. EPA to work closely with states as it develops and promulgates national rules that directly limit NAAQS pollution from categories of sources to balance the need for states to retain flexibility within their programs with the need for states to effectively and expeditiously meet new or revised NAAQS.

Calls on U.S. EPA to collaborate closely with states, using lessons from the SIP Reform Workgroup, to develop guidance and the implementation rule for new or revised NAAQS and issue a proposed implementation rule concurrent with the final NAAQS promulgation;

Encourages U.S. EPA, to the best of its ability, to better align compliance dates for rules that reduce the same or different pollutants from the same source sectors; and

Urges U.S. EPA to work in partnership with states and local agencies to develop methodologies and enhance existing tools to educate and warn sensitive populations about the health effects of exposure to criteria pollutants during periods of high concentration.



**STATE ENVIRONMENTAL AGENCY  
PERSPECTIVES ON BACKGROUND OZONE &  
REGULATORY RELIEF**

Results of a Survey by the  
Association of Air Pollution Control Agencies (AAPCA)

June 2015

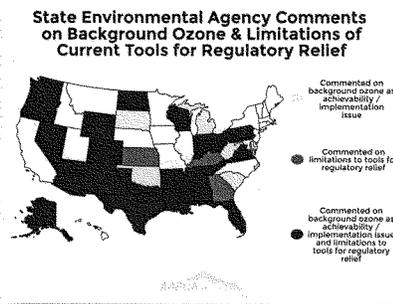


### Executive Summary

Following the end of the comment period for U.S. EPA's proposed revision to the National Ambient Air Quality Standards (NAAQS) for ground-level ozone, the Association of Air Pollution Control Agencies (AAPCA)<sup>1</sup> conducted a survey of all written state environmental agency comments on the proposal (totaling 44 state agency comments).

A majority of state agency comments raised concerns about the role of background ozone, including both naturally-occurring and internationally-transported contributions to ground-level ozone, as an achievability or implementation challenge (26 states). Similarly, a majority of state comments identified limitations to the Clean Air Act tools highlighted by U.S. EPA for regulatory relief to address background ozone (24 states).

In order to gather more comprehensive data, AAPCA also conducted a more detailed follow up survey of member states. While U.S. EPA has stated that there are three "tools for air agencies to address exceedances of an ozone standard potentially caused by background ozone," this survey found significant limitations and several common concerns with these tools. These include: a lack of familiarity with the tools as they relate to ozone; the burdensome and resource-intensive nature of the application/approval process; the low likelihood of EPA approval of applications under the tools; and outdated rules or guidance for state deployment of the tool.



While they have often been treated as limited, regional issues in the past, background ozone and limitations of the regulatory relief tools available to states are increasingly national concerns that could impact large swaths of the country, especially under a more stringent ozone NAAQS that requires reliance on unknown controls. These comments reflect a consensus among geographically-diverse states with differing perspectives on the proposed ozone NAAQS revisions.

<sup>1</sup> The Association of Air Pollution Control Agencies (AAPCA) is a national, consensus-driven non-profit organization focused on assisting state and local air quality agencies and personnel with implementation and technical issues associated with the federal Clean Air Act. 17 state environmental agencies currently sit on AAPCA's Board of Directors. AAPCA has not taken a position with respect to where the primary or secondary ozone NAAQS should be set. AAPCA is housed in Lexington, Kentucky as a policy program with The Council of State Governments. You can find more information about AAPCA at: <http://www.cleanairact.org>.

### Background

In the U.S. Environmental Protection Agency's (EPA) proposed revision to National Ambient Air Quality Standards (NAAQS) for ground-level ozone (O<sub>3</sub>) under the Clean Air Act (CAA),<sup>2</sup> the Agency acknowledged that "... there can be events where O<sub>3</sub> levels approach or exceed the concentration levels being proposed in this notice (i.e., 60-70 ppb) in large part due to background sources. These cases... typically result from stratospheric intrusions of O<sub>3</sub>, wildfire O<sub>3</sub> plumes, or long-range transport of O<sub>3</sub> from sources outside the U.S."<sup>3</sup> EPA staff's final Policy Assessment for the Review of the Ozone NAAQS indicated that this may become more prevalent if a more stringent standard was adopted, noting "the relative importance of background O<sub>3</sub> would increase were O<sub>3</sub> concentrations to decrease with a lower level of the O<sub>3</sub> NAAQS."<sup>4</sup> The Policy Assessment also identified EPA updates to its methodology for estimating changes in health risk and exposure related to ozone, including that "risk estimates are now based on total O<sub>3</sub> concentrations, as opposed to previous reviews which only considered risk above background levels."<sup>5</sup>

In the proposed revision, EPA concludes: "In most locations in the U.S., these events are relatively infrequent and the CAA contains provisions that can be used to help deal with certain events, including providing varying degrees of regulatory relief for air agencies and potential regulated entities."<sup>6</sup> Later in the preamble, EPA also suggests that "For a prospective standard of 70 ppb, the EPA does not believe that background O<sub>3</sub> would create significant implementation-related challenges at locations throughout the U.S. and prevent attainment of the NAAQS."<sup>7</sup>

Similarly, a fact sheet accompanying the proposal indicated:

Under the Clean Air Act, states are not responsible for reducing emissions that are not in their control. Existing and upcoming EPA regulations and guidance will assist states in ensuring background ozone does not create unnecessary control obligations as they continue their work to improve air quality.<sup>8</sup>

In the preamble and accompanying fact sheets, U.S. EPA identified three "tools for air agencies to address exceedances of an ozone standard potentially caused by background ozone"<sup>9</sup>:

- **CAA Section 319 - Exceptional events exclusions**

"The term 'exceptional event' generally means either a natural event (such as stratospheric intrusions or wildfires) or an event caused by human activity that is unlikely to recur. Exceptional events can affect air quality but are not reasonably controllable or preventable.

<sup>2</sup> <http://www.gpo.gov/fdsys/pkg/FR-2014-12-17/pdf/2014-28674.pdf>.

<sup>3</sup> 79 FR 75382.

<sup>4</sup> EPA, "Policy Assessment for the Review of the Ozone National Ambient Air Quality Standards" (final report), August 2014, 2-30 – 2-31, <http://www.epa.gov/ttn/naaqs/standards/ozone/data/20140829pa.pdf>.

<sup>5</sup> *Ibid.*, 2-12 – 2-13.

<sup>6</sup> 79 FR 75382.

<sup>7</sup> 79 FR 75383.

<sup>8</sup> EPA Fact Sheet, "Tools for Addressing Background Ozone," November 25, 2014,

<http://www.epa.gov/airquality/ozonepollution/pdfs/20141125fs-tools.pdf>.

<sup>9</sup> *Ibid.*

**AAPCA** 



Under section 319 of the Clean Air Act, EPA may exclude air monitoring data influenced by exceptional events from use in making designations, provided states meet certain criteria.”

- **CAA Section 179B - International Transport**  
“Section 179B of the Clean Air Act allows EPA to approve an ozone attainment plan for a nonattainment area, if the state demonstrates that it has taken appropriate local measures and international transport of pollution is a significant impediment to meeting the standard on time.”
- **CAA Section 182(h) – Rural Transport Areas (RTAs)**  
“Section 182(h) of the Clean Air Act allows EPA to determine that a designated nonattainment area can be treated as a rural transport area if it meets certain criteria, including that: The area does not contain emission sources that make significant contribution to monitored ozone concentration in the area or other areas; and The area does not include, and is not adjacent to a Metropolitan Statistical Area.”

EPA indicated that this relief may apply to designation as a nonattainment area (exceptional events), relief from the more stringent requirements of higher nonattainment area classifications (RTAs, exceptional events, international transport), or relief from adopting more than reasonable controls to demonstrate attainment (international transport).<sup>10</sup> The Agency acknowledged some limitations to the use of these tools, remarking that “None of these relief mechanisms are completely burden-free, meaning they all require some level of assessment or demonstration by a state and/or EPA to legally invoke” and that “In no case does the CAA authorize a blanket exclusion from the basic application of an air quality management regime because an area is significantly impacted by background O<sub>3</sub>.”<sup>11</sup>

In an April 2015 presentation to the Western States Air Resources Council,<sup>12</sup> EPA’s Office of Air Quality Planning and Standards stated that the Agency’s “[p]roposal acknowledges that background ozone contributes significantly to ozone levels on some days, especially in some areas in the western U.S.” and that EPA is “working to ensure these mechanisms are as workable as possible for states and EPA to administer.” The presentation also included an updated timeline for EPA to propose Exceptional Events Rule revisions and draft Wildfire/Ozone Guidance, which is now expected in Fall of 2015. The most recent Unified Regulatory Agenda (Spring 2015)<sup>13</sup> anticipates a Notice of Proposed Rulemaking on rule revisions for the Treatment of Data Influenced by Exceptional Events in October 2015.

<sup>10</sup> 79 FR 75382-75383.

<sup>11</sup> 79 FR 75383.

<sup>12</sup> [http://www.westar.org/Docs/Business%20Meetings/Spring15/SE15/06.1%20AWOOD\\_westar\\_FINAL.pdf](http://www.westar.org/Docs/Business%20Meetings/Spring15/SE15/06.1%20AWOOD_westar_FINAL.pdf).

<sup>13</sup> <http://www.reginfo.gov/public/do/eAgendaViewRule?pubId=201504&RIN=2060-AS02>.

#### Survey of State Comments - Findings

- This survey included a review of all identifiable state environmental agency comments submitted to U.S. EPA through March 17, 2015. This review included comments filed individually or jointly<sup>14</sup> by these agencies but not comments filed by national or regional associations on behalf of state agencies.<sup>15</sup>
- 44 state environmental agencies filed individual or joint comments on EPA's proposed revision to ozone NAAQS.<sup>16</sup>
  - Comments from 26 state agencies raised background ozone as an achievability or implementation challenge.
  - Comments from 24 states identified limitations to the tools identified by EPA for regulatory relief.
  - Comments from 21 states raised both background ozone as an achievability or implementation challenge and identified limitations to the tools identified by EPA for regulatory relief.
- Among states that identified limitations to tools for regulatory relief:
  - 22 states commented on limitations to the use of CAA section 319 for excluding "exceptional event" data.
  - 16 states commented on limitations to the use of CAA section 179B for demonstrating attainment "but for" international emissions.
  - 17 states commented on limitations to the use of CAA section 182(h) for rural transport area determinations.
- As the map on the following page illustrates, these comments reflect an increasingly national concern among geographically-diverse states with differing perspectives on the proposed ozone NAAQS revisions.

"As a new standard becomes closer to background levels, states have less ability to develop practical control strategies to meet the standard."  
- Ohio EPA

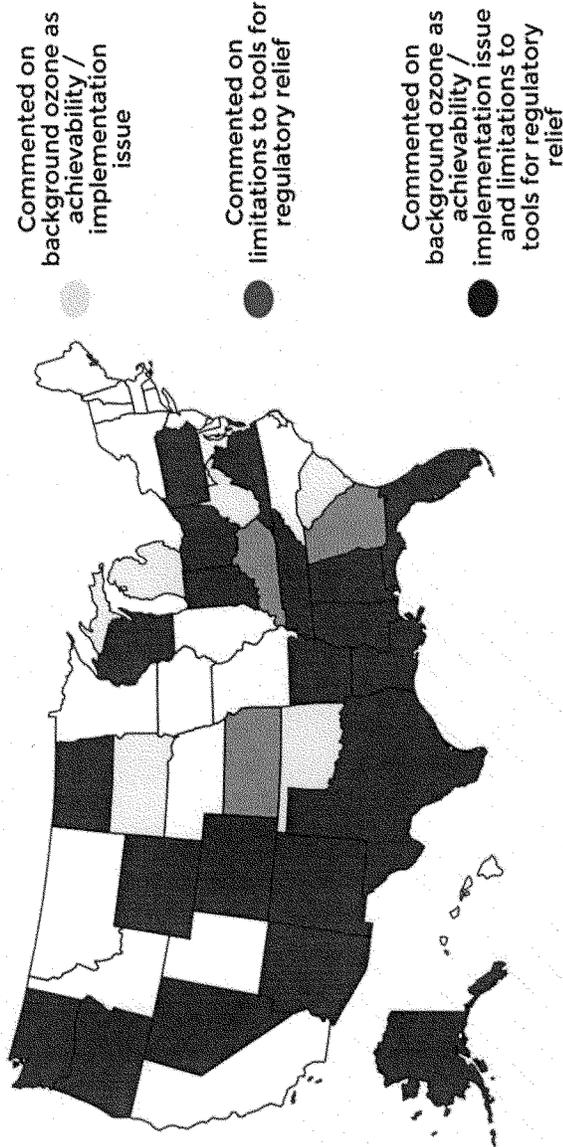
"Tennessee...urges extreme caution in selecting a value that approaches background due to the many likely implementation issues that will follow. While the courts may have ruled that costs are not to be considered in setting a health based standard, the practicality of implementation irrespective of costs must absolutely be considered."  
- Tennessee Department of Environment and Conservation

<sup>14</sup> Notably, joint comments from North Dakota Department of Health, Alabama Department of Environmental Management, Mississippi Department of Environmental Quality, West Virginia Department of Environmental Protection, and Wyoming Department of Environmental Quality.

<sup>15</sup> For example, comments from the Western States Air Resources (WESTAR) Council, an association of 15 western state air quality managers, included extensive feedback on background ozone and regulatory relief.

<sup>16</sup> All state comments can be viewed at: [http://www.csg.org/aapca\\_site/news/OzoneNAAQSComments.aspx](http://www.csg.org/aapca_site/news/OzoneNAAQSComments.aspx)

# State Environmental Agency Comments on Background Ozone & Limitations of Current Tools for Regulatory Relief



Follow Up Survey of AAPCA Member States - Findings

- To provide additional feedback on some of the frequently-sited concerns raised in state environmental agency comments about the tools for regulatory relief identified by U.S. EPA, AAPCA classified six themes and developed a follow up electronic survey for AAPCA member states.
- These states were invited to provide a single response for their state between May 14 and June 1. 12 states responded (see map to the right).
- All responding states said the process to exclude exceptional events data under Section 319 of the Clean Air Act was overly burdensome or limited by resource/time constraints. Two-thirds of respondents had similar issues with the rural transport area tools.



"Exceptional events demonstrations for NAAQS violations resulting from high background ozone concentrations in the rural west will be too lengthy, frequent, and onerous."  
- Nevada Division of Environmental Protection

- 75 percent of responding states identified a lack of familiarity with international transport and rural transport area tools as they relate to ozone.
- 75 percent of responding states identified the low likelihood of U.S. EPA approval as a concern for the use of exceptional event and rural transport area tools.
- A majority of responding states identified outdated rules or guidance as a concern for the use of exceptional event and rural transport area tools.
- A majority of responding states identified a lack of state applicability for the use of international transport tools available under Section 179B of the Clean Air Act.

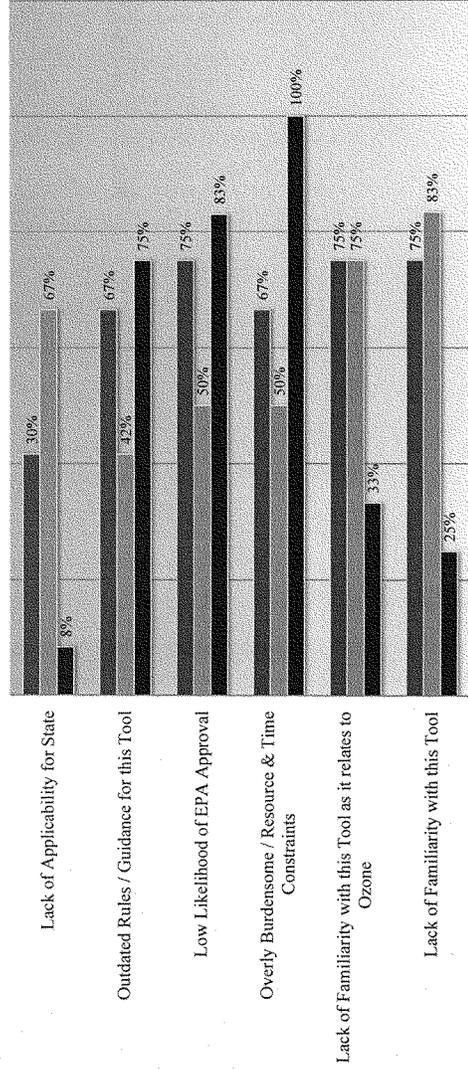
"The [Exceptional Events Rule] places an undue burden on states by requiring a very stringent 'but for' demonstration, which goes well beyond the requirements in the Clean Air Act."  
- Virginia Department of Environmental Quality

"As with other states, the Department is concerned about background and transported ozone which may prevent compliance with a more stringent NAAQS. As the economies of Asian countries, such as China and India grow, the problem is expected to only get worse."  
- North Dakota Department of Health



### Limitations of Tools to Address Background Ozone

■ Rural Transport Areas (Section 182(h)) ■ International Transport (Section 179B) ■ Exceptional Event Exclusions (Section 319)



State Responses (Total: 12)

State Responses (Total: 12)	Exceptional Event Exclusions (Section 319)	International Transport (Section 179B)	Rural Transport Areas (Section 182(h))
Lack of Familiarity with this Tool	3	10	9
Lack of Familiarity with this Tool as it relates to Ozone	4	9	9
Overly Burdensome / Resource & Time Constraints	12	6	8
Low Likelihood of EPA Approval	10	6	9
Outdated Rules / Guidance for this Tool	9	5	8
Lack of Applicability for State	1	8	5

Relevant Excerpts from Written State Environmental Agency Comments

**On Background Ozone:**

“EPA also should consider whether natural background concentrations would preclude compliance with EPA’s proposed standards in certain geographic areas. For example, EPA estimates that 70 to 80 percent of the seasonal mean ozone levels in Florida are attributed to background contributions.”

- Florida Department of Environmental Protection, pg. 2

“LDEQ has concerns that a strengthening of the ozone standard may result in ozone exceedances due to background concentrations of naturally occurring ozone mixed with anthropogenic background levels.... EPA instead suggests that the states pursue regulatory relief in the form of exclusion, exceptional events or relief from adopting stringent requirements by using the rural or international transport provisions. Once again this presents an onerous burden for the states. EPA does not have to prove these exceptions or exclusions, the states must perform these exercises, subject to EPA review and approval.”

- Louisiana Department of Environmental Quality, pg. 5

“EPA has not been able to confirm the natural background levels for ozone. This varies from region to region with the Southeast United States having higher background concentrations. As EPA lowers the standard, the background contribution becomes more significant.”

- Mississippi Department of Environmental Quality, pg. 2

“The intent of the CAA has never been to compel air quality authorities to mandate reduction measures that will prove to be futile where NAAQS violations are the result of elevated background concentrations, as is the case with ozone in Nevada and the intermountain West.”

- Nevada Division of Environmental Protection, pg. 1 of cover letter

“Ohio EPA does not agree that the new ozone standard should be mostly comprised of background ozone itself. As a new standard becomes closer to background levels, states have less ability to develop practical control strategies to meet the standard.”

- Ohio EPA, pg. 13

“As the NAAQS is further reduced, the Department is concerned about the increasing proportion of naturally occurring background ozone in monitor readings.... The Department believes that the EPA should provide more information to CASAC and its state partners on background ozone; perhaps even developing a relevant policy on background levels that the EPA can use as a basis for evaluating revisions to this and future NAAQS. If not now, an in-depth study of background levels is needed before the next five-year NAAQS review cycle begins.

- South Carolina Department of Health and Environmental Control, pg. 2

"Tennessee appreciates the need to lower the standard, but urges extreme caution in selecting a value that approaches background due to the many likely implementation issues that will follow. While the courts may have ruled that costs are not to be considered in setting a health based standard, the practicality of implementation irrespective of costs must absolutely be considered."

- Tennessee Department of Environment and Conservation, pg. 9

"Another consideration in EPA's policy judgment should be the attainability of the standard. Ozone forms naturally in the absence of the anthropogenic influences over which EPA and states have any control. As lower ozone concentrations are considered as NAAQS, these background levels of ozone are approached. This is especially an issue at the lower end of the range that EPA is considering. A NAAQS should not be set at background levels at which there are no realistic compliance options available."

- West Virginia Department of Environmental Protection, pg. 2

"...the Proposed Rule directly raises the very significant issue of potential widespread unattainability of the proposed revised NAAQS due to background levels that are not subject to control by either the States or the Federal government through their statutory and regulatory authority."

- Joint comments from North Dakota Department of Health, Alabama Department of Environmental Management, Mississippi Department of Environmental Quality, West Virginia Department of Environmental Protection, and Wyoming Department of Environmental Quality, pg. 2

**On Exceptional Events:**

"EPA should establish clear protocols for reviewing all of the exceptional events documentation packages submitted by states. These protocols should call for EPA to respond to states' requests for exceptional events determinations as expeditiously as practicable. Given the probabilistic nature of the ozone standard, any such protocol for reviewing exceptional events documentation packages should allow states to request that data be excluded even if those data do not reflect an exceedance of the standard, so long as the circumstances that resulted in the elevated concentrations meet the criteria for an exceptional event."

- Florida Department of Environmental Protection, pg. 3-4

"GEPD strongly urges EPA to provide additional clarification and guidance for submittal of exceptional event documentation."

- Georgia Environmental Protection Division, pg. 9

"Exceptional events demonstrations for NAAQS violations resulting from high background ozone concentrations in the rural west will be too lengthy, frequent, and onerous.... The analysis and demonstration for a single stratospheric intrusion exceptional events package would require resources beyond what is currently available. The NDEP's past experience is that a large portion of the agency's resources have been consumed by investigating, analyzing and preparing demonstrations for suspected exceptional events, which takes away from the agency's ability to focus on air quality planning and implementation that would actually provide public health protections."

- Nevada Division of Environmental Protection, pg. 8-9



"The 'exceptional event exclusion' may be useful in rare instances, but demonstrating even a single instance is extremely burdensome and, as previously discussed, the states face uncertainty regarding what is required for an acceptable exceptional events demonstration."

- Texas Commission on Environmental Quality, p. 34

"DEQ has not been successful in receiving concurrence on the exclusion of any ozone data even though various monitors across the Commonwealth experienced elevated ozone levels throughout these events. The EER places an undue burden on states by requiring a very stringent 'but for' demonstration, which goes well beyond the requirements in the Clean Air Act (CAA)... Even with longer timeframes, emission inventory development to support these analyses would be prohibited by the resource-intensive nature of such a project."

- Virginia Department of Environmental Quality, pg. 2

"So far, we are the only agency in the nation that has received concurrence for a stratospheric intrusion event. Based on this experience, each demonstration took between four and eight months to produce. The effort to produce those demonstrations used internal staff with meteorological expertise as well as assistance from the EPA's stratospheric ozone intrusion workgroup, a group of state regulators, Federal regulators, and academics focused on researching and diagnosing stratospheric ozone intrusions.

While the DEQ has not produced a demonstration to show a clear causal relationship between a wildfire and ozone exceedance, the DEQ is familiar with the demonstrations that the EPA has posted as examples for wildfire impacts and ozone. The DEQ has concluded that it would require 15 months and contractor assistance of \$150,000 to produce one of these demonstrations and any future demonstrations will require comparable resource commitments. Securing funding and additional staff resources for new NAAQS implementation is always a challenge, but this process will be even more difficult for low-population, rural states facing additional workloads under a more-stringent ozone NAAQS."

- Wyoming Department of Environmental Quality Air Quality Division, testimony to House Science, Space, and Technology Committee's Environment Subcommittee, pg. 7-8

**On International Transport:**

"While this sounds like a viable option for relief in theory, the practical application of this 'international transport' provision of the CAA is tenuous. Under this regulatory provision, a state must demonstrate that it has taken all possible steps to reduce ozone. As with the 'exceptional events' provision, submitting approvable proof of such demonstration has proven to be historically difficult. Additionally, there is limited precedent for EPA approving an attainment plan under this provision. As such, its practical applicability to states as a viable avenue for relief is uncertain."

- Arkansas Department of Environmental Quality, pg. 17

"As with other states, the Department is concerned about background and transported ozone which may prevent compliance with a more stringent NAAQS. As the economies of Asian countries, such as China and India grow, the problem is expected to only get worse."

- North Dakota Department of Health, pg. 1

"The other potential remedy relies on federal Clean Air Act (FCAA) §179B and requires a demonstration that an area would attain the standard by its attainment date 'but for' emissions emanating from outside the United States. However, the EPA has only approved such demonstrations for two areas adjacent to the Mexican border. The EPA does note that areas distant from international borders may be affected by emissions from foreign sources, offering some hope of relief for large sections of the country but offers little guidance on how such a demonstration should be made or what would be acceptable. For example, would modeling that excluded emissions from foreign areas within the modeling domain and using adjusted boundary conditions constitute an acceptable demonstration?"

- [Texas Commission on Environmental Quality](#), p. 34-35

"The AQD requests that the EPA updates its 1991 guidance to include technology and tools developed in the past 24 years and reflect current research on international transport..."

- [Wyoming Department of Environmental Quality Air Quality Division](#), pg. 3

**On Rural Transport Areas:**

"While many Kentucky counties may technically qualify for this 'relief,' a determination of an area as a Rural Transport Area would not avoid the actual designation as nonattainment as the rule is written. These areas would still be subject to the requirements and economic disincentives of nonattainment new source review (NNSR) permitting, among other requirements."

- [Kentucky Energy and Environment Cabinet](#), pg. 2

"Rural transport areas still need to meet requirements for marginal ozone areas, including baseline emissions inventory, source emission statements, nonattainment new source review with offset requirements, and transportation and general conformity. This does not provide regulatory relief for many rural areas that are slightly above the standard due to pollution transported from outside the area.... The lack of available offsets will result in the effective foreclosure of new industrial growth in rural ozone non-attainment areas in the west, which is likely to have devastating consequences on these rural communities since they may already be struggling economically."

- [Nevada Division of Environmental Protection](#), pg. 14

"The AQD commends the EPA for retaining and expanding these regulatory relief mechanisms in light of the increasing relative importance of background ozone to overall ozone levels in rural, high-elevation areas with a lower standard. However, the fact that this classification has only been approved for two areas since the RTA's inception calls into question the RTA's usefulness as a nonattainment regulatory relief mechanism."

- [Wyoming Department of Environmental Quality Air Quality Division](#), pg. 3





April 13, 2016

Dear Representative:

Clean air is fundamental for good health, and the Clean Air Act promises all Americans air that is safe to breathe. The undersigned public health and medical organizations urge you to **oppose H.R. 4775, the so-called "Ozone Standards Implementation Act of 2016."** Despite the clear scientific evidence of the need for greater protection from ozone pollution, and the Clean Air Act's balanced implementation timeline that provides states clear authority and plenty of time to plan and then work to reduce pollution to meet the updated standard, H.R. 4775 imposes additional delays and sweeping changes that will threaten health, particularly the health of children, seniors and people with chronic disease.

In contrast to what the bill's title implies, H.R. 4775 reaches far beyond implementation of the current ozone standards. It also permanently weakens the Clean Air Act and future air pollution health standards for all criteria pollutants. **Specifically, H.R. 4775 weakens implementation and enforcement of all lifesaving air pollution health standards including those for carbon monoxide, lead, nitrogen dioxide, ozone, particulate matter, and sulfur dioxide.** It would also permanently undermine the Clean Air Act as a public health law.

The Clean Air Act requires that the Environmental Protection Agency review the science on the health impacts of carbon monoxide, lead, nitrogen dioxide, ozone, particulate matter, and sulfur dioxide air pollutants every five years and update these national ambient air quality standards according to the current science. **H.R.4775 would lengthen the review period of the air pollution health standards from once every five years to once every ten years for all criteria pollutants.** As the science continues to evolve, EPA and states should have the best and most current data inform air pollution cleanup.

New research shows additional impacts that air pollution has on human health. For example, on March 29, 2016, a new study, *Particulate Matter Exposure and Preterm Birth: Estimates of U.S. Attributable Burden and Economic Costs*, was published that shows particulate air pollution is linked to nearly 16,000 preterm births per year. **Under H.R. 4775, EPA would have to wait as much as a decade to consider new evidence when setting standards. Ten years is far too long to wait to protect public health from levels of pollution that the science shows are dangerous or for EPA to consider new information.**

In the 2015 review of the ozone standard, EPA examined an extensive body of scientific evidence demonstrating that ozone inflames the lungs, causing asthma attacks, resulting in emergency room visits, hospitalizations, and premature deaths. A growing body of research indicates that ozone may also lead to central nervous system harm and may harm developing fetuses. In response to the evidence, EPA updated the ozone standards. While many of our organizations called for a more protective level, there is no doubt that the new 70 parts per billion standard provides greater health protections compared to the previous standard.

H.R. 4775 would delay implementation of these more protective air pollution standards for at least eight years. This means eight years of illnesses and premature deaths that could have been avoided. Parents will not be told the truth about pollution in their community and states and EPA will not work to curb pollution to meet the new standards. **The public has a fundamental right to know when pollution in the air they breathe or the water they drink threatens health, and Congress must not add eight years of delay to health protections and cleanup.**

**H.R. 4775 would also permanently weaken implementation of the 2015 and future ozone standards.** It would reduce requirements for areas with the most dangerous levels of ozone. Areas classified as being in "extreme nonattainment" of the standard would no longer need to build plans that include additional contingency measures if their initial plans fail to provide the expected pollution reductions. **The Clean Air Act prioritizes reducing air pollution to protect the public's health, but H.R. 4775 opens a new opportunity for communities to avoid cleaning up, irrespective of the health impacts.**

Further, the bill would greatly expand the definition of an exceptional event. Under the Clean Air Act, communities can demonstrate to EPA that an exceptional event – such as a wildfire – should not "count" in determining whether their air quality meets the national standards. **This bill would recklessly expand the definition of exceptional events to include high pollution days when the air is simply stagnant – the precise air pollution episodes the Clean Air Act was designed to combat – and declare those bad air days as "exceptional."** Changing the accounting rules will undermine health protection and avoid pollution cleanup.

**Additionally, the bill would permanently weaken the Clean Air Act.** The Clean Air Act is one of our nation's premier public health laws because it puts health first. The Act has a two-step process: first, EPA considers scientific evidence to decide how much air pollution is safe to breathe and sets the standard that is requisite to protect public health with an adequate margin of safety. Then, states work with EPA to develop a plan to clean up air pollution to meet the standard. Cost and feasibility are fully considered in the second phase during implementation of the standard.

This bill states that if EPA finds that "a range of levels" of an air pollutant protect public health with an adequate margin of safety, then EPA may consider technological feasibility in choosing a limit within that range. Further, the bill would interject implementation considerations including adverse economic and energy effects into the standard setting process. **These changes will permanently weaken the core health-based premise of the Clean Air Act – protecting the public from known health effects of air pollution with a margin of safety.**

**H.R. 4775 is a sweeping attack on lifesaving standards that protect public health from air pollution. This bill is an extreme attempt to undermine our nation's clean air health protections.** Not only does it delay the long-overdue updated ozone standards and weaken their implementation and enforcement, it also permanently weakens the health protections against many dangerous air pollutants and the scientific basis of Clean Air Act standards.

**Please prioritize the health of your constituents and vote NO on H.R. 4775.**

Sincerely,

Allergy & Asthma Network  
Alliance of Nurses for Healthy Environments  
American Lung Association  
American Public Health Association  
American Thoracic Society  
Asthma and Allergy Foundation of America  
Children's Environmental Health Network

Health Care Without Harm  
March of Dimes  
Physicians for Social Responsibility  
Public Health Institute  
Trust for America's Health

Center for Biological Diversity \* Conservatives for Responsible Stewardship \* Earthjustice  
Environment America \* Environmental Defense Fund \* League of Conservation Voters  
League of Women Voters \* Natural Resources Defense Council  
Physicians for Social Responsibility \* Sierra Club \* Southern Environmental Law Center  
Union of Concerned Scientists \* Voices for Progress

April 14, 2016

Dear Representative:

On Thursday, April 14, the House Energy and Commerce Energy & Power Subcommittee is holding a hearing on H.R. 4775—the so-called “Ozone Standards Implementation Act.” The undersigned environmental, science, and health groups believe this bill represents one of the most irresponsible compilations of attacks on Clean Air Act health standards ever to be introduced in Congress. If this bill were to become law, it would be very detrimental for our nation’s air quality, public health and Americans’ right to clean, safe air. The legislation systematically weakens the Clean Air Act without a single improvement. It eliminates Americans’ 46-year right to healthy air based on medical science, and substitutes a process in which politics and profits will dictate acceptable air quality. The bill delays life-saving health standards that already are years overdue. Each section of this bill would effect a radical rewrite of the Clean Air Act. The following section-by-section analysis explains in greater detail exactly how this draft legislation would weaken the Clean Air Act and worsen air quality and public health in ways not allowed under current law.

Section 2(a): This section denies Americans the right to clean, healthy air for up to eight years longer than current law allows. EPA recently strengthened national health standards for ground-level ozone (or smog) pollution, and states have one year to tell EPA which areas have healthy air and which do not. Following that, EPA has one year to designate unhealthy areas, which triggers cleanup of unhealthy, polluted air. States must implement the standards within three years of their adoption. H.R. 4775 delays all these requirements by *eight years*, meaning that cleanup steps by polluters will be delayed by eight years, and Americans will not even have the right to know if the air they breathe is unhealthy.

Section 2(b): This section weakens the Clean Air Act by letting corporations that apply for air pollution permits pollute at levels that national health standards recognize to be unsafe. The bill provides that facilities applying for air pollution permits need not meet the updated 2015 ozone health standards if they submit a draft or complete application any time before the drawn out, eight-year delayed deadline in section 2(a). Adding insult to the injury of an eight-year delay, section 2(b) reverses longstanding Clean Air Act safeguards by letting the largest sources of air pollution exceed health standards. Congress has prohibited this evasion for nearly

40 years. Section 2(b) would make new polluters “winners” at the expense of existing businesses in an area, as well as any future businesses seeking to expand, by letting new entrant polluters worsen an area’s air quality inordinately. This makes it harder and more costly for other businesses to expand or grow, if the new polluter pushes the area near or over an unhealthy classification. Indeed, the provision gives a perverse incentive for these facilities to pollute a community as quickly and severely as possible, all the way up to the level of outdated ozone standards, knowing that the safer 2015 standard will need to be met later. This section plays favorites with big polluters and ensures that we all lose from dirtier, less safe air.

Sections 3(a)(1) & (a)(2): Section 3 would radically weaken the Clean Air Act to *double* the time period in which the U.S. EPA is required to review national health standards for ozone, soot, lead and other dangerous pollutants. Current law requires that EPA review the science on ozone, soot, and four other common pollutants every five years, and update standards for these pollutants if the science indicates the standards should be updated. It is critical to understand, however, that even with this 5-year statutory deadline, in practice EPA has reviewed health standards every 8 years or longer. What this means is that delaying the statutory deadline from 5 to 10 years would in effect delay EPA’s updates to standards for even longer than 10 years. As we learn more about air pollution, we understand it is more dangerous to human health, with especially harmful impacts on children and their developing lungs and hearts. Delaying review of the best medical science does not make current air pollution levels safe— it just means more Americans will suffer unhealthy air pollution levels longer. Section 3(a)(2) singles out health standards for ozone, and prohibits the EPA from even proposing new health standards before 2025, ten years after updated ozone standards were finalized in 2015. The bill imposes this shocking prohibition with no regard for advancement of medical science, Americans’ health, or how many Americans will suffer harm due to the bill’s arbitrary political ban.

Section 3(b): This section overthrows Americans’ 46-year-old right to clean, safe air under the Clean Air Act, which is based on medical science and health considerations. H.R. 4776 substitutes a process that will be dictated by politics and polluter compliance costs. The bill radically worsens the Clean Air Act’s bedrock health standard-setting process by authorizing EPA to depart from the appropriate, medically-based health standard, by taking into account “technological feasibility” when EPA finds that a range of levels are requisite to protect health with an adequate margin of safety. This legislative maneuver pretends that unhealthy air becomes healthy if polluter feasibility complaints find receptive politicians. The Clean Air Act since 1970, backed by a unanimous Supreme Court ruling authored by former Justice Antonin Scalia, makes clear that EPA must consider only medical and public health data to set clean air health standards that protect all Americans, including children, the elderly and asthma sufferers. H.R. 4775 would pollute a medical process with money (and, invariably, politics) and

undermine the Act's very foundation of clean air health standards, leaving millions of Americans exposed to dangerous air pollution even when medical science tells us that amount of air pollution is unsafe.

Section 3(c): This section compounds the harms of section 3(b) by requiring EPA's independent science advisors to redirect time spent reviewing science and health data for adopting protective health standards, toward time considering social and economic factors related to *complying* with standards. This not only seeks to impermissibly inject economic factors into setting what are supposed to be medical health standards, but also turns a process always concerned with public health and medical science into a forum for political lobbying, rent-seeking and corporate favoritism. This would further undermine the Clean Air Act's concern with clean, safe air for all Americans.

Section 3(d): This section provides that if implementing rules for preconstruction permits are not issued simultaneously with a new health standard, major facilities that apply for air pollution construction permits do not need to meet updated air quality health standards, and may instead pollute at unsafe levels. This significantly weakens and departs from longstanding current law.

Section 3(e): This section weakens the Clean Air Act to excuse parts of the country suffering the worst smog pollution from having contingency plans in case they do not meet their air pollution reduction obligations. It makes no sense to give the worst polluted areas an exemption from a requirement to make sure pollution control measures effectively reduce pollution. For the most polluted parts of the country, it is critical that states and municipalities do everything they can to protect Americans' health and environment by cleaning up smog pollution. Excusing them from these requirements takes these parts of the country backward and penalizes their citizens with laxity that current law does not allow.

Sections 3(f) & (g): Sections 3(f) and 3(g) again weaken the Clean Air Act by injecting polluter cleanup costs into requirements meant to ensure reasonable further progress to reduce smog and soot pollution. Injecting compliance costs retreats from the current law's focus on public health and whether cutting pollution is achievable. These provisions also significantly weaken and depart from longstanding current law.

Section 3(h): This section weakens the Clean Air Act's treatment of "exceptional events"—generally natural air pollution events that the Act does not count when determining compliance with national air quality standards if specific conditions are met. This section of the bill would recklessly expand this narrow exception to make it easier to exclude conclusive proof of unsafe air quality when it is influenced by stagnant air, high temperatures, or a lack of precipitation. There is nothing exceptional about such events and they often combine with industrial air

pollution to cause unsafe air. During these types of events, people are suffering real health impacts from the very real poor air quality that exists. Pretending these events are exceptional or that bad air quality is not harmful to peoples' health does not make it so.

Section 3(j): This section requires a report to Congress on air pollution from foreign sources and their impacts on air quality in the United States. The mandate is unaccompanied by any funds to prepare and issue the report and will pull agency resources away from statutory responsibilities to protect Americans' health and air quality.

H.R. 4775 would systematically weaken the Clean Air Act by authorizing increased air pollution, delays in safe air for the public, and even the elimination of Americans' longstanding right to clean, safe air. The bill would even allow EPA to deceive Americans about whether the air is safe to breathe, by departing from a safe level founded on medical science to unsafe levels that accommodate polluter cleanup costs. Since 1970, the federal Clean Air Act has been organized around one governing principle—that the EPA must set health standards for dangerous air pollution, including smog, soot and lead, that protect all Americans, with “an adequate margin of safety” for vulnerable populations like children, the elderly and asthmatics. H.R. 4775 eviscerates that principle and protection. We know more now about the dangers of air pollution than ever before. H.R. 4775 takes us backwards when we need more progress. We urge you to oppose H.R. 4775, to protect our families and their rights to clean air.

Sincerely,

Center for Biological Diversity  
Conservatives for Responsible Stewardship  
Earthjustice  
Environment America  
Environmental Defense Fund  
League of Conservation Voters  
League of Women Voters  
Natural Resources Defense Council  
Physicians for Social Responsibility  
Sierra Club  
Southern Environmental Law Center  
Union of Concerned Scientists  
Voices for Progress

FRED UPTON, MICHIGAN  
CHAIRMAN

FRANK PALLONE, JR., NEW JERSEY  
RANKING MEMBER

ONE HUNDRED FOURTEENTH CONGRESS  
**Congress of the United States**  
**House of Representatives**  
COMMITTEE ON ENERGY AND COMMERCE  
2125 RAYBURN HOUSE OFFICE BUILDING  
WASHINGTON, DC 20515-6115  
Majority (202) 225-2927  
Minority (202) 225-3841

May 5, 2016

Dr. Bryan W. Shaw  
Chairman  
Texas Commission on Environmental Quality  
12100 Park 35 Circle, Building F  
Austin, TX 78753

Dear Dr. Shaw:

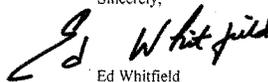
Thank you for appearing before the Subcommittee on Energy and Power on Thursday, April 14, 2016, to testify at the hearing entitled "H.R. 4775, Ozone Standards Implementation Act of 2016."

Pursuant to the Rules of the Committee on Energy and Commerce, the hearing record remains open for ten business days to permit Members to submit additional questions for the record, which are attached. The format of your responses to these questions should be as follows: (1) the name of the Member whose question you are addressing, (2) the complete text of the question you are addressing in bold, and (3) your answer to that question in plain text.

To facilitate the printing of the hearing record, please respond to these questions with a transmittal letter by the close of business on May 19, 2016. Your responses should be mailed to Will Batson, Legislative Clerk, Committee on Energy and Commerce, 2125 Rayburn House Office Building, Washington, DC 20515 and e-mailed in Word format to [Will.Batson@mail.house.gov](mailto:Will.Batson@mail.house.gov).

Thank you again for your time and effort preparing and delivering testimony before the Subcommittee.

Sincerely,



Ed Whitfield  
Chairman  
Subcommittee on Energy and Power

cc: The Honorable Bobby Rush, Ranking Member, Subcommittee on Energy and Power

Attachment

Bryan W. Shaw, Ph.D., P.E., *Chairman*  
Toby Baker, *Commissioner*  
Jon Niermann, *Commissioner*  
Richard A. Hyde, P.E., *Executive Director*



## TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

*Protecting Texas by Reducing and Preventing Pollution*

The Honorable Ed Whitfield  
U.S. House of Representatives  
Committee on Energy and Commerce  
Chairman, Subcommittee on Energy and Power  
2125 Rayburn House Office Building  
Washington, DC 20515-6115

RE: Responses to Questions for the Record

Dear Chairman Whitfield:

Thank you for the opportunity to supplement my testimony before the Subcommittee on Energy and Power's hearing entitled, "H.R. 4775, Ozone Standards Implementation Act of 2016," on Thursday, April 14, 2016.

I have reprinted your questions below, with my answers immediately following.

**1. Currently, the EPA is prohibited from considering costs when setting a NAAQS. Are there other instances where the Agency does consider costs and where this practice results in health protective standards?**

Yes. The Safe Drinking Water Act requires EPA to establish two values for a chemical in water. The first is a Maximum Contaminant Level Goal (MCLG), which is analogous to the Clean Air Act's NAAQS. MCLGs consider only public health; not costs, availability of treatment technologies, or analytical detection limits. However, an MCLG is not enforceable. The second value EPA must establish for a chemical in drinking water is the Maximum Contaminant Level (MCL). The MCL is the enforceable standard that a public water system must meet. The MCL is set considering the availability of treatment technology and analytical detection limits. EPA can also determine if the costs of treatment outweigh the public health benefits of a lower MCL. There is no NAAQS level analogous to the MCL.

The EPA is also required to consider costs when setting other kinds of standards, such as New Source Performance Standards (NSPS) under Federal Clean Air Act (FCAA), §111, and National Emission Standards for Hazardous Air Pollutants (NESHAP), also known as Maximum Achievable Control Technology Standards (MACT) under FCAA, §112. When setting an NSPS, EPA is required to consider cost, non-air impacts, and energy requirements. The NSPS act as a "technological floor" to ensure that all new or modified sources covered by the NSPS meet minimum technological standards, but does not have a statutory public health impact assessment requirement. Similarly, under

§112, EPA is required to consider costs when initially setting the NESHAP/MACT and is required to assure that the NESHAP/MACT are protective of public health through a separate residual risk review that should occur 8-9 years after EPA promulgates the initial NESHAP/MACT. Additionally, EPA is required under §112(k) (Urban Air Toxics Strategy) to conduct a program of research and to develop a national strategy for reducing risk from air toxics in urban areas. The strategy must identify at least 30 HAPs that present the greatest risk to public health from area sources in urban areas. The strategy must achieve substantial reductions in public health risks, including a 75 percent reduction in cancer incidence from stationary sources. The EPA must assure that sources accounting for 90 percent or more of the aggregate emissions of each of the 30 identified HAPs are subject to emission control standards, which must include technology-based control (MACT or Generally Achievable Control Technology (GACT)) of area sources.

Even though these and other rules consider costs, they are still health protective.

**2. When calculating costs and benefits for a proposed standard, the EPA only includes costs to regulated entities. What are the consequences of this narrow view of costs? What other costs are not included in these estimates, but should be considered by the EPA?**

Although EPA only considers the regulated entity costs to comply with a new NAAQS, the actual total cost of ozone nonattainment is much broader in scope and more challenging to estimate. Costs outside of control technology are influenced by the type, amount, location, and timing of emission reductions necessary to achieve attainment, which is driven by the classification level for areas designated nonattainment. Nonattainment classification levels are based on the concentration of ozone, measured by the area's design value. The higher the ozone design value (concentration), the more stringent the classification. As classifications become more stringent, areas must comply with all of the requirements for the less stringent classifications, in addition to the requirements for the area's classification. For example, with a marginal ozone classification, major point sources in the area must begin to comply with emissions inventory reporting requirements and offset proposed new emissions as part of the nonattainment new source review (NSR) permitting program, and local authorities must comply with federal general conformity and transportation conformity requirements. Although difficult to predict and estimate, the procedural costs, delays, and uncertainty introduced by these permitting and conformity requirements are often cited as reasons why companies may prefer not to locate or expand in nonattainment areas, which can severely impact an area's economic growth. Some specific costs that currently are not considered by EPA, but significantly impact citizens, include:

1. Costs accruing to governments. State and local governments incur costs when developing and implementing state implementation plan (SIP) revisions, including coordinating stakeholder involvement, outreach, implementing more stringent permitting requirements, implementing credit generation programs, monitoring, and enforcement. Local governments face costs associated with coordinating stakeholder involvement in air quality planning decisions, developing local ordinances, outreach, and participation in transportation and general conformity

activities. The TCEQ has estimated that the state's level of effort is 45,000 to 55,000 hours of staff time, with an estimated cost of over \$1 million dollars, per SIP revision. The cost of implementing SIP strategies at the state, local government, and regional level can also be significant due to the ongoing enforcement of required control strategies.

2. Costs accruing to individuals. Citizens in ozone nonattainment areas classified as moderate or higher may be required to comply with inspection and maintenance (I/M) and fuel requirements for vehicles or face other potential restrictions (on idling, lawn care equipment, etc.). For example, in Texas the I/M fee is generally an incremental \$14 to \$27, on top of the cost for a safety inspection, for all gasoline-fueled light-duty vehicles aged two through 24 years old. Vehicles that do not pass the emissions inspection must be repaired and retested in order to be registered. In 2014, the emissions inspection failure rate was approximately 4% and the average cost of repair was \$554 for vehicles that participated in the state's Low Income Vehicle Repair Assistance, Retrofit, and Accelerated Vehicle Retirement Program (commonly known as "LIRAP"). Citizens may also experience indirect cost increases for goods and services as businesses complying with control requirements raise prices. These costs may be estimated in general equilibrium econometric models that account for behavior changes ("induced" effects).
3. Indirect costs. These include the long-term effects of business decisions to avoid locating or expanding in areas with stricter air quality controls. They may include changes in prices, employment, and consumption patterns.
4. Negative costs (benefits). Some businesses that build, install, and service pollution control equipment may benefit from increased demand for their products, including engineering design, materials, manufacturing, construction, and vehicle inspection industries.

The result of EPA's narrow analysis is to underestimate the costs of its rules and provide confusing information to the public about the real cost-benefit relationship associated with NAAQS implementation. Even the cost estimates currently provided by EPA are given poor context with regard to uncertainty in the values and their indirect impacts on Americans. For example, NERA Economic Consulting estimated the potential emissions control costs to achieve the proposed ozone NAAQS of 65 ppb would decrease the nation's gross domestic product by about \$140 billion (2014\$) per year on average over the 2017 through 2040 period [1]. EPA estimated the same proposed standard would cost only \$16 billion (2011\$) by 2025 [2], but did not include any estimation of control cost impacts to the economy overall. In addition to these compliance costs, costs to state and local governments can be quite dramatic, as can the subsequent impact to the local economy. Increased unemployment, poverty, and loss of funding for local public health programs and clean air initiatives are just a few of the consequences of stunted economic growth and each of these issues cause both additional costs and health burdens that are not currently considered by EPA. Better representing the true costs of a regulation should help create more responsible and meaningful regulations.

**3. During the hearing it was suggested that although the EPA cites ozone effects on asthma as a reason to promulgate a new, lower standard, these effects may be uncertain. Please provide additional information on the relationship between ozone exposure and asthma.**

When evaluating ozone effects on asthma, there is an important distinction that should be considered: whether ozone concentrations are causing or contributing to asthma (asthma development or asthma incidence), or whether ozone concentrations are causing asthma exacerbations (asthma attacks). For asthma development, a recent meta-analysis did not show an association between ozone and asthma incidence [3]. In addition, EPA Administrator Gina McCarthy was quoted in a Congressional Hearing saying, "Well, I don't think that the scientists at this point are saying that asthma is caused by ozone...The issue is that it's exacerbated."<sup>1</sup> As for asthma attacks, current scientific literature does not provide a definitive link between current ambient ozone levels and asthma exacerbations. Three major multi-city studies have followed hundreds of mainly urban children in 16 different cities and studied their lung function and asthma symptoms [4-6]. Only one of these studies [6] showed an association between asthma symptoms and ozone, and that was in only one city (Baltimore) out of the eight studied. The most recent study available (conducted by the University of Texas at Austin and Yale University) examined relationships between asthma-related hospitalizations and ozone concentrations for eight cities in Texas [7]. They found that ozone was not related to asthma hospitalization risk, but rather that the common cold is a primary driver of asthma exacerbation. Therefore, the general consensus from the scientific community is that ozone does not cause asthma, and overall, recent evidence does not show that ozone contributes to asthma attacks at ambient concentrations. While the latter statement is in disagreement with the statement made by Administrator McCarthy, we note that the EPA's regulatory impact analysis did not show a statistically significant decrease in asthma exacerbations with a decreasing ozone standard (Table 6-20 [2]).

**4. Although opponents of HR 4775 cite concern that the lengthened NAAQS review cycle would limit the EPA's ability to keep the NAAQS consistent with current literature, the EPA has actually had difficulty maintaining the existing review schedule. Has the EPA's failure to keep this schedule impacted Texas? If so, how?**

The current NAAQS review cycle is already lengthy, with many large documents and analyses to be developed and many hundreds of comments to consider from multiple rounds of public comment and Clean Air Scientific Advisory Committee reviews for each standard. The length of the current process (often far more than 5 years) has not inhibited the EPA's ability to assess available scientific literature and to act on it to ensure that the standard is set at a health-protective level. While there may be cutoff publication dates for incorporation into a given document, the EPA can, and has revised documents mid-cycle and/or issued interim analysis to include newer, relevant literature. For example, during the last review for the ozone NAAQS, the EPA issued a

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<sup>1</sup> Committee on Science, Space, and Technology - Full Committee Hearing - Examining EPA's Regulatory Overreach - July 9, 2015

number of technical memos that included supplemental analyses, errata, and other updated information.

The EPA's failure to maintain a 5-year NAAQS review cycle has not meant that emission reduction efforts in Texas have stopped. Like many other states, Texas is still working toward reducing ambient ozone concentrations in areas designated nonattainment under previous standards. Because of ozone's complex atmospheric formation chemistry, the multitude of precursor sources in densely populated and industrial areas, and the impact of national and international transport, ozone reduction strategies are long-term in scope. Delay of a new ozone standard does not pause the reduction strategies that are already being planned or in place.

Frequent NAAQS revisions are, in fact, more challenging for state governments than delays in their review. When the EPA revises the NAAQS frequently, as they have done with ozone recently, there are overlapping standards with differing ozone nonattainment requirements and sometimes differing ozone nonattainment counties for each standard. This, coupled with delays in implementation of the NAAQS, leads to burdensome and duplicative SIP planning for states and confusion among the regulated community and the public. Transition from one ozone NAAQS to another is difficult, especially when guidance and rulemaking necessary for states to plan for transitioning to the new NAAQS is not provided at the time of NAAQS promulgation and EPA guidance requires that SIP revisions include time-consuming photochemical modeling to demonstrate attainment for all classifications except marginal. In addition, the FCAA does not provide requirements for transitioning from one NAAQS to another, nor does it provide a schedule that gives states enough time to plan for a revised standard or require the EPA to revoke the previous standard in a timely manner.

To further complicate the impact of frequent NAAQS revisions, the FCAA does not sync planning and implementation obligations for interstate transport with nonattainment planning and implementation obligations. Interstate transport requirements are required by the FCAA to be finalized at least a year before attainment demonstrations are due so as to allow a state's attainment demonstrations to incorporate this information and avoid local or federal over-control due to these requirements not being synchronized. The current three-year intervals between attainment deadlines for ozone nonattainment areas classified as marginal, moderate, and serious need to be extended to six-year intervals. If an area does not meet an attainment date and is bumped up to the next classification, states often have less than three years (often only two) to analyze and determine needed reductions, develop a new future case modeling scenario, develop any additional control strategies, conduct stakeholder meetings, propose and adopt rules and a SIP revision (which often takes a year by itself), give industry adequate time to comply with control strategies (often 6-24 months), and then have the emission reductions show up in a three-year average of monitoring data. The federal system of reclassification sets states up to fail in these "bump-up" situations. States should not be penalized or expected to ask for voluntary double bump-ups and bear the associated impacts on permitting and other actions just to compensate for an unwieldy FCAA requirement.

**5. Some have suggested that the litigation filed by Texas and several other states over the 2015 ozone NAAQS indicates that these states are putting technology and policy issues above public health issues. What priority does Texas give to public health concerns? In your experience, are the NAAQS purely public health standards or is there a policy component?**

The TCEQ is firmly and proudly committed to the protection of public health and the state's natural resources. In the realm of air quality alone, Texas annually invests millions of dollars in ambient air monitoring, emission reduction programs, and scientific studies that are over and beyond what is required by federal rule. The present litigation is intended to address noted technical and scientific shortcomings with the 2015 ozone NAAQS, not to impede progress in lowering ambient ozone concentrations. Indeed, Texas continues to be a national leader in ambient ozone reductions and the EPA itself anticipates that minimal emission reduction efforts will be necessary in Texas in order to meet the 2015 ozone NAAQS [2]. The TCEQ continues to work with its local government partners, as well as industry, to understand and reduce ambient ozone concentrations and looks forward to continued discussion with the EPA and other state governments on meaningful air quality regulation.

The NAAQS are neither purely public health nor public policy standards. The basis of the NAAQS is to determine a level of a criteria pollutant that is requisite to protect public health. However, many policy judgments are necessarily embedded in the NAAQS review process in order to deal with the uncertainties inherent in evaluating different lines of evidence throughout hundreds or thousands of studies. The role of policy in the setting of the NAAQS is further outlined in the 2013 D.C. circuit's opinion on *Mississippi et al. v. EPA* ("the NAAQS review process includes EPA's public health policy judgments as well as its analysis of scientifically certain fact"<sup>2</sup>) and *Lead Industries Association* (the margin of safety is "a policy choice of the type that Congress specifically left to the Administrator's judgment"<sup>3</sup>).

Sincerely,



Bryan W. Shaw, Ph.D., P.E.  
Chairman, Texas Commission on Environmental Quality

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<sup>2</sup> *Mississippi v. EPA*, No. 08-1200 (DC Cir. 2013) at 13

<sup>3</sup> 647 F.2d at 1162

**References**

1. NERA Economic Consulting, *Economic Impacts of a 65 ppb National Ambient Air Quality Standard for Ozone*, 2015: February. p. 20.
2. USEPA, *Regulatory Impact Analysis of the Final Revisions to the National Ambient Air Quality Standards for Ground-Level Ozone*, 2015: September. p. 480.
3. Gasana, J., et al., *Motor vehicle air pollution and asthma in children: a meta-analysis*. *Environ Res*, 2012. **117**: p. 36-45.
4. O'Connor, G.T., et al., *Acute respiratory health effects of air pollution on children with asthma in US inner cities*. *J Allergy Clin Immunol*, 2008. **121**(5): p. 1133-1139 e1.
5. Schildcrout, J.S., et al., *Ambient air pollution and asthma exacerbations in children: an eight-city analysis*. *Am J Epidemiol*, 2006. **164**(6): p. 505-17.
6. Mortimer, K.M., et al., *The effect of air pollution on inner-city children with asthma*. *Eur Respir J*, 2002. **19**(4): p. 699-705.
7. Eggo, R.M., et al., *Respiratory virus transmission dynamics determine timing of asthma exacerbation peaks: Evidence from a population-level model*. *Proc Natl Acad Sci U S A*, 2016. **113**(8): p. 2194-9.

FRED UPTON, MICHIGAN  
CHAIRMAN

FRANK PALLONE, JR., NEW JERSEY  
RANKING MEMBER

ONE HUNDRED FOURTEENTH CONGRESS  
**Congress of the United States**  
**House of Representatives**  
COMMITTEE ON ENERGY AND COMMERCE  
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Minority (202) 225-3641

May 5, 2016

Mr. Ali Mirzakhaili  
Director, Division of Air Quality  
Delaware Department of Natural Resources  
and Environmental Control  
655 South Bay Road, Suite 5N  
Dover, DE 19901

Dear Mr. Mirzakhaili:

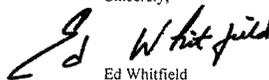
Thank you for appearing before the Subcommittee on Energy and Power on Thursday, April 14, 2016, to testify at the hearing entitled "H.R. 4775, Ozone Standards Implementation Act of 2016."

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To facilitate the printing of the hearing record, please respond to these questions with a transmittal letter by the close of business on May 19, 2016. Your responses should be mailed to Will Batson, Legislative Clerk, Committee on Energy and Commerce, 2125 Rayburn House Office Building, Washington, DC 20515 and e-mailed in Word format to [Will.Batson@mail.house.gov](mailto:Will.Batson@mail.house.gov).

Thank you again for your time and effort preparing and delivering testimony before the Subcommittee.

Sincerely,



Ed Whitfield  
Chairman  
Subcommittee on Energy and Power

cc: The Honorable Bobby Rush, Ranking Member, Subcommittee on Energy and Power

Attachment



STATE OF DELAWARE  
DEPARTMENT OF NATURAL RESOURCES  
& ENVIRONMENTAL CONTROL  
DIVISION OF AIR QUALITY  
STATE STREET COMMONS  
100 W. Water Street, Suite 6A  
DOVER, DELAWARE 19904

Telephone: (302) 739 - 9402  
Fax No.: (302) 739 - 3106

June 1, 2016

United States House of Representatives  
Committee on Energy and Commerce  
2125 Rayburn House Office Building  
Washington, DC 20510-6115

Dear Chairman Whitfield and Ranking Member Rush:

I would like to thank you once again for providing me the opportunity to testify before the Committee on April 14, 2016. It is a privilege to be able to assist the Committee while it considers important matters of public interest.

I received follow-up question from the Committee, which I have responded to the best of my ability in the attached document. Please feel free to contact me with any additional questions.

Sincerely,



Air Mirzakhaili, P.E.  
Director  
Division of Air Quality

Attachment

*Delaware's good nature depends on you!*

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Responses of Ali Mirzakhali  
Director, Division of Air Quality, Delaware Department of Natural Resources and Environmental Control  
to Additional Questions for the Record from the Honorable Frank Pallone  
Ranking Member, House Energy and Commerce Committee  
in Follow Up to the  
April 14, 2016 Hearing, "H.R. 4775, Ozone Standards Implementation Act of 2016"

**1. Section 3(d) creates a loophole in the law, that if EPA fails to meet new procedural requirements, the bill would allow a facility to get a permit by measuring its emissions against an outdated, less stringent air quality standard. In your testimony you call this "amnesty." What is the practical effect of allowing a new facility to be permitted under an outdated standard?**

A. The primary practical effect is that the public will not be protected from adverse impacts of air pollution. In an attainment area, the facility emissions could cause or contribute to nonattainment because the emissions are not evaluated against the new standard. This is of particular concern with respect to health-based standards with short averaging times such as the 1-hour SO<sub>2</sub> and 1-hour NO<sub>2</sub> standards. In an area that is nonattainment for the new standard, air quality is already above the standard and Section 3(d) allows new sources of air pollution to be added to the airshed without regard to the new standard, which would result in a lesser level of emission control (i.e., BACT instead of LAER).

**2. Section 3(d) of the bill also shifts the burden of air quality improvements from new to existing industrial facilities. How will this affect existing industrial sources in your state, particularly if a new facility pushes an area into violation of the air quality standards? Do you think this approach is cost-effective?**

A. The amnesty for new sources shifts the burden to existing sources. I will attempt to illustrate this point by way of an example: Consider an area that has total emissions of 1,000 tons from all of its sources and will need to reduce the emissions to 800 tons to meet the new air quality standard. That is a 20-percent reduction obligation from existing sources. Now, under the proposed Section 3(d), new sources could be built without having to comply with the requirements of the new standard. Assuming 200 tons of new emissions are added to the area under this exemption, the total emissions would now be 1,200 tons, which must still be reduced to 800 tons in order to meet the new air quality standard. This means garnering 400 tons of reductions which can come only from the area's existing sources, which translates to a 40-percent reduction burden for those sources, which, in many areas, have already complied with control requirements. Similarly, this same logic would apply if the new facility were to push the area into violation of the standard; reductions would be required from existing sources as necessary to meet the air quality standard. Controlling emissions from new units at the time of construction can always be done more cost effectively than retrofitting existing units, which makes this amendment contrary to economic reality, unfair to existing sources and not in the interest public health.

**3. Has your state ever been unable to issue preconstruction permits because EPA had not issued guidance or implementing regulations for a new air quality standard? Is this a situation that states have the ability to handle?**

A. Delaware has always been able to issue permits in the absence of EPA's final implementation regulations or guidance. Delaware, like many other agencies across the country, has a long history of issuing permits and some aspects of our program even predate the Clean Air Act (CAA). We know how to issue permits and stand ready to help other sister agencies that lack the necessary experience to issue complex permits. It is noteworthy, however, that by this point in the implementation of the CAA there are multitudes of guidance documents, applicability determinations and example permits, so that no agency should feel unable to issue a permit regardless of the complexity of the project.

**4. A number of proponents have stated that the bill does not "roll back" the new ozone standard, or any Clean Air Act requirements or protections. Do you agree with this assessment? Could you give a few examples?**

A. Timely attainment of national ambient air quality standards is, by design, a primary objective of the CAA. The Act, in Sections 172(a)(2) and 181(a)(1), requires that attainment of a NAAQS be achieved "as expeditiously as practicable." The proposed bill defies this objective by delaying area designations and implementation of a health standard for eight years. The notion of "as expeditiously as practicable" loses its meaning under such a construct and, therefore, is a significant rollback. Delaware is dependent on upwind states reducing their emissions in order for our air quality to meet the new and old ozone standards. This bill removes the obligation of states to do any planning by delaying implementation of the new standard. The delay in implementation means delay in formulation and implementation of good neighbor State Implementation Plans and therefore a roll back of the relief from pollution that Delaware anticipates receiving from proper implementation of the CAA.

Exempting new sources from complying with requirements under a new NAAQS in the absence of final EPA guidance will allow additional growth upwind of Delaware without regard to the existing air quality violations, thus exacerbating Delaware's and other downwind states' struggle with transported pollution. This is a roll back.

Consideration of technical feasibility of a standard is an implementation issue and is not part of the standard-setting process. The fact that an air pollutant may be difficult to control does not change its impact on human health and should not be used in setting a health-based standard. Further, the CAA is a technology-forcing statute and has been a tremendous tool in advancing the science of air pollution control. For instance, in Delaware we established standards for gas turbine nitrogen oxide emissions at 88 parts per million (ppm) in the 1990s and were able to reduce them to 25 ppm in early 2000 and to 9 ppm by end of that decade. Today, we are issuing permits at 1 to 2 ppm of nitrogen oxides. The requirements for clean generation have also spurred installation of non-emitting sources as well as use of renewable resources. The proposed change in the standard-setting process fundamentally alters the science-based approach that the CAA has relied upon; it injects technical feasibility based on today's technologies and closes the door on future advances. This is a roll back.

**5. Proponents of this bill indicate that section 3 is intended to facilitate more efficient implementation of air quality standards by states. In your opinion, are the provisions of H.R. 4775 likely to help or hinder implementation of NAAQS requirements by states?**

A. We cannot agree that delaying implementation of a health-based standard in anyway equates to efficiency. The proposal seeks to delay actions that will reduce pollution that enters the environment, while meeting a new NAAQS requires actual emission reductions. The proposal makes it easier to redefine air pollution as something that does not count under the guise of an "exceptional event" and goes on to widen the exceptional event definition to include conditions such as "hot days" and atmospheric "inversions." These provisions only invite inaction and further delays in implementation while the breathing public still will inhale unhealthy air whether Congress defines it as an "exceptional event" or not. This is merely an accounting exercise that does not help advance our mission for clean air. To the extent that H.R. 4775 preserves the ability to grow emissions without planning for attainment and delays obligations that are triggered under the current provisions of the CAA, it hinders states' ability to implement NAAQS over the short and long term and makes reaching attainment more difficult. From the perspective of states such as Delaware that are so significantly impacted by transported air pollution, H.R. 4775 allocates even more of our air resources to the polluters, thereby placing us at an economic disadvantage. This bill denies Delaware and any other state similarly situated downwind the ability to implement the NAAQS according to the original CAA concept of "as expeditiously as practicable" and therefore violates the cooperative federalism that is a fundamental cornerstone of the CAA.

