

EPA'S PROPOSED OZONE RULE

HEARING
BEFORE THE
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OF THE
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COMMERCE
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¹ Available at: <http://docs.house.gov/meetings/if/if03/20150612/103590/hhrg-114-if03-20150612-sd005.pdf>

EPA'S PROPOSED OZONE RULE

FRIDAY, JUNE 12, 2015

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

The subcommittee met, pursuant to call, at 10:45 a.m., in room 2123, Rayburn House Office Building, Hon. Ed Whitfield (chairman of the subcommittee) presiding.

Present: Representatives Whitfield, Olson, Shimkus, Harper, McKinley, Griffith, Johnson, Long, Ellmers, Flores, Mullin, Hudson, Upton (ex officio), Rush, McNerney, Green, Capps, Castor, Welch, Loebsack, and Pallone (ex officio).

Staff Present: Will Batson, Legislative Clerk; Sean Bonyun, Communications Director; Leighton Brown, Press Assistant; Allison Busbee, Policy Coordinator, Energy & Power; Melissa Froelich, Counsel, CMT; Tom Hassenboehler, Chief Counsel, Energy & Power, A.T. Johnston, Senior Policy Advisor; Mary Neumayr, Senior Energy Counsel; Dan Schneider, Press Secretary; Christine Brennan, Minority Press Secretary; Michael Goo, Minority Chief Counsel, Energy and Environment; Caitlin Haberman, Minority Professional Staff Member; Rick Kessler, Minority Senior Advisor and Staff Director, Energy and Environment; John Marshall, Minority Policy Coordinator; Alexander Ratner, Minority Policy Analyst; and Tim Robinson, Minority Chief Counsel.

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

Mr. WHITFIELD. I would like to bring the hearing to order.

This morning's hearing is going to be focused on EPA's proposed ozone rule.

I would like to recognize myself for 5 minutes for an opening statement.

The proposed rule would lower the standard from the current 75 parts per billion down to 65 ppb or 70 ppb, but the Agency is also taking comments on 60 parts per billion.

These proposed levels are so low that, in some parts of the country, they are at or near background levels. The proposed levels are so low that even EPA admits that it is not fully known in some areas how to achieve full compliance. In other words, they have to use unknown controls to do it, to meet those standards.

The marginal costs of ratcheting down the existing standard go through the roof, and the EPA estimates that a 65-to-70-parts-per-

billion standard would cost \$3.9 to \$15 billion annually and that at 60 ppb would cost \$39 billion annually.

Independent estimates are much higher, including a National Association of Manufacturers study that puts the cost of a 65-parts-per-billion standard at \$140 billion a year, which would make this the Agency's most expensive regulation ever.

This study also estimates 1.4 million fewer jobs and the household cost averaging \$830 per year. These costs come on top of all of the other rules we have seen from this administration, many of which also impact the energy and manufacturing sectors.

Moreover, this rule is yet another chapter in the administration's effort to force more extreme climate policies on the American people. I would like to just name a few of them. We have done the Utility MACT, the Boiler MACT, the Cement MACT, the Cross-State Air Pollution Rule, the PM, the 111(d), the 111(b), the Tier 3, all on top of this proposed ozone rule.

I would also like to point out that today in America there are 230 counties not in compliance with the 2008 standard. And I might also add that EPA is just now getting around to providing implementing guidance for the States for the 2008 rule.

Now, these counties not meeting the new standard would be designated as nonattainment. As I said, there are 230 counties today in nonattainment around the country.

EPA estimates that fully 358 counties that currently have monitors would be in nonattainment if they go to 70 parts per billion and 558 counties would be in noncompliance at 65 parts per billion based on recent data. Now, this does not include counties nearby or without ozone monitors that may also be designated by EPA to be in nonattainment.

Now, a nonattainment designation is like a self-imposed recession for some areas. In such counties, it becomes extremely difficult to obtain a new permit to build a factory, to expand a factory or a power plant, and even permits for existing facilities would be impacted.

Just last week, in a survey of manufacturers, over half of them, in fact, 53 percent, said they were not likely to continue with a new plant or expansion if it is located in a nonattainment area.

The same permitting challenges apply for roads and other large infrastructure projects. In effect, almost all new major job-creating economic activity is jeopardized until the nonattainment area meets the standard, which could take years, if not decades.

Even the mere possibility that a location could later be designated to be in nonattainment is enough to scare off prospective employers. So the proposed rule may already be doing damage.

Now, there is something wrong with our system when you have Los Angeles, San Joaquin Valley, major parts of California, that have the most stringent environment standards in the country and, on top of that, EPA and those areas—San Joaquin Valley, Los Angeles—may never be in compliance. And they are certainly not in compliance today and have been out of compliance since the beginning of the Clean Air Act. So we have a system that is not working very well.

[The prepared statement of Mr. Whitfield follows:]

PREPARED STATEMENT OF HON. ED WHITFIELD

This morning we will begin our examination of EPA's proposed new National Ambient Air Quality Standard (NAAQS) for ozone. We will start with a focus on the agency's perspective, and I welcome Acting Assistant Administrator McCabe. Next Tuesday we will explore other perspectives on this proposed rule, including those of the job-creating businesses on which the compliance burdens would fall.

Before we get into the proposed new rule, I want to touch on a few historical points I think are relevant to the conversation. The regulation of criteria pollutants, including ozone, is a core component of the Clean Air Act. The agency adopted ozone standards in 1971, 1979, and 1997. These regulations have resulted in major reductions, and ozone levels have declined by more than 30 percent since 1980.

In 2008, the Bush EPA finalized an even stricter ozone standard, the agency's fourth. However, the Obama EPA itself has significantly delayed implementation of this rule. In fact, the agency delayed issuing the implementing regulations until last March. As a result of this late start, state and local governments are only in the very preliminary stages of compliance, which will take many more years.

In my view, the ozone problem in America is well on its way towards resolution, and to the extent that EPA identifies public health concerns they are largely in areas out of compliance with the existing standard. However, rather than focus on implementing the requirements already on the books, the agency seems intent on setting a new rule that would bind future administrations.

The proposed rule would lower the standard from the current 75 parts per billion (ppb) down to 65 or 70 ppb, but the agency also took comment on 60 ppb. These proposed levels are so low that in some parts of the country they are at or near background levels. The proposed levels are so low that even EPA admits that it is not fully known how to achieve compliance.

The marginal costs of ratcheting down the existing standard go through the roof. EPA estimates that a 65 to 70 ppb standard would cost \$3.9 to \$15 billion annually, and that a 60 ppb standard would cost \$39 billion annually. Independent estimates are much higher, including a National Association of Manufacturers' (NAM) study that puts the cost of a 65 ppb standard at \$140 billion per year, which would make it the agency's most expensive regulation ever. This study also estimates 1.4 million fewer jobs and household costs averaging \$830 per year.

These costs come on top of all the other rules we have seen from the Obama EPA, many of which also impact the energy and manufacturing sectors. Moreover, this rule is yet another chapter in the Administration's effort to force more extreme climate policies on the American people. Those counties not meeting the new standard would be designated as nonattainment. EPA estimates that fully 358 counties that currently have monitors would be in non-attainment at 70 ppb, and 558 counties at 65 ppb based on recent data. This does not include counties nearby or without ozone monitors that may also be designated by EPA to be in nonattainment.

A nonattainment designation is like a self-imposed recession. In such counties it becomes extremely difficult to obtain a new permit, build a factory or power plant, and even permits for expansions at existing facilities are impacted. Just this week, in a survey of manufacturers, over half said they were not likely to continue with a new plant or expansion if it was located in a nonattainment area.

The same permitting challenges apply for roads and other large infrastructure projects. In effect, almost all new major job-creating economic activity is jeopardized until the nonattainment area meets the standard, which could take years if not decades. Even the mere possibility that a location could later be designated to be in nonattainment is enough to scare off prospective employers, so the proposed rule may already be doing damage.

To me, this proposed ozone rule is Exhibit A of skyrocketing marginal costs and diminishing marginal returns. Implementation of the current standard has essentially not yet begun. At a minimum, EPA should focus on implementing the ozone rule already on the books before imposing a new one.

Mr. WHITFIELD. At this time I would like to recognize the gentleman from New Jersey, Mr. Pallone, for his 5-minute opening statement.

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

Mr. PALLONE. Thank you, Chairman Whitfield, for holding this hearing on EPA's proposed ozone standard.

I also want to welcome EPA Acting Assistant Administrator Janet McCabe and thank her for testifying before the subcommittee again.

Since 1970, the cornerstone of the Clean Air Act has been a set of health-based air quality standards which help to ensure that all Americans can breathe healthy air. EPA must set each air quality standard based on science and medical evidence alone.

Essentially, the standard sets the level of pollution that is safe to breathe. This structure has been extraordinarily effective in cleaning the air and protecting public health, including the health of children and seniors.

But the current 75-parts-per-billion ozone standard has fallen short. Since 2008, the ozone standard has been weaker than the facts would allow.

As such, the Independent Clean Air Scientific Advisory Committee made crystal-clear that, in order to adequately protect public health, EPA must strengthen the ozone standard to ensure an adequate margin of safety for all individuals. But these recommendations, unfortunately, were ignored by the Bush administration.

To correct this flagrant disregard for the facts, EPA has now proposed, based on yet another exhaustive review of the scientific evidence, to revise the standard to fall within the range of 65 to 70 parts per billion, as recommended by the Scientific Advisory Committee.

EPA's decision is fully consistent with the law and the scientific evidence, and there are a litany of adverse health impacts that will be avoided with the stronger standard, nearly a million asthma attacks in children, millions of missed school days, and thousands of premature deaths.

These are meaningful real-world benefits, but I have little doubt that today we will hear much about cost. Yet, a unanimous United States Supreme Court opinion written by Justice Scalia, no less, made it clear that EPA's approach for determining a safe level of air pollution is correct and costs may not be considered.

And that is why Congress designed the Clean Air Act. The standard is set based on the health science, and economic costs are only considered later when determining the best way to implement the standard. In other words, EPA sets the goal for clean air and the States develop the lowest cost way to meet it.

Although EPA may not consider costs in setting the standard, EPA has, nevertheless, worked with the Office of Management and Budget to prepare a careful analysis of the projected costs and benefits associated with reducing ozone. EPA estimates that the benefits associated with the new ozone standards would range from \$13 to \$38 billion annually, outweighing the cost by approximately three to one.

Industry has prepared dubious and grossly inflated estimates of the projected costs, but they fail to consider any of the benefits.

That paints a completely one-sided picture of the costs of cleaning our air, one that ignores the real costs that are borne by those who breathe, especially children whose lungs are developing and who breathe greater volumes of air for their size.

We will also hear that EPA's proposed ozone standard will have dire consequences for economic growth. And these doomsday claims about the costs of clean air are nothing new.

The history of the Clean Air Act has a history of exaggerated claims by industry that have never come true. The reality is that, over the past 40 years, the Clean Air Act has produced tremendous public health benefits while supporting America's economic growth.

EPA's ozone standard is long overdue. We need to let EPA do its job to reach the goal of the Clean Air Act, clean air for all Americans. And I look forward to Ms. McCabe's testimony.

I yield back the balance of my time.

Mr. WHITFIELD. The gentleman yields back.

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 the chair. And I will be very brief.

I spent long hours going over comments that EPA received about this new ozone rule. And there was a common theme: "Will I lose my job?" Questions came from big cities, members of the Atlanta Chamber or the Greater Houston Partnership. They came from family farms and ranches, members of the Iowa Farm Bureau or the Nebraska home builders.

A mom-and-pop store in Pennsylvania wrote EPA: "Parents tell our children, 'Eat your peas, then you can have dessert.' EPA says, 'Eat your peas, then you can have more peas.'"

The worst came from EPA's workhorses, the state agencies who make this rule work. They have questions about the science used for the health impacts. They worry if they can build new roads. These voices come from all of America, and I hope EPA starts listening.

And if one of my colleagues on my side wants some time, I will yield. If not, I yield back.

Mr. WHITFIELD. The gentleman yields back.

At this time I recognize the 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 this hearing today on the EPA's proposed ozone rule.

And I also want to welcome back Ms. McCabe, the Acting Assistant Administrator for Air and Radiation at EPA. She has always given us her best, and I always am pleased to hear her insightful and forthright testimony before this subcommittee.

Mr. Chairman, today, as has been duly noted, we are here to discuss the proposed National Ambient Air Quality Standards for ozone, which the EPA is legally mandated to put forth by the Clean Air Act.

The Clean Air Act requires the EPA to set primary National Ambient Air Quality Standards at concentration levels sufficient to protect the public health with an adequate margin of safety for certain pollutants that endanger public health and the environment.

We know that the EPA establishes these standards based on medical and scientific evidence as well as the recommendations provided by the Clean Air Scientific Advisory Committee, which, Mr. Chairman, you know is an independent scientific review committee.

The EPA is required to base these standards, which must be reviewed every 5 years, solely on consideration of public health, and they must accurately reflect the latest scientific knowledge, Mr. Chairman.

We know that, in 2008, the Bush administration failed to heed the unanimous recommendations of the Clean Air Scientific Advisory Committee, ignoring the ozone air quality standards to be between 60 and 70 points per million.

Instead, the EPA under President Bush set the standard at 75 ppb, despite the advice of the Scientific Advisory Committee that a 60-to-70-ppb standard would be more protective of public health.

The Obama administration also initially failed to reconsider the ozone standard in 2009 until being ordered to do so by the courts in April of last year due to a lawsuit brought forth by environmental and public health groups.

So that leads us to ask the questions, Mr. Chairman: Why is this rule so very important? And why did the court force the EPA to act?

Well, we know that there are serious health effects caused by the ozone, and the EPA's proposal will improve air quality and result in significant public health benefits. Children, the elderly, and people with respiratory diseases such as asthma will be impacted directly by this rule.

The EPA estimates that there are currently 25.9 million people in the U.S. with asthma, including 7.1 million children. And, Mr. Chairman, my city of Chicago has been and is disproportionately impacted by asthma and the effect that ozone has on asthma. The most recent study shows that Cook County, Illinois, is home to over 113,000 children and over 340,000 adults with asthma.

And, Mr. Chairman, I don't know what value can be placed on preventing all of these dire circumstances, all these illnesses, all these premature deaths and emergency room visits, but I know that the people who sent me here to represent them are some of the ones who would be impacted by this procedure and by this action most of all.

So I look forward to engaging Ms. McCabe on the rationale behind this proposal. And, Mr. Chairman, I think I am out of time. So I yield back the balance of my time.

Mr. WHITFIELD. The gentleman yields back the balance of his time.

At this time, Ms. McCabe, I want to thank you for coming here early this morning, at 9:30 a.m. And, once again, we apologize for the delay. But we are delighted that Janet McCabe is with us, the Acting Assistant Administrator at EPA.

And you are recognized for 5 minutes for your statement on the ozone rule.

STATEMENT OF HON. JANET MCCABE, ACTING ASSISTANT ADMINISTRATOR, AIR AND RADIATION, U.S. ENVIRONMENTAL PROTECTION AGENCY

Ms. MCCABE. Thank you, Chairman Whitfield, Ranking Member Rush, members of the subcommittee. Thank you for the opportunity to testify today on EPA's proposed updates to the ozone National Ambient Air Quality Standards. I will try to be brief so we can get to your questions.

The Clean Air Act requires EPA to review the National Ambient Air Quality Standards every 5 years to make sure that they continue to protect public health with an adequate margin of safety. For at-risk groups, including, as Ranking Member Rush has noted, the estimated 25.9 million people who have asthma in the United States, of whom 7.1 million are children, this is critical work.

For this review, EPA examined the thousands of scientific studies, including more than 1,000 new studies published since EPA last revised the standards in 2008. Based on the law, a thorough review of all of that science, the recommendation of the Agency's independent scientific advisors and the assessment of EPA scientists and technical experts, the Administrator's judgment was that the current standard of 75 parts per billion is not adequate to protect the public health. So she proposed to strengthen those standards to within a range of 65 to 70 parts per billion to better protect Americans' health and welfare.

The Agency invited comments on all aspects of the proposal, including alternative levels as low as 60 parts per billion, and also acknowledged interest among some stakeholders in offering comment on retaining the existing standard.

We also propose to update the Air Quality Index for ozone to reflect a revised standard if one is finalized. The AQI is the tool that gives Americans realtime information about air quality each day so they can make informed choices to protect themselves and their families.

Ozone seasons are lasting longer than they used to. So EPA proposed to lengthen the ozone monitoring season for 33 states to match the season when ozone levels can be elevated.

To protect the environment from damaging levels of ground-level ozone, as required by the Clean Air Act, the EPA has also proposed to revise the secondary standard.

Based upon new studies that add to the evidence that repeated exposure to ozone reduces growth and has other harmful effects on plants and trees, the Administrator judged that a secondary standard within the range of 65 to 75 parts per billion, the same as the primary standard proposal, would protect the public welfare, particularly against harm to trees, plants, and ecosystems.

In addition, we have proposed to make updates to monitoring and permitting requirements, smooth the transition to any revised standards, maximize effectiveness in the State, local, tribal and Federal monitoring programs, and give areas new flexibilities to meet local needs for monitoring ozone precursors. All of these updates are designed to ensure that Americans are alerted when

ozone approaches levels that may be unhealthy, especially for sensitive people.

The Administrator's proposal to strengthen the standards is designed to better protect children and families from the health effects of ozone pollution. For example, we estimate that meeting a level in the range of 65 to 70 parts per billion would prevent an estimated 330,000 to 1 million missed school days, 320,000 to 960,000 asthma attacks in children, and 710 to 4,300 or more premature deaths per year.

Implementing a NAAQS has always been and will continue to be a Federal, state, and tribal partnership. EPA stands ready to do our part to assist states and tribes with pollution control programs and to streamline implementation.

Local communities, states, tribes, and EPA have already shown that we can reduce ground-level ozone while our economy continues to thrive. We have reduced air pollution in this country by nearly 70 percent, and our economy has tripled since 1970. We fully expect this progress to continue.

Existing and proposed Federal measures like vehicle standards, power plant rules, are leading to substantial reductions in ozone nationwide, which will help improve air quality and help many areas meet any revised standards.

We received over 430,000 comments during the 90-day public comment period, and we are reviewing those comments as we work towards completing the final standards by October 1 of this year.

Thank you very much. And I look forward to your questions.

[The prepared statement of Ms. McCabe follows:]

**Opening Statement of Janet McCabe
Acting Assistant Administrator
Office of Air and Radiation
U.S. Environmental Protection Agency**

Ozone NAAQS Hearing

**Energy and Commerce, Energy and Power Subcommittee
United States House of Representatives
June 12, 2015**

Chairman Whitfield, Ranking Member Rush, members of the subcommittee: Thank you for the opportunity to testify today on EPA's proposed updates to the Ozone National Ambient Air Quality Standards.

Because the air we breathe is so important to our overall health and well-being, the Clean Air Act requires EPA to review the National Ambient Air Quality Standards (NAAQS) every five years to make sure that they continue to protect public health with an adequate margin of safety. For at-risk groups, including the estimated 25.9 million people who have asthma in the United States (almost 7.1 million of whom are children), this is critical. Establishing and implementing an air quality standard is a two-step process for improving air quality. Setting the standards is step one – it is about defining what is clean air to protect public health.

Implementing the standards is step two, and involves the federal government, states, and tribes if they wish to, putting measures and programs in place to reduce harmful pollution. We will continue to work together with state, tribal and local partners to build on the progress we have already made and meet any revised standard over time in a flexible and cost-effective way. The Federal government also promulgates regulations designed to reduce emissions, helping states meet the standards.

For this review, EPA examined thousands of scientific studies, including more than 1,000 new studies published since EPA last revised the standards in 2008. And based on the law, a thorough review of the science, the recommendations of the agency's independent scientific advisors, and the assessment of EPA scientists and technical experts, the Administrator's judgment was that the current standard of 75 parts per billion is not adequate to protect the public health, so she proposed to strengthen the standards to within a range of 65 to 70 parts per billion to better protect Americans' health and welfare. This is a proposal, and taking public comment on a range is exactly how the process is supposed to work. The agency invited comments on all aspects of the proposal, including on alternative levels as low as 60 parts per billion, and acknowledged interest among some stakeholders in

offering comment on retaining the existing standard.

We also proposed to update the Air Quality Index for ozone to reflect a revised standard if one is finalized. The AQI is the tool that gives Americans real time information about air quality each day so they can make informed choices to protect themselves and their families. And we're proposing to 1) make updates to monitoring and permitting requirements, 2) smooth the transition to any revised standards, 3) assure that the public has full information about air quality, 4) maximize effectiveness in the state, local, tribal, and federal monitoring programs, and 5) give areas new flexibilities to meet local needs for monitoring for ozone precursors.

Ozone seasons are lasting longer than they used to, so EPA is proposing to lengthen the ozone monitoring season for 33 states to match the season when ozone levels can be elevated. All of these updates are designed to ensure that Americans are alerted when ozone approaches levels that may be unhealthy, especially for sensitive people.

To protect the environment from damaging levels of ground-level ozone as required by the Clean Air Act, the EPA has also proposed to revise the secondary standard. Based upon new studies that

add to the evidence that repeated exposure to ozone reduces growth and has other harmful effects on plants and trees, the Administrator judged that a secondary standard within the range of 65 to 70 parts per billion would protect the public welfare, particularly against harm to trees, plants and ecosystems.

The science clearly tells us that exposure to sufficiently elevated ozone levels poses a real threat to our health, especially to growing children, older Americans, those of us with heart or lung conditions, and those who are active or work outside. The Administrator's proposal to strengthen the standards is designed to better protect children and families from the health effects of ozone pollution.

For example, we estimate that meeting a level of 70 parts per billion would prevent an estimated 330,000 missed school days, 320,000 asthma attacks in children, and 710 to 1,400 or more premature deaths per year. We estimate that meeting a level of 65 parts per billion would prevent an estimated 1 million missed school days, 960,000 asthma attacks in children, and 2,000 to 4,300 or more premature deaths per year.

In addition to giving families across the country an improved quality of life, the benefits of avoiding these health effects are significant. EPA estimates that meeting the standards will yield health benefits

valued at \$6.4 to \$13 billion annually in 2025 for a standard of 70 ppb, and \$19 to \$38 billion annually in 2025 for a standard of 65 ppb, nationwide, excluding California. These estimated benefits include the value of avoiding asthma attacks, heart attacks, missed school and work days and premature deaths, among other health effects. EPA analyzed the estimated benefits and costs for California separately, because a number of areas in California would have longer to meet the proposed standards under the Act, due to the unique challenges facing the state. Benefits of meeting the proposed standards in California add to the nationwide benefits after 2025, with values estimated at \$1.1 to \$2 billion annually after 2025 for a standard of 70 ppb, and \$2.2 to \$4.1 billion for a standard of 65 ppb.

States will ultimately determine what measures – beyond federal ones – are appropriate for their clean air plans, but EPA has estimated illustrative costs at \$3.9 billion in 2025 for a standard of 70 ppb, and \$15 billion for a standard at 65 ppb, nationwide except for California. Estimated costs in California post-2025 are \$800 million for a standard of 70 ppb and \$1.6 billion for a standard of 65 ppb.

Implementing a NAAQS has always been and will continue to be a federal, state, and tribal partnership. EPA stands ready to do

our part to assist states and tribes with pollution control programs and to streamline implementation. Local communities, states, tribes and EPA have already shown that we can reduce ground-level ozone while our economy continues to thrive. Nationally, since 1980, average ozone levels have fallen by a third. And 90 percent of the areas originally identified as not meeting the ozone standards set in 1997 now meet those standards. We have reduced air pollution by nearly 70% and our economy has tripled. We fully expect this progress to continue. Existing and proposed federal measures like vehicle standards and power plant rules are leading to substantial reductions in ozone nationwide, which will help improve air quality and help many areas meet any revised standards.

Conclusion

Exposures to ground-level ozone, a key component of smog, can have very serious consequences for our families' health and for the environment.

We received over 430,000 comments during the 90 day public comment period and we are reviewing the comments as we work toward completing the final standards by October 1, 2015.

I look forward to your questions. Thank you.

Mr. WHITFIELD. Thank you, Ms. McCabe, very much.

And I recognize myself for 5 minutes of questions.

Many of us believe that the Clean Air Act needs to be changed. I say that because, just as Mr. Rush mentioned, you mentioned, EPA looks at impact on health care by making it more stringent, these ozone rules, for example, and you eliminate so many cases of asthma, so many premature deaths, whatever, whatever, which is important.

But under the act you do not have any responsibility to look at those pockets of the country that are in noncompliance and the impact that these stringent controls have on jobs. And we have had economist after economist come in here and talk about loss of jobs and the impact that that has on health care for children, for infants.

And, yet, EPA, every time they come up here, it is all about the benefits, the benefits, the benefits. And there are detriments to these actions because, as you know, when an area is in noncompliance, they can't build a new plant unless they can get a permit. They can't built infrastructure projects. And it does have an effect on jobs.

Now, fortunately, areas like Los Angeles that have never been in compliance, you know, they rely on the entertainment industry and high tech and so forth. So they don't have to worry about manufacturing jobs or basic industry jobs.

But how do you account for the fact, for example, that Los Angeles is still in noncompliance and your own rule states that, some of these areas, the only way they will ever be in compliance under even the 2008 rule is they have to use unknown controls, controls that we don't know what it is.

And you do understand—I mean, your own testimony, your own documentation, shows that many parts of the country are going to be in noncompliance, whether it is 70 ppb or 65 ppb. And even President Obama tried to prevent the implementation. He delayed implementation of the most recent review.

And now, of course, environmentalist groups who do a good job, they have a role to play, but they are driving EPA because they are always going in to court. And under the strict construction of the language, sometimes which is quite nebulous, the courts say, "You cannot delay."

So many of us are really frustrated that these environmental groups are driving the decisions because of the strict language in the original Clean Air Act. So I hope you get a sense of the frustration of many parts of the country.

In Kentucky, we are going to have 11 more counties in noncompliance at 70 ppb. We are going to have 23 more at 65 ppb. And every major city in Kentucky will be in noncompliance at some of these levels.

So are you concerned that, after all this time, areas like Los Angeles and San Joaquin still can't even meet the old standards?

Ms. MCCABE. Chairman Whitfield, there is a lot in your question there, and I will try to address as much of it as I can.

There are certainly parts of the country where meeting the health standard has been extremely challenging due to a variety of factors, including particular challenges in southern California.

What that means is that millions of people who live in those areas are exposed to unhealthy air.

The good news is that air quality has improved in southern California as well as all across the country——

Mr. WHITFIELD. But they are still in noncompliance.

Ms. MCCABE. They do not meet the standard, but there are way fewer days and the levels are lower and the area is making progress in a way that still supports a vital local economic and——

Mr. WHITFIELD. How much time does Los Angeles have to comply? I don't know if they are severe or extreme. But how many years do they have to comply?

Ms. MCCABE. Los Angeles is in the extreme category. And if the standard is revised this fall, they would have until 2037 to meet that standard.

What that means is the area has a lot of time to bring reductions into place and——

Mr. WHITFIELD. But they have been working on it for 15 or 18 years. They are not even in compliance today.

Ms. MCCABE. That is right. The air is still not healthy there for the citizens to breathe.

Mr. WHITFIELD. Well, I see my time has expired. But many of us feel very strongly you should just continue to implement this existing rule for a while and give the country time to catch up, since even your implementing guidance has not been issued until just recently.

I recognize the gentleman from Illinois for 5 minutes.

Mr. RUSH. I want to thank you, Mr. Chairman.

Assistant Administrator McCabe, in your written testimony, you note that nationally, since 1980, average ozone levels have fallen by a third. Additionally, 90 percent of the areas originally identified as not meeting the ozone standards set in 1997 now meet those standards, 97 percent.

What would you say to the argument that we have already reduced our average ozone levels enough and further lowering the standards from 75 to 70 or even 65 would not give us the additional health benefits as opposed to the cost of trying to reach those higher standards?

Ms. MCCABE. Yes. Well, Congress in the Clean Air Act directed EPA every 5 years to look at the science and make a determination about whether the current level is adequate to protect the public health.

And based on all of that review in a very open process with external peer review all along the way, the Administrator made the determination that 75 parts per billion is not sufficiently protective.

That is based on all of this science that we have seen that shows that people suffer the effects of ozone air pollution at levels below 75 parts per billion. That is her job to do under the Clean Air Act, and that is what our proposal is all about.

Mr. RUSH. Well, you also point out that, since 1980, we have reduced our air pollution by nearly 70 percent and our economy has tripled. And we know that, by law, EPA cannot consider the cost of implementing either the primary or secondary air quality standards, but only can consider the health benefits.

Has there been any cost-benefit analysis by the EPA or any other agency either before, during, or after the proposal?

Ms. MCCABE. Ranking Member Rush, you are correct to point out that there is a separation that Congress laid out in the Clean Air Act between deciding what the science says is important for safe and healthy air and deciding how to meet that standard, which the states are in charge of because it is their air quality, their sources, with considerable help from the Federal Government.

So we don't know exactly how the states will go about meeting the standard because we know that they will—as they have over the years, they will find cost-effective ways to do that with the help of rules provided by the Federal Government.

But we do provide, as part of the rulemaking process, a regulatory impact analysis, an RIA, to show illustrative costs. And that goes through the review of the Office of Management and Budget and is done consistently with the obligations and the requirements that they put on us to do those sorts of economic reviews.

Mr. RUSH. Ms. McCabe, the chairman talked about Los Angeles and other places. What is your viewpoint? Why do they stand out? And what direction is the EPA going to try to bring them more into compliance?

Ms. MCCABE. There are a lot of pretty unique features that make southern California very challenging for air quality.

It is obviously a very populated area. So there is a lot of activity there that creates emissions. But there is also the unique geography and topography, of being the mountains and the ocean and the meteorology there, that just makes it very challenging.

As a result, EPA, as well as really progressive and smart and innovative agencies and businesses in California, have really led the way in figuring out how to reduce emissions in cost-effective ways to protect the citizens and improve air quality there.

And EPA, in fact, has provided significant support and assistance through grant programs, through technology assistance over the years, and certainly will continue to do that in order to bring the kinds of programs that need to be in place there.

One of the advantages of that is that the innovations in California have helped the rest of the country in terms of bringing new ideas and new approaches into use in ways that can benefit the rest of the country and benefit the economy.

Mr. RUSH. Thank you, Mr. Chairman. I yield back.

Mr. WHITFIELD. At this time I recognize the gentleman from Texas, Mr. Olson, for 5 minutes.

Mr. OLSON. I thank the chair.

Welcome back, Ms. McCabe.

We all know that much of the ozone in America is beyond our control. EPA calls this background ozone. Some of this ozone is natural, blows from other countries.

I have a slide here. This was Houston. Some of that is not our ozone. Some belongs to Mexico. We get it because of annual crop burnings.

I have another poster. Last time Ms. McCarthy was here I showed her this map of ozone pouring into America from China and Asia.

In your proposal, you admit that natural ozone and ozone from Mexico and China can be a huge problem. Your rule says, "There are times where ozone levels approach or exceed the concentration levels being proposed in large part due to background sources."

In small Needville, Texas, you are saying that ozone we can't control makes us violate your new rules. That seems very unfair, ma'am.

My first question is: Is it true that nearly one-half of the ozone in America is here naturally or comes from overseas?

Ms. MCCABE. I don't know that I would agree with that formulation exactly. We do address the background issue, and background levels vary across the country and they vary across different times of year. And, as you note, they come from a variety of sources.

I will note that the Clean Air Act does not hold States responsible for pollution that they do not control, and there are provisions and mechanisms in the Clean Air Act to help States that—

Mr. OLSON. Ma'am, I am sorry. I have only have 5 minutes and thousands of questions back home people have asked. So I have got to cut you off. I apologize.

And, also, your answer goes against your own data. I will give you copies of the EPA's data that says foreign ozone is all over this country.

We know that natural and foreign ozone are not going away and are likely to get much, much bigger. That means we must squeeze more and squeeze more from smaller and smaller sources of ozone. EPA can't say how this can be achieved. You don't know.

Is it true the EPA says that much of the technology needed to meet these new rules are unknown today? Is that true? Yes or no.

Ms. MCCABE. I wouldn't characterize it as much of the technology. We do recognize that, in some parts of the country, there may need to be controls identified that are not in existence today.

But there are many controls that are in existence today that can be implemented that will reduce the air pollution that causes ozone.

Mr. OLSON. Ma'am, one example: EPA admits that 43 percent of NOx controls needed in the northeast are now unknown. Stark contrast to your answer.

One other question: Is it true that EPA won't even consider whether an ozone rule is achievable? Is that true? In your formulation, will you consider is this achievable? Can we do this with technology?

Ms. MCCABE. Our job under the Clean Air Act is to identify the standard that is necessary to protect the public health. That is what this rule is about, is letting the American people know what is safe and healthy air for them to breathe.

Mr. OLSON. So you can't take into account achieve-ability. You just can't do that.

By law, is that what you are saying, ma'am?

Ms. MCCABE. The Supreme Court has spoken to this, and this is about the science and about what is healthy for the American people.

Mr. OLSON. Well, it sounds like we need to change that law.

One final question, ma'am. The law does not require, as you know, EPA to change the ozone rule every 5 years. You just have to review it, as you said in your opening comments.

You say you have to change the current rule because the 2008 rule doesn't protect human health, and, yet, back home the Texas Commission on Environmental Quality points out that your own modeling in your "Health and Risk Exposure Assessment, appendix 7, page 73-2" would result in more deaths in Houston, Texas, with a lower standard.

TCEQ concludes that our EPA can't read their own data or you are accepting a lower ozone standard that makes health worse.

Any comments about that fact, ma'am?

Ms. McCABE. I would very much disagree with the way TCEQ characterized the data. And if you look at the entire body of data, you will see that the health benefits of the proposed ozone standard are substantial.

We welcome everybody's comments on the rule, and TCEQ has provided a lot of analysis which we are looking very closely at.

Mr. OLSON. I will make you a deal. Get a copy of our assessment. Have it to you today, ma'am. Thank you very much.

Yield back.

Mr. WHITFIELD. Time has expired.

At this time I recognize the gentleman from California, Mr. McNerney, for 5 minutes.

Mr. MCNERNEY. Thank you, Mr. Chairman.

And thank you, Ms. McCabe.

Early in your testimony and, also, in response to Mr. Rush's question, you said that you looked at thousands of reports, a thousand more recent reports, and it concluded that, to protect the health and safety of the communities, 75 was a little too high.

Now, are we splitting hairs here or are we talking about large-scale effects?

Ms. McCABE. We are talking about millions of people that are suffering the effects of ozone pollution that at a lower level would not suffer those effects.

Mr. MCNERNEY. So one of the EPA's primary missions is to protect the health of this country and our communities.

Wasn't there a rule recently that ensured that the EPA must look at health and safety of the community first before looking at economic impacts?

Ms. McCABE. That is exactly what courts have said with regard to setting these air quality standards. Yes.

Mr. MCNERNEY. Thank you.

The chairman mentioned San Joaquin Valley, which is my home. So I appreciate your attention, Mr. Chairman.

But I have seen over the last several years improvement year by year in the air quality in our community, and I think a lot of this is due to the kind of standards that the EPA has initiated.

And one of the things that we do is incentivize some of the old diesel equipment to be replaced by new diesel equipment, but that takes time.

That is not something we can require all the farmers or diesel truck owners to do over a period of a year or two. It takes time.

So I appreciate that we are going to continue to look at those and keep those standards in place.

And I just want to say the Bay Area contributes a lot of the ozone to the San Joaquin Valley. Sort of like what Mr. Olson was saying, we get a lot of it from outside of our region.

So we ask you to take special consideration to that in helping us make those attainments and then the sort of penalties that are assessed when you don't make those attainments. And I appreciate Mr. Olson's comments on that.

What is the EPA going to do or how is the EPA going to assess drought impacts on air pollution and ozone?

Ms. McCABE. Yes. So we know that the drought situation is incredibly severe and challenging and troubling in California and elsewhere. That can contribute to poor air quality because of increased dust. But we also have tools in the Clean Air Act that can allow States to evaluate their air quality as it is being influenced by natural conditions such as that.

And we are working closely with the States to make sure that our guidance and expectations are current with situations like drought and wildfires, which are also a challenge, to make sure that States aren't responsible for natural conditions and that sort of thing that can create ozone situations.

Mr. MCNERNEY. Would you confirm my observation that the air quality is improving in the San Joaquin Valley?

Ms. McCABE. Yes, sir. Yes. I certainly would.

Mr. MCNERNEY. Do you have something you could say here about that?

Ms. McCABE. Well, I don't have figures with me, Congressman, although I would be happy to get those to you. But certainly over recent years air quality has been improving, and it is due to the kinds of programs that you mentioned: replacing older, dirtier engines with cleaner, newer ones and working very closely with the agricultural community and everybody in the San Joaquin Valley to find sensible things to do.

Mr. MCNERNEY. So nonattainment doesn't penalize us in the sense of backtracking the actual air quality in the region?

Ms. McCABE. No. No. Not at all. It is all moving in the right direction.

Mr. MCNERNEY. Thank you.

Could you explain the difference between secondary standards and primary standards.

Ms. McCABE. Yes. Primary standards are focused on protecting human health. Secondary standards are focused, as the Clean Air Act says, in protecting public welfare.

So those are other things that we care about, as people who live in this country: economic impacts, effects on ecosystems, effects on crops, effects on buildings, the other things that make our economy and our quality of life what it is.

Mr. MCNERNEY. OK. So then you said you are going to set the primary and secondary standards the same with regard to ozone.

Ms. McCABE. Well, it turns out we do an independent analysis of the information that exists on human health and then on these secondary impacts and there is an extensive discussion of that in the preamble in the proposal.

And our Clean Air Act Science Advisory Committee spoke to that directly. Our review of the science shows that a standard set in the range of 65 to 70 will provide the protection that the science tells us the welfare impacts require.

Mr. MCNERNEY. OK. Thank you, Mr. Chairman.

Mr. WHITFIELD. At this time I recognize the gentleman from Illinois, Mr. Shimkus, for 5 minutes.

Mr. SHIMKUS. Thank you, Mr. Chairman.

And, Assistant Administrator, welcome. It is good to have you back.

Just personally, just you as an individual, don't you believe that having a good-paying job with health benefits is also protective of human health?

Ms. MCCABE. I think it is important for everybody to have a job and—

Mr. SHIMKUS. And healthcare benefits of some sort.

Ms. MCCABE. Yes, I do. Of course I do.

Mr. SHIMKUS. And that is part of our—I mean, when you hear the questions and the responses back and forth, that is kind of our—part of our challenge is—especially as I follow up on this question, is that you all, as an EPA, don't really have the authority to evaluate that with respect to your primary mission, which is protective of human health via the air regulations. Right?

I mean, you just can't weigh in. You are not making those cost-benefit analyses. We say we are to some extent, but they are so far down the decision tree that many of us believe that they just don't happen.

So let me go to another question based upon a comment you made. Because a lot of this is—75 parts per billion in 2008, many states have not met those yet, but now we are ratcheting down even more and there is a lot of uncertainty. Now that will move on to my third question once I get there.

But in your response you talked about background is different in different areas. So are you considering a different regulation standard based upon the variance of background? So could one area of the country have a 70 parts per billion and another one have a 65 parts per billion? And if—

Ms. MCCABE. Well—

Mr. SHIMKUS. Yes. Answer the question. I can follow up.

Ms. MCCABE. Yes. Sure.

Well, the standard is supposed to reflect what is safe for people to breathe. And so a child living in Florida and a child living in Oregon should be entitled to the—

Mr. SHIMKUS. But background is background. Background is there without, in essence, human contact.

Ms. MCCABE. That is right. And that comes into play when states are putting their plans together and EPA is working with states to figure out how much time and what needs to be done in order to reach those standards so that areas that have more—

Mr. SHIMKUS. But if an area has 70-parts-per-billion background, you can't get them to 65—

Ms. MCCABE. But—

Mr. SHIMKUS [continuing]. Through the power of government.

Ms. MCCABE. But there are two very important elements to the standard. One is for the people who live in that area to know whether the air that they are breathing is healthy or not.

Mr. SHIMKUS. So they should move. Is that the answer? Get out of that 70-parts-per-billion area because it is not healthy.

Ms. MCCABE. No. But they should know that, when the air quality is bad, that they might want to—

Mr. SHIMKUS. What should they do? It is naturally occurring. That is the background.

Ms. MCCABE. Right. But understand, too, that ozone changes from day to day and there are—

Mr. SHIMKUS. So they should take a vacation during those days. You see our problem. I think—in rolling this out, I would hope that—background is important. Background should be a standard. We should not try to have government force something that is not naturally occurring based upon nature without man's intervention.

Ms. MCCABE. If I could clarify a point on the background because I think people may be thinking that this is pervasive, in fact, across the country, most of the ozone that is contributing to high values is locally or regionally created.

There are very few areas, very few parts of this country, where background can get as high as approaching the level—

Mr. SHIMKUS. OK. But you understand our concern, even if it is very low possibility. If—anyway, I want to move on to the last question.

We just finished our congressional baseball game last night. We lost again. But it makes me think about what Chairman Whitfield was addressing. Had we started the game and then halfway through the game the strike zone changed or in the second inning the number of outs changed or the fourth inning the foul lines changed or the outfield walls got moved in, that would make for a very frustrating, impossible game. Don't you agree?

Ms. MCCABE. But this is about—ozone is not about rules. It is about science.

Mr. SHIMKUS. This is about Utility MACT, Boiler MACT, Cement Rule, Cross-State Air Pollution, 111(d), 111(b), ozone, different standards, particulate matter, Tier 3.

We are changing the rules on the fly, and the people who are creating jobs in this country cannot manage it. That is our problem with what is going on with the EPA.

And I yield back my time.

Mr. WHITFIELD. At this time I recognize the gentlelady from California, Mrs. Capps, for 5 minutes.

Mrs. CAPPS. Thank you, Mr. Chairman, for holding this hearing. Thank you, Ms. McCabe, for your testimony.

And maybe it is a bias because I have been a public health nurse a long time, but when it comes to air quality, I believe our focus must be primarily on protecting public health.

This is the standard set by Congress in the Clean Air Act. It is a standard that has been upheld by the Supreme Court and for good reason. Clean air has very real and significant impacts on the health and well-being of all Americans.

And this was underscored by our Ranking Member Bobby Rush from Chicago, where they know a thing or two about air pollution,

too. Healthier children, parents, and employees translate into very real economic benefits.

I would say to my colleague Mr. Shimkus, who made a case in the other direction, that good jobs with health benefits, which he was arguing for, are even better in the context of clean air. And even polluters benefit from healthier employees taking fewer sick days.

So my question is just asking you to elaborate on this fact. What is the economic value?

Ms. MCCABE. Yes. It is absolutely true. And I think many agree that a clean and healthy environment is very positive for the economy as well as for public health.

Our illustrative analysis shows that, at a standard of 60 parts per billion, there would be benefits in the range of \$6.4 to \$13 billion to the economy and, for 65 parts per billion, \$19 to \$38 billion.

And that comes from some of the things that you have cited, which is fewer missed school days, less missed work, fewer visits to the emergency room and that sort of thing.

Mrs. CAPPS. Right. Some oppose strengthening ozone standards—and we have heard it today—because it would increase the number of nonattainment areas.

Ms. McCabe, does the Clean Air Act require EPA to set ozone standards based on how many areas currently meet that standard or based on protecting public health?

Ms. MCCABE. It is based on protecting public health.

Mrs. CAPPS. And for those areas that need to make improvements—and many of these are in my home State of California—what resources are available to help lower the ozone layers?

I think the word “smog” was invented in the Los Angeles area. I live just a tiny bit to the north of it, but we still struggle every day.

Are these areas on their own or does the Federal Government provide assistance?

Ms. MCCABE. Absolutely. This is a partnership between the Federal Government and the State governments. The Federal Government assists in a number of ways.

One is by promulgating national rules like Tier 3 to apply to automobiles nationwide, bring tremendous benefits, and other rules that make sense to do at a national level.

We also help the States by providing financial assistance and support, technical assistance and grants. And your area has certainly benefited from those sorts of programs that can be very targeted to the specific needs of a particular area.

Mrs. CAPPS. Thank you.

And, as you know well—and I would like to turn to the topic of climate change just briefly—this is increasingly impacting all aspects of our economy and our daily lives. Storms are getting stronger. Floods are getting worse. Droughts, as I know very well in California now, and wildfires are getting more severe. And climate change also increases the levels of ozone in the air we breathe.

Would you explain just very simply how climate change is expected to impact ozone levels. And how will this affect our human health?

Ms. MCCABE. Sure. As the climate gets warmer—warm conditions are what is conducive to ozone formation. So it can lead to increased ozone formation. And, circularly, ozone is also a climate pollutant. So it helps contribute to the kinds of effects that we are seeing.

Mrs. CAPPS. And then, just briefly, finally, I hear so often the industry as well as some here in Congress cite high cost estimates as the reason to oppose strengthening environmental public health standards. It is the same argument being used against the proposed ozone standards.

While I believe cost of new regulations should certainly be considered and there is a way that you are talking about doing that, these costs must also be weighed against the benefits. It is important to remember that health benefits represent real people and real lives saved.

So how do the estimated health benefits of EPA's proposed ozone standards compare to the costs? In other words, what is that balance—

Ms. MCCABE. Yes. As we laid out in our illustrative case, the benefits outweigh the costs by \$3 to every \$1 that is spent.

Mrs. CAPPS. And this is based on studies that actually do demonstrate this?

Ms. MCCABE. It is based on all the information that is available to us about the things that people are likely to do and the cost benefits associated with the health benefits.

Mrs. CAPPS. Thank you very much.

And I yield back.

Mr. WHITFIELD. At this time I recognize the gentleman from Mississippi, Mr. Harper, for 5 minutes.

Mr. HARPER. Thank you, Mr. Chairman.

Thank you for being here today. Seems like you do hang out here quite a bit. So it is good to have you back.

Ms. MCCABE. I do. I am happy to.

Mr. HARPER. Well, look, just a quick question.

If we were able to somehow eliminate all ground-level ozone, there would still be people that would have respiratory illnesses. You would agree with that, wouldn't you?

Ms. MCCABE. Sure. There are lots of things that contribute to respiratory illness.

Mr. HARPER. Sure. And as we learn how to measure more minute levels of any type of item, that is something that I know we have to look at.

But I am really concerned, as we look at this, if we revise the current ozone standards, how that is going to affect transportation conformity requirements.

And so if you could just briefly say what is transportation conformity, what does that mean?

Ms. MCCABE. Transportation conformity is a provision in the act that wants to make sure that as States and municipalities are working to improve their air quality, that transportation planning is taken into account and that transportation planning takes air quality into account so that areas won't undermine their efforts to improve air quality inadvertently through transportation projects that could increase air pollution.

Mr. HARPER. So states and localities will have that responsibility.

Ms. MCCABE. They do have that now.

Mr. HARPER. Obviously.

Ms. MCCABE. And working with the Federal Government.

Mr. HARPER. And in order to make that demonstration——

Ms. MCCABE. Yes.

Mr. HARPER [continuing]. What kind of modeling tools will these cities need to use?

Ms. MCCABE. Well, there are tools that are in existence now and tools that EPA and Federal highway provide so that we work with the States on to analyze those impacts.

Mr. HARPER. Well, how——

Ms. MCCABE. We have been doing this for a long time.

Mr. HARPER. How reasonable or what type of situation is it for smaller cities? What about those that have that? Are you expecting the smaller cities to do the same analysis, and is that reasonable, and what are you anticipating?

Ms. MCCABE. We would certainly provide any assistance that we needed to for any community. This is a focus in larger communities, more populous communities, but we would provide whatever assistance was needed to help.

Mr. HARPER. So if the focus is for larger communities, are you planning on extending it to every community?

Ms. MCCABE. The Clean Air Act provides the areas that need to look at transportation conformity. So we would follow the guidance and the requirements in the act and the regulations.

Mr. HARPER. So if EPA allowed existing Federal measures to work, existing now, wouldn't many cities avoid having to do these time-consuming transportation conformity analyses?

Ms. MCCABE. Well, we actually are—RIA looks at the—what we expect to happen to air quality in the future, looking at the rules that are in place now and the ones that are under development now, and we show that the vast majority of the areas that right now would have levels exceeding these standards by 2025 will come into attainment of those standards through these measures.

Mr. HARPER. We have lots of important issues.

And one of those issues is what to do about our highway, bridges, infrastructure, issues that we have in this country, and then many of those need to be repaired. We need new ones that need to be built. Stringent ozone standards, obviously, are going to make it harder for States to show that proposed highway projects conform with ozone standards.

Has EPA considered the economic and safety impacts that could result if these more stringent ozone standards block crucial transportation projects?

Ms. MCCABE. I don't think that we anticipate or have historically seen that conformity blocks important transportation projects, especially ones that are needed for safety reasons.

Mr. HARPER. Well, you haven't seen that under the current, but if we have more stringent requirements and that causes additional cost, can you explain that?

Ms. MCCABE. I don't expect that the system would work differently in any areas. We don't expect a lot of new areas to be coming into nonattainment under these standards, so the areas are

generally familiar with and already working with the transportation conformity system. But all of the provisions that are in there about making sure that important safety projects go forward and other important projects go forward, those will all continue to apply.

Mr. HARPER. Thank you. And I yield back.

Mr. WHITFIELD. The chair recognizes the gentleman from Texas, Mr. Green, for 5 minutes.

Mr. GREEN. Thank you, Mr. Chairman.

Welcome, Ms. McCabe. Has previously EPA ever delayed the NAAQS standard?

Ms. MCCABE. The NAAQS standard?

Mr. GREEN. Yes.

Ms. MCCABE. There is the NO₂ standard, maybe that is what you are referring to. EPA, in the past, has not always met its deadlines, I would say, on—

Mr. GREEN. OK. Well, that is the other thing. If EPA hadn't delayed the standards when the law required EPA to review the ozone standard again, what would be the regular timeline? Would it be 2015?

Ms. MCCABE. The last time the ozone standard was revised was in 2008. Clean Air Act says every 5 years. So 2013 would have been 5 years.

Mr. GREEN. OK. In your testimony, you stated EPA examined thousands of scientific studies, including more than 1,000 new studies published since EPA last revised the standard. The ozone NAAQS proposal, EPA acknowledged there is a brandnew scientific data the EPA couldn't consider. Also, EPA states there are significant uncertainties regarding some of the studies that EPA did include regarding lowering the standard.

Most importantly, by 2017, the following standards will be in place that would significantly affect ozone and precursors. Ozone NAAQS at 75 parts per billion, Tier 3 vehicle emission standards, mercury and air toxic standards, from the Utility MACT, new source performance standards for volatile organic compounds, and particulate matter that NAAQS is important because EPA acknowledges reduction of particulate matter would account for two-thirds or three-fourths of those ozone NAAQS benefits.

Why is lowering the standard not more appropriate after the 75-parts-per-billion standard has time to take effect and EPA reviews all the new and related information and data, say, 2017?

Ms. MCCABE. Well, because the Clean Air Act gives us a timetable of every 5 years, and we are late on that, and because this is about letting the American people know what is healthy air quality for them.

Mr. GREEN. Well, in earlier NAAQS, the EPA stated in earlier decisions, based on the applicable statutory requirements and the volume of material requiring careful evaluation, the EPA estimates it will be take 2 to 3 years to incorporate over 1,000 new health studies and criteria documents. Given various legal constraints and the fact that EPA has already missed deadlines for completion of ozone review cycles, the Administrator concluded that the best course of action would be to complete the current review based on the existing air standard and proceed as rapidly as possible with

the next review. Why would EPA not make a similar decision now since we are in 2015 now?

Ms. McCABE. Because we are now in that regular review, we are past our statutory deadline, and in fact, we are subject to a court schedule to finalize this rule.

Mr. GREEN. Well, my earlier question, there have been times that EPA has delayed it in the past. Is that true?

Ms. McCABE. On our regularly required 5-year review—

Mr. GREEN. Yes.

Ms. McCABE [continuing]. There have been times when we have not met that deadline. I think you are referring to the ozone reconsideration, which was not a mandatory requirement under the Clean Air Act. But for our mandatory 5-year review cycle, we have not deliberately delayed. We have missed deadlines, and we are in that situation now.

Mr. GREEN. I guess the concern I have, and you have heard it from other members, is that we haven't met the current standard, and yet we are getting ready to see some really things happen. And so to put a new standard on with all this is maybe starting too early before we see what the benefits are of the other things that the industries and everyone else is complying with.

And, again, EPA has delayed it in the past. But, for a 2-year delay, while all these other things come into play, and we will have better data then to be able to look at it.

Ms. McCABE. I will say, Congressman Green, that the effect of those various measures will affect air quality. And so if a standard is revised, and folks need to look at which areas do and don't meet the standard, all of those programs, like mercury and air toxic standard, Tier 3, will be bringing air quality down so that fewer areas will be in nonattainment, and those programs will provide assistance in order to improve air quality in those areas.

Mr. GREEN. Mr. Chairman, one of my concerns is that part of our particulate matter in my area is because of the lack of infrastructure improvements. And so we can actually be hindering those infrastructure improvements if we make it more difficult. But, anyway, I am out of time, but I appreciate you being here.

Thank you, Mr. Chairman.

Mr. WHITFIELD. At this time, I will recognize the gentleman from West Virginia, Mr. McKinley, for 5 minutes.

Mr. MCKINLEY. Thank you, Mr. Chairman. What is the timeframe on getting some written—because I don't think we are going to be under 5 minutes to be able to get through our questions. Is there a timeframe to be able to submit written questions?

Mr. WHITFIELD. Yes, 10 days.

Mr. MCKINLEY. OK. Within 10 days, thank you.

Welcome back. My question is that should a rule like this, that helps public health, be withheld? Be withheld because of a regulatory burden that we have been referring to here?

Ms. McCABE. I am not sure I understand your question, Congressman.

Mr. MCKINLEY. Well, if there is regulatory burden that is going to be imposed with this, should the EPA withhold the bill or the rule?

Ms. McCABE. Well, the Clean Air Act directs EPA to set the standards, and the Supreme Court has said that that is our job to do and that the issues related to implementation are a separate matter of separate consideration not to be considered in determining what the proper public health level is.

Mr. McKINLEY. So the Court has ruled on that, but I am just curious because it goes back that—and you have heard it several times mentioned here that the President did step in and say there were some—this was going to cause regulatory burden. And, therefore, he asked that the rule be held back for a period of time. That is an accurate statement, isn't it, that the President did intercede?

Ms. McCABE. That was in a reconsideration event, which is—

Mr. McKINLEY. OK. That was in 2011. I am just curious. So I guess part of me is—part of the question is, what has changed? If he felt that this rule should not have proceeded because it had regulatory burdens with it, what has improved since 2011 that is it going to be less burdensome to industry?

Ms. McCABE. No. The decision to—

Mr. McKINLEY. Just those were his words.

Ms. McCABE. The decision—

Mr. McKINLEY. He just said if it has a regulatory burden, I think we should hold it back.

Ms. McCABE. I respectfully I disagree that that is what he said, Congressman. That decision was made in the context of knowing that there would be the required 5-year review, and the decision there was to defer and stop with the reconsideration process in deference to the review that we are doing right now.

Mr. McKINLEY. He just said that: I underscore the importance of reducing regulatory burden and regulatory uncertainty. I have requested the Administrator Jackson to withdraw the draft ozone standards.

I think that is interesting because I am curious to see what has changed, how the economy is improved or the regulatory burden is less. But you have answered about as much—I have just limited questions here, time on this. I am just curious a little bit about how a county is supposed to work in actual functioning through it.

I have got up to my 20 counties that I represent, 75 percent of those counties are going to be in noncompliance if you go to 65—75 percent. So how are they supposed to—in a real world, not from academia, but how are they supposed to function when they are going to be in a nonattainment county? Seventy-five percent of my counties, 15 of those counties are going to be in nonattainment—what are they supposed to do?

Ms. McCABE. Well, there are counties all across the country that have experienced poor air quality, have been designated nonattainment in the past, and states work with those counties to get programs in place to improve air quality in those areas.

Mr. McKINLEY. Can you give me an example? Give me—you are talking—

Ms. McCABE. Yes.

Mr. McKINLEY. 30,000 feet.

Ms. McCABE. OK.

Mr. MCKINLEY. Just go down to how are they going to change the air quality in Jefferson County, West Virginia that has a—right now is at 81?

Ms. MCCABE. OK. Well, I can talk better about my own home State of Indiana.

Mr. MCKINLEY. No, please just talk—these are just three counties in a row that they average 73, so there are already going to be so far over. Are we telling them and their kids and their families, when they sit at that kitchen table and they can't get a job, it is because their air quality is—it was fine at 75, but now that they get the 65, there are no jobs coming to West Virginia?

Ms. MCCABE. So what states do in nonattainment situations is they look at the local sources of air pollution and put in place sensible measures to reduce those, and it might be local industry. It might be transportation.

Mr. MCKINLEY. OK. Local industry. You're telling me that local industry change how it produces.

Ms. MCCABE. Industry has controlled air pollution remarkably over the years. I come from Indiana. I was the air director there. We have an area in northwest Indiana that—

Mr. MCKINLEY. We have some counties like Tyler County, and they may have just—well, I won't give—we have some counties that just have one industry.

Ms. MCCABE. Right.

Mr. MCKINLEY. And yet they are in nonattainment.

Ms. MCCABE. And there are many counties for which—from which the air pollution is not generated right within that county, but it is generated regionally.

Mr. MCKINLEY. Right.

Ms. MCCABE. That is why States work with metropolitan areas. That is why the Clean Air Act has provisions to make sure that if upwind States are contributing to downwind States, that those upwind States take responsibility, that is why EPA moves forward with Federal programs, such as the Tier 3, which makes motor vehicle traffic much cleaner everywhere, including in your State.

Mr. MCKINLEY. OK. I will get back to you. I would like to have more of a written answer from you because I have got a series.

I want to follow a metric here. How are we going to go down through to make these—so there are job opportunities.

I want to close very quickly. Why are the tribes excluded from this regulation?

Ms. MCCABE. The tribes aren't excluded. The tribes have the opportunity to regulate themselves, and if not, then EPA—

Mr. MCKINLEY. But the proposal says that the tribes are not obligated to adopt or implement any of the ambient air quality standards for ozone. In addition, tribes are not obligated to conduct ambient monitoring for ozone or adopt the ambient monitoring requirements. That sounds like an exemption to me.

Ms. MCCABE. No. The Federal Government implements the standards in Indian country, unless the tribe chooses to seek to do it itself. So the standards apply in Indian country. Regulations get put in place in Indian country. It is just that the Federal Government has the initial responsibility to do that.

Mr. MCKINLEY. I know I am way over time. I would just be curious how they are going to change their operation. Thank you.

Mr. WHITFIELD. The gentleman's time has expired, and he can submit those questions.

At this time, I recognize the gentlelady from Florida, Ms. Castor, for 5 minutes.

Ms. CASTOR. Well, thank you, Mr. Chairman, and thank you for calling this hearing.

And welcome.

Listening to my colleagues' comments today takes me back to a time when I was younger. Now, the Clean Air Act was originally adopted by the Congress in the 1960s. Is that right?

Ms. MCCABE. Yes.

Ms. CASTOR. And there have been significant amendments in the 1970s and especially in 1990. And, I think back to we have all kind of lived through this era. And I don't think anyone can argue that America is better off because we breathe cleaner air. And we have been able to balance environmental progress with economic progress. We have the strongest economy in the world today.

Yes, we have our challenges. We have had our setbacks, but we have been able to combine environmental progress, cleaner air, cleaner water, oversight of chemicals with economic progress and good jobs. I remember very well in the late 1960s and 1970s walking outside in my home in Tampa, Florida, and the air was awful. And we are a warm climate, so we have very smoggy days.

Now, it is much better. It is noticeably better. And anyone that lived in the 1960s and 1970s, whether you were in an industrial area or not, you understand the progress that we have made. So I want to thank you for your attention to cleaner air that we breathe. What a privilege it is to live in a country that has been able to show such environmental stewardship and balance it against economic progress.

And that is the history of this country, and I am confident that we can continue to make that kind of progress.

Now, Ms. McCabe, what is the ozone standard right now?

Ms. MCCABE. Seventy-five parts per billion.

Ms. CASTOR. And what does that mean exactly?

Ms. MCCABE. That means that in a billion units of air, no more than 75 of those should be ozone in order to provide healthy air quality.

Ms. CASTOR. And how long has it been at 75?

Ms. MCCABE. That was adopted in 2008.

Ms. CASTOR. And what was it before that time?

Ms. MCCABE. It was 85.

Ms. CASTOR. And now the proposal, EPA's proposal directed by the Court, directed by the Congress in statute is to go where now?

Ms. MCCABE. What the Administrator proposed was a level somewhere between 65 and 75 parts per billion.

Ms. CASTOR. And that was after significant discussion by the Clean Air Scientific Advisory Committee. What is the Clean Air Scientific Advisory Committee?

Ms. MCCABE. That is an external expert advisory panel that EPA convenes and has assisted us with all reviews of National Ambient Air Quality Standards. So it is a special panel convened to review

all of the science that EPA develops, our Office of Research and Development, and the Office of Air and Radiation. And they go through a very lengthy process of reviewing multiple documents, both science documents and then policy documents, and give us feedback on the science that we are looking at.

Ms. CASTOR. So they considered all sorts of levels?

Ms. MCCABE. So, yes, right, right. And they looked at all the studies that we looked at. They considered all of that information and our evaluation of it.

Ms. CASTOR. And, in fact, that committee indicated that—and it concluded that—there is adequate scientific evidence to recommend a range of levels for a revised primary ozone standard from 70 parts per billion to 60 parts per billion. And with regard to the upper bound of 70 parts per billion, the committee said, based on the scientific evidence, a level of 70 parts per billion provides little margin of safety for protection of public health, particularly for sensitive subpopulations like children, elderly folks with respiratory problems.

Although a level of 70 parts per billion is more protective of public health than the current standard, it may not meet the statutory requirement to protect public health with an adequate margin of safety. What are they saying there?

Ms. MCCABE. Well, they are acknowledging, first of all, that it is the Administrator's job to make this judgment about what protects the public health with an adequate margin of safety. What they are saying is that they looked at all of this information and that they see evidence in the science record from the level of 70 down to a level of 60 that shows adverse impacts on public health from ozone at these levels of exposure. And what they are saying is that at the top end of the range, there is less cushion, there is less margin of safety than at lower levels within that range.

Ms. CASTOR. So this was taken into account as you develop—as the Administrator developed the proposal.

Ms. MCCABE. It was.

Ms. CASTOR. And when you consider that the public health benefits for children, the elderly, respiratory diseases, we all know someone in our family or we know someone with asthma—26 million people in the U.S. are estimated to have asthma, 7 million children—certainly we can continue the environmental progress to improve the public health and balance it against the economic needs of the country. I think this is the United States of America, and it can be done, so thank you for staying true to the law.

Thank you, Mr. Chairman.

Ms. MCCABE. Thank you.

Mr. WHITFIELD. I recognize the gentleman from Virginia, Mr. Griffith, for 5 minutes.

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

As you know, I represent a fairly rural district, includes the Appalachian Mountains, Appalachian Trail, Blue Ridge Mountains, a stone's throw from the Smokies. My understanding is, is that under EPA requirements, in order to construct a new source of emissions or expand an existing source, there is a need to find offsets. Is that accurate?

Ms. McCABE. It depends on how an area is designated. So areas that are the least polluted areas in terms of ozone, it changes as the area gets more and more severely polluted.

Mr. GRIFFITH. OK. Kentucky's air regulator has raised concerns about the impacts on rural counties. In particular, he stated the statutory and regulatory offset requirements would severely restrict economic development in these rural counties since, by definition, the areas have no existing offset emissions available for any new sources. Rural counties would be disproportionately negatively impacted with little opportunity for economic development.

For rural counties, would states be able to seek relief from some of these offset requirements?

Ms. McCABE. There is actually a provision in the Clean Air Act that specifically focused on rural counties that may be in non-attainment because of transported air pollution. So we would work with any state that wanted to come forward and talk about rural counties.

Mr. GRIFFITH. You represented or you said transported ozone. The problem that I fear that some of my areas may have with the newer requirements as well is that it is not transported, but it is natural. As you know, trees produce volatile organic compounds, which combined with sunlight, produce ozone. Thus the name Smoky Mountains. Thus the name Blue Ridge Mountains because the mountains themselves with their trees produce ozones. So it is not necessarily transported ozone. It is ozone because we are in fact rural and have trees that produce some of this. It is not 80 percent, as Ronald Reagan once said, but it is a significant contributor, particularly in the rural areas like mine in the eastern Appalachians.

In fact, Scientific American in a June 1, 2014, story singled out or said, according to their research, black gum, poplar oak, and willow are significant producers of volatile organic compounds. So is there anything that would give us that offset, or do we have to go out into the forest, national or private, and say you got to cut the black gum, the poplar, the oak, and the willow, but it is OK to leave the birch, the linden, and the tulip, which apparently are low producers of VOCs, or volatile organic compounds?

Ms. McCABE. Well, as I mentioned in response to a previous question, what our science shows is that the areas that have significant challenges with background ozone are in the Rocky Mountains, the higher elevation areas. We are not seeing that kind of a situation with background in other areas of the country.

Mr. GRIFFITH. So you think the central Appalachians will be OK?

Ms. McCABE. I do.

Mr. GRIFFITH. But what about this offset? If it is not transported, would that rule also cover naturally occurring ozone?

Ms. McCABE. So as we look forward, I would be happy to get you this information—

Mr. GRIFFITH. Please do.

Ms. McCABE [continuing]. Mr. Griffith, on Virginia, particularly, but as we look at areas that are likely to be in nonattainment, we will look at air quality in future years to make those determinations, and I don't think we are seeing widespread nonattainment

in rural areas. But in those areas where we do, there are opportunities there to work with those areas.

Mr. GRIFFITH. All right. I appreciate the opportunity to work on it. I am concerned about it.

I am going to have to ask you some of these questions offline because time is precious and we don't get but so much, but if you could get us just some basic process on what the states have to do. What is the process for reviewing the state implementation plans? What is the range of time this process can take to complete, months or years? And if the EPA doesn't approve—and I guess this is one I would ask you to answer at this time—if the EPA doesn't approve a state's implementation plan, what happens to the state? Does it become subject to a Federal plan? And would there then be litigation between the States and the EPA over that?

Ms. MCCABE. Yes. So the Clean Air Act lays out a lot of steps, depending on the severity of the area that dictates how much time the states have. But, typically, if an area is considered—most areas the last time around were designated as marginal nonattainment, which means that they were not obliged to do a plan because they were expected to come into attainment and many do.

For ones that are moderate or above, they typically have 3 years to put a plan together. EPA works with those states to try to make sure that those plans are going to be approvable when they—

Mr. GRIFFITH. What happens if their state plan is not approved?

Ms. MCCABE. Generally, we work back and forth with the state to get it to a place where it is approvable.

Mr. GRIFFITH. But what if it is not, what do you do?

Ms. MCCABE. Well—

Mr. GRIFFITH. Do you come up with a Federal plan?

Ms. MCCABE. If a state really didn't want to make a plan that was approvable, which most states do, the Clean Air Act does provide that EPA would step into a Federal plan. But I have to say that that is very, very rare in this situation because—both because states want to do their plans because they are possible to do them and because we work hard with the states to make sure they can be successful.

Mr. GRIFFITH. And I have got to go. But in those places where they don't want to because you have made the standard so low, you may see more litigation. Thank you.

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

Mr. PALLONE. Thank you, Mr. Chairman.

Some of my colleagues are quick to argue that EPA's proposed ozone standard will hurt the economy, but history tell us that cleaning up pollution can benefit the economy as well as human health and the environment. Since its enactment in 1970, the Clean Air Act provides a perfect example of how we can make steady progress in cleaning up the air while growing the economy.

So, Ms. McCabe, do we have to choose between clean air and economic growth? What does the history of the Clean Air Act tell us about our ability to cut pollution while building the economy?

Ms. MCCABE. It actually shows us that the two things go hand in hand. We have reduced pollution dramatically, air pollution dramatically in this country. The economy has grown. We have also

shown that this country has—and businesses in this country have innovated, have come up with pollution-control technologies that employ American workers and make us leaders in the world on selling this kind of technology.

Mr. PALLONE. When we talk about air pollution regulation, my Republican colleagues often focus on cost, but they aren't talking about the cost from exposure to unsafe air. They are talking about the cost of polluters of actually cleaning up their act.

So, again, Ms. McCabe, how do the costs and benefits of implementing the proposed ozone standards stack up?

Ms. MCCABE. Well, we look at both. We lay both of those out, and in our analysis that we put out with our proposed rule, it showed that the benefits of this rule would outweigh the costs by three to one.

Mr. PALLONE. And along those lines, the National Association of Manufacturers estimates the cost of this rule would be \$140 billion annually, making the new ozone standard the most expensive rule-making in history. My understanding is that EPA's cost estimate—approved by the Office of Management and Budget—was much lower. So would you tell us how much does EPA expect this standard to cost?

Ms. MCCABE. Yes, our estimates—and, again, these are illustrative because the States will make their own choices—but our estimates are that at a level of 65 parts per billion, it would be in the range of 19 to 38 billion in the first standard of 70 parts per billion—oh, sorry. I said that completely wrong.

The costs range from 3.9 billion to 15 billion, depending on where the standard is.

Mr. PALLONE. So this, based on your experience, that \$140 billion price tag doesn't seem reasonable to you?

Ms. MCCABE. It does not match our evaluation.

Mr. PALLONE. Yes. I mean, this concentration of cost, I think, has been misguided. Over the history of the Clean Air Act, industry has consistently exaggerated the potential cost of controlling pollution.

How have these doomsday predictions measured up to reality?

Ms. MCCABE. Well, they haven't, given the information that folks have in front of them. In 1997, there were similar claims made that 1997 standards were going to kill the economy, and that absolutely hasn't come true.

Mr. PALLONE. You know, I just wanted to ask you something based on some of my Republican colleagues. And I am not trying to be critical of them, but can you confirm this? Can you confirm that under EPA's projections for West Virginia and Virginia, there will be zero counties in 2025 that will exceed 65 or 70 parts per billion? Does that sound right to you?

Ms. MCCABE. That does sound right to me.

Mr. PALLONE. OK. I have a little over a minute. Let me just get to some other questions about health- and science-based standards.

The Clean Air Act requires that EPA review the science behind the National Ambient Air Quality Standards every 5 years to ensure the best information is used. EPA examined thousands of scientific studies when reviewing the ozone standard, and given this body of evidence, what are some of the health impacts associated

with breathing air that contains ozone? And what groups of people are most at risk from breathing air containing ozone?

Ms. MCCABE. So ozone can have a range of impacts on the respiratory system, inflammation of the lungs exacerbated, asthma, and this is especially significant for people who have asthma, for children, for the elderly, for people with compromised respiratory systems. The studies also show an association between premature mortality and exposure to ozone.

Mr. PALLONE. So I understand that the Clean Air Scientific Advisory Committee and EPA scientists recommended that the Agency strengthen the ozone standard from 75 parts per billion to a level within the range of 60 to 70. So the Administrator has proposed to strengthen the standard to a level within the range of 65 to 70.

Is the proposed ozone level an aggressive or overzealous action by EPA as some may claim?

Ms. MCCABE. We believe that the range that the Administrator proposed is very well supported by the scientific information and affirmed, as you just noted, by our external peer-review panel.

Mr. PALLONE. Thank you very much.

Thank you, Mr. Chairman.

Mr. WHITFIELD. At this time, I recognize the gentleman from Missouri, Mr. Long, for 5 minutes.

Mr. LONG. Thank you, Mr. Chairman.

Ms. McCabe, at the same time the EPA is moving forward with its proposed, or excuse me, with its proposed ozone rule, it is also proposing its clean power plan, which would require states to prepare plans to submit to the EPA.

How can we realistically expect the EPA to manage several new rounds of state plan revisions that will be needed with the new ozone standard at the same time that they are reviewing plans for the clean power plan?

Ms. MCCABE. Well, these are—

Mr. LONG. That is going to take a lot of money and a lot of people, isn't it? And do you have those people and that money?

Ms. MCCABE. These are important programs that the Clean Air Act directs us to implement, so we expect to use our resources to work with the states to get this work done.

Mr. LONG. You expect to, but is it practical? Is it feasible? I mean, a lot of people want to do a lot of things, have lofty goals, but when push comes to shove, they can't get it done. Do you realistically think that this is something that the Agency can handle?

Ms. MCCABE. I do, Congressman. This is our job to do, and we will make sure that we get it done.

Mr. LONG. OK. I know it is your job, but I just question how it can possibly, how you can have the resources, the time—you are behind on several things already—the time, the money, and the employees to accomplish the goal.

Ms. MCCABE. Some of this work is overlapping as well, some of the technical work that we do in terms of air quality modeling, and it is efficient to do some of these things together. So—

Mr. LONG. Some of the state plan revisions overlap?

Ms. MCCABE. So the technical work that underlies the work that EPA and the States need to do in order to implement these programs.

Mr. LONG. OK. A few months ago, I met with some city officials from Springfield, Missouri, which is my hometown. I represent Springfield; Branson, Missouri; Joplin, Missouri; southwest part of Missouri. And they are one of the most forward-thinking cities and done more work on an integrated plan than about anyone. In fact, they were invited out to I believe it was Alexandria, and just them and one other city, I can't remember now the other city, but there was only two cities in the United States that were invited out to present how they did their plan and what they do.

But, anyway, they discussed this integrated plan for implementing mandates from the Environmental Protection Agency, and after analyzing the cost of the mandates over the next 20 years, and I have heard some people speculate that, here today, that things are never as bad as they seem, but if this was even 50 percent accurate, it is not doable. It is devastating. And they found that complying with the EPA mandates would cost each individual in my district, each of my 751,000 constituents, \$46,000. Now, you can cut that in half if you would like and say 23, but anyway, and cut it in half again if you would like, but it is not feasible. It is not doable.

Missouri alone is looking at billions of dollars in compliance cost with the proposed ozone regulation and financial impact that it will have on everything from manufacturing to transportation. And it is going to, like I say, have an impact on each one of my constituents.

Do you all look at the comprehensive financial and economic impact to these regulations at all that they are going to have on the states and our constituents?

Ms. MCCABE. Well, I am not familiar with exactly the study that you are talking about, Congressman, so I can't speak to that.

Mr. LONG. I will get it to you. Integrated plan for the city of Springfield for the next 20 years, I will be glad to provide that to you and your staff.

But let's say that you were familiar with it. At what point—my question is, do you all look at the economic impact?

Ms. MCCABE. So each rule looks at its impacts in light of the rules that have come before it, and so there is an understanding of the rules and the impacts, both benefits and costs, that are associated with trying to use programs.

Mr. LONG. But there is a weight given to cost?

Ms. MCCABE. I am sorry?

Mr. LONG. There is a weight, there is a consideration given to the cost?

Ms. MCCABE. Whenever we do regulations, there is an evaluation of cost and of benefits.

Mr. LONG. OK. I guess that that is—I am about out of time anyway, and Morgan stole some of my notes, I think, and asked some of my questions.

So, anyway, with that, Mr. Chairman, I yield back.

Mr. WHITFIELD. At this time, the chair recognizes the gentleman from Texas, Mr. Flores, for 5 minutes.

Mr. FLORES. Thank you, Mr. Chairman.

Administrator McCabe, thank you for joining us today. How does the market price risk? I mean, if you know something and you

know what the cost is of something, it has a price, and you know that price. But if you don't know something, then the price is higher because you have risk, right?

Ms. MCCABE. I——

Mr. FLORES. Yes. OK. In 2010, the EPA, when they proposed going to 60 parts per billion, said that that would cost \$90 billion, cost the economy \$90 billion. In 2014, you reduced it to \$40 billion. What happened over that 4-year period to make the cost go down?

Ms. MCCABE. So I think what you are comparing is the proposal that was put out under the ozone reconsideration compared with the most recent one.

Mr. FLORES. Now, just tell me what made it go down.

Ms. MCCABE. Yes. So, in that first one, we were looking at a change of the standard from the previous standard of 85 parts per billion to that level of in the range of 60 to 70.

Mr. FLORES. So this is not a 75 to 60.

Ms. MCCABE. That is right.

Mr. FLORES. OK. All right.

Ms. MCCABE. Because that was a reconsideration of the prior standard.

Mr. FLORES. OK. Thank you. And in your proposal to go to either 70 or 65, a significant amount of the control technology doesn't exist today, and that is where the risk question comes in. So do you know what it costs to offset a ton of ozone in the Galveston-Houston area today?

Ms. MCCABE. I don't.

Mr. FLORES. It is about \$170,000 a ton. So where did EPA price its unknown risk technology on a per ton of what is ozone?

Ms. MCCABE. So we looked across the types——

Mr. FLORES. Just give me a number.

Ms. MCCABE. Oh, the number?

Mr. FLORES. Yes, just give me a number.

Ms. MCCABE. I believe it was——

Mr. FLORES. About \$15,000.

Ms. MCCABE. That is what I was going to say.

Mr. FLORES. Yes, \$15,000. So if we know in Texas what the cost to offset a ton of ozone is and it is \$170,000, where did we come up with \$15,000 for imaginary technology that doesn't exist? Where in the world did that come from?

Ms. MCCABE. By looking at the history of the costs of pollution control technology over the years, and this is actually a conservative estimate based on the actual cost to control pollution that we have seen over time.

Mr. FLORES. Is that a publicly available document?

Ms. MCCABE. All of our assumptions are publicly available.

Mr. FLORES. Well, let me say that it doesn't pass the smell test when we know today what the cost is for an offset, and then you have imaginary technology that does not exist, and we just price it at a fire sale, give it a Wal-Mart price. That is crazy.

Let's talk about background ozone for a minute. Here is a map, background ozone map. Texas has about 70 parts per billion on average, 72 parts per billion, of background ozone. So if you take the level to 65, what is Texas supposed to do, get a big vacuum and send it down to the ozone hole in Antarctica or what?

Ms. MCCABE. Well, I am not familiar with that map, but that number doesn't sound right to me, Congressman.

Mr. FLORES. Well, that is all right. OK. Let's use something a little bit more discreet. How about Rocky Mountain National Park has a background of 77.

Ms. MCCABE. Yes.

Mr. FLORES. There is no industry in Rocky Mountain National Park.

Ms. MCCABE. As I mentioned, there are—particularly in that part of the country, there are a few areas where we are seeing high background.

Mr. FLORES. So what do you do? You said you had to have a national standard a minute ago, so how are you going to clean up Rocky National Park to take it to 65?

Ms. MCCABE. Well, it is not responsible for cleaning up air pollution that it doesn't create, and the Clean Air Act provides mechanisms to make sure that—

Mr. FLORES. So what is the mechanism? How do you clean up Rocky Mountain National Park?

Ms. MCCABE. To the extent that pollution is coming from places that we can control.

Mr. FLORES. Well, in this case, it is not.

Ms. MCCABE. Well—

Mr. FLORES. And 77-parts-per-billion background means, by definition, is not being produced there, it is coming from somewhere else.

Ms. MCCABE. Right, so—

Mr. FLORES. Natural occurring causes, or China.

Ms. MCCABE. If it is coming from motor vehicles around the country that—where that air pollution is coming into that area, our rules will help reduce that if it is coming—

Mr. FLORES. Let's talk about RFS for a minute. Under your 2010 regulatory impact analysis of the renewable fuel standard, the EPA concluded that the program would contribute to ozone as a consequence of increased ethanol use.

Disregarding that all together, EPA recently proposed that its latest targets for RFS through 2016 would lead to higher levels of ethanol. And according to the studies of the Journal of Geophysical Research that measured emissions of ozone forming VOCs from methanol refineries, it is five times higher than the EPA's original estimate.

So the EPA, on one hand, is saying: OK, you have got to reduce to 65 to 70 parts per billion. On the other hand, you are trying to cram more ethanol in the system, which has a five times worse ozone impact on the economy than does the production of regular gasoline. I will submit the rest of my questions in writing.

Thank you. I yield back.

Mr. WHITFIELD. The gentleman yields back.

At this time, I recognize the gentleman from North Carolina, Mr. Hudson, for 5 minutes.

Mr. HUDSON. Thank you, Mr. Chairman.

And thank you, Administrator, for being here today. I represent rural North Carolina. I grew up with a love for the outdoors, and I certainly understand our—the importance of protecting the envi-

ronment. But like many of my colleagues, I do have concerns about this proposed rule, and I thought it was fascinating my colleague from Florida, Ms. Castor said that the air in Tampa, Florida, is clean, that it used to be polluted but now it is clean. But I looked up Hillsborough County, Florida, and the ozone levels are 71. So even by her definition it is clean, I believe her, but even Tampa, Florida, would be out of attainment.

And what I really want to talk about is one of my counties, Montgomery County, North Carolina. It is a very rural county. A majority of the county is part of Uwharrie National Forest. This county has been disseminated with job loss. We have lost manufacturing jobs. There is no major significant industry in the county. Yet this county has 66 parts per billion in ozone, so it would be out of attainment if the standard were 65.

And, again, this is a beautiful county. It has got two rivers. It has got a lake. The air quality is wonderful. It is a rural beautiful community. What would the EPA do with a county in a situation like that?

Ms. MCCABE. Well, I think we need to be careful about making assumptions about which counties will be and won't be nonattainment, because we don't know that. We don't know what a final standard will be if a decision is made to revise it, but also those decisions will be made based on future air-quality data. The numbers that I believe you are citing are based on air-quality data from 2011 to 2013.

We will use current, most recent air-quality data when we make those decisions. And air quality is trending in a good direction. So I think we need to not assume an area will or won't be nonattainment based on information that is from prior years.

Mr. HUDSON. So do you think the level will stay above 70?

Ms. MCCABE. Which level?

Mr. HUDSON. That EPA sets for air quality?

Ms. MCCABE. No, I am not speaking to what decision might be finally made. I am speaking to the information that people are citing about whether areas based on air quality now will be in attainment if there is a revision to the standard, and we just don't know that.

That being said, we have talked, and I understand the comments that many of the members have made about being concerned about rural areas. And we do have the ability to work with those areas. The Clean Air Act does recognize that there are areas that don't control their air quality, and the Clean Air Act doesn't hold those areas responsible for reducing pollution if it is not being produced there.

Mr. HUDSON. Well, I appreciate that. And, obviously, a county like Montgomery County desperately needs jobs, and if we get to a nonattainment situation where we can't hire new people, we can't attract new industry, it is devastating.

So what specifically would Montgomery County, North Carolina, do if hypothetically it were in nonattainment? Do we file a lawsuit against a local city? Or, I mean, how do you—

Ms. MCCABE. Well, programs like the motor vehicle standards will improve air quality everywhere in the country where motor vehicles are used. This is an example of how the Federal-State part-

nership works where Federal programs bring cleaner air all across the country and will take care of the air pollution in many areas where there is not a lot of local industry that is contributing.

Mr. HUDSON. So we would have to give up our pickup trucks and Suburbans? Is that—

Ms. McCABE. No, no, no. As the fleet turns over, as people buy newer cars, the fuels are getting cleaner, and so air quality will improve.

Mr. HUDSON. What percentage do you think motor vehicles contribute to that?

Ms. McCABE. Well, motor vehicles generally contribute about a third of the air pollution in the country, and see it is not just cars driven in Montgomery County. It is cars driven in the region that are contributing to regional air pollution.

Mr. HUDSON. Well, I appreciate that.

And, Mr. Chairman, I have three resolutions I would like to insert in the record: One is from Cabarrus Regional Chamber of Commerce; another is from Rowan County Board of Commissioners; and a third is from the Cabarrus-Rowan Urban Area Metropolitan Planning Organization. All these organizations oppose this new standard, and I seek unanimous consent to have them inserted in the record at this time.

Mr. WHITFIELD. Without objection, so ordered.

[The information appears at the conclusion of the hearing.]

Mr. HUDSON. Well, thank you. I would again thank you for your testimony, but I just have concerns that we are setting standards so low that they are not attainable, and when rural areas that aren't near industrial areas or not near big cities can't reach the attainment, a significant portion, 10 of the 12 rural counties in my district, I think we may be using the wrong metric. So that is my concern. Thank you.

Mr. Chairman, I yield back.

Mr. WHITFIELD. The gentleman yields back.

At this time, I recognize the gentlelady from North Carolina, Mrs. Ellmers, for 5 minutes.

Mrs. ELLMERS. Thank you, Mr. Chairman.

And thank you, Ms. McCabe, for being with us today.

I just want to start off, as my colleague from North Carolina was pointing out, basically the concerns that we have in North Carolina, just in our home state alone, this rule will kill over 13,000 jobs a year and decrease the state's GDP drastically at a time when we can afford it the least. This proposal raises serious concerns, and I look forward to this discussion. I definitely have some questions for you.

Starting off with, in September of 2011, President Obama requested that your agency withdraw its proposed ozone standard based on his "concerns about the importance of reducing regulatory burdens and regulatory uncertainty, particularly as our economy continues to recover."

Your agency agreed to withdraw the proposed standard, and now you are issuing the revised standard. Can you tell us what changes you made to decrease the regulatory burden which now allows you to move forward?

Ms. McCABE. Well, first, let me explain that at that time, the Agency was engaged in a reconsideration of the 2008 ozone standard, which was not a mandatory duty. We are under a mandatory duty to relook at the standard every 5 years. It was last reviewed in 2008, so this is our required review.

Mrs. ELLMERS. So there are less regulations now?

Ms. McCABE. This is about science. This particular decision is about science and public health and what the science says about what is healthy in the air to breathe. Implementation——

Mrs. ELLMERS. Not to interrupt you, but to point out that the President said that he was asking for you to decrease the amount of regulations. What regulations have you decreased which can move us forward? I understand you are looking at the science. I am a nurse. I understand science. But what is it that you have done to make this process move forward so that we can all come together and work on it?

Ms. McCABE. Well, we put out regulations like the Tier 3 regulation that I mentioned a minute ago, which will bring improved air quality all across the country. That is—things that States won't have to do themselves.

Mrs. ELLMERS. Is that less cumbersome than what existed in 2008?

Ms. McCABE. It is a provision that will help states and municipalities meet the ozone standard.

Mrs. ELLMERS. OK. Moving on.

The first question that any economic developer asks when locating new plants or considering expansion of an existing plant is the attainment status, and I know my colleague from North Carolina, we were having this conversation just a moment ago.

Areas designated as nonattainment are immediately excluded from consideration. The Clean Air Act requires that the Clean Air Scientific Advisory Committee to advise the Administrator of any adverse public health, welfare, social, economic, or energy effects which may result from various strategies for attainment and maintenance of such National Ambient Air Quality Standards.

Given the adverse economic impact of a revised standard, why are you not requiring CASAC to take all of these things into consideration in regard to economic development?

Ms. McCABE. In setting the health standard, we have been specifically directed by the Supreme Court that looking at the implementation implications is not part of setting the health standard. And so in this——

Mrs. ELLMERS. So the Supreme Court told you that economic development is not significant and should not be considered.

Ms. McCABE. Is not relevant to the setting of the public health standard.

Mrs. ELLMERS. OK. Moving on.

Nonattainment designation indiscriminately reduces development, including development associated with military bases. This is particularly important for North Carolina as we have many strong military presence there.

This standard of the level at the near national background as is currently being considered will potentially limit military expansion and place at risk our military readiness. How is your Agency plan-

ning on ensuring that your revised ozone standard will not jeopardize national security?

Ms. MCCABE. Congresswoman, I am not aware of any instance in which the ozone standard has interfered with our military readiness.

Mrs. ELLMERS. Well, then I would love to work with your office because my understanding is there are some situations especially affecting some of our North Carolina bases now that this will dramatically affect, so I would like to continue that conversation.

Ms. MCCABE. We will be glad to follow up.

Mrs. ELLMERS. Great. Now, lastly, and I have got 31 seconds. Part of this continued problem is how are manufacturers going to be able to deal with this technology. If a manufacturer simply cannot meet these standards, what are their options? Are they to buy expensive offsets? Are they to close their doors? What do we do? How do we help our manufacturers?

Ms. MCCABE. We work with the states and with the business industry, we look at where the pollution is coming from, and we develop programs that are targeted towards addressing the most cost-effective reductions, and that is what we have done through the whole history of the Clean Air Act, where manufacturing has moved forward, has implemented new technologies, has been able to grow.

Mrs. ELLMERS. Do existing controls exist right now to achieve the 60-parts-per-billion standard or the 65-parts-per-billion standard?

Ms. MCCABE. Well, keep in mind the Administrator has not proposed the 60 parts per billion standard. When we looked at the range of 65 to 70, which is what she proposed—

Mrs. ELLMERS. Yes.

Ms. MCCABE. We identified a number of already existing controls that will get—

Mrs. ELLMERS. What are those existing controls?

Ms. MCCABE. Things like cleaner engines, scrubbers, NAAQS controls, lower VOC paints and coatings, a variety of technologies that have been developed over the years that many areas are not yet employing that could be employed.

Mrs. ELLMERS. Thank you.

I yield back.

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

At this time, I recognize the gentleman from Ohio, Mr. Johnson, for 5 minutes.

Mr. JOHNSON. Thank you, Mr. Chairman.

And Ms. McCabe, thanks for joining us again today. You know, increased access to low-cost sustainable domestic natural gas production has helped tremendously in fueling the manufacturing renaissance in this country. This expansion has resulted not only in cleaner gas and electricity for manufacturers but also provides a new source of natural gas liquids, which are essential feed stocks in many major manufacturing applications, such as chemicals and plastics.

A study conducted by the consulting firm NERA, frequently contracted by the Department of Energy, among others, shows dramatic cost increases in the price of natural gas under a 60-parts-per-billion standard. The study projects a 52-percent increase in

the cost of natural gas for industrial use under a 60-parts-per-billion standard.

So quick question. Can we expect our manufacturing renaissance to continue under this type of scenario?

Ms. McCABE. I can't speak to that study specifically, but I know that there certainly has been a significant increase in the development of natural gas. It is a very important——

Mr. JOHNSON. We know that, but what I am asking you is when we are essentially taxing it with these standards. And I might point out to you that in a recent trip that we made to Europe, ratepayers, businesses and residential ratepayers in Europe are taking a strong second look at their energy profiles because of this exact problem, making their businesses noncompetitive and their unwillingness to pay the exorbitant high prices for energy that is going to result from a rule like this.

So how can we expect the manufacturing renaissance to continue when we are taxing essentially the very energy that is providing that renaissance?

Ms. McCABE. Well, I don't think we are taxing the energy——

Mr. JOHNSON. Well, sure you are. If you get a 52-percent increase in the cost of natural gas under a 62-parts-per-billion standard, that is essentially a tax.

Ms. McCABE. Well, I——

Mr. JOHNSON. You can call it whatever you want to, but it is a tax on the industry.

Ms. McCABE. Well, I am not sure that I agree with the——

Mr. JOHNSON. OK. Well, we will agree to disagree. Let me move on. Let me focus on how the EPA has calculated the benefits of its proposed ozone standard. And here is the issue in a nutshell: Instead of calculating only the benefits from reducing nitrogen oxides and volatile organic compounds, the constituents of ozone, which are emitted from cars, trucks, and stationary sources, EPA also incorporated the cobenefits from reducing particulate matter, or PM, from those same sources. Of course, this rulemaking has nothing to do with particulate matter. EPA has a separate National Ambient Air Quality Standard for particulate matter, not to mention multiple other rules to regulate it under the Clean Air Act.

But without the benefits from PM reductions, the ozone rule would have very little to show for it. In fact, Dr. Anne Smith of NERA has pointed out that these PM cobenefits are actually larger than the direct ozone related benefits from the rule. If you don't accept NERA's assessment, then how about Cass Sunstein, the former head of OMB's Office of Information and Regulatory Affairs. He reviewed the ozone reconsideration in 2011 and helped prevent that proposal from being finalized because it was too costly.

Here is what he said about this, and I quote: But on some of the Agency's estimates of the 2011 ozone proposal, the net benefits would have been zero. Moreover, a strong majority of the benefits would have resulted not from ozone reductions but from cobenefit reductions in particulate matter, which come as an incidental benefit of the technologies that reduce ozone emissions.

So, Ms. McCabe, this prompts a number of questions. First, can you explain to me and our committee the EPA's legal justification for engaging in this kind of double counting? How is it that you can

justify a lower ozone standard using benefits from an entirely different pollutant?

Ms. McCABE. Well, it is not double counting.

Mr. JOHNSON. That is not science. That is a shell game. That is what that is. That is not science.

Ms. McCABE. It is not double counting. Those benefits are real.

Mr. JOHNSON. Those benefits—this rule is supposed to be going after ozone, not particulate matter.

Ms. McCABE. But it is having additional benefits to the—

Mr. JOHNSON. But very little in terms of the ozone. Very little in terms of the ozone in comparison with the benefits that are coming from particulate matter.

Further, talk to me about how transparent you have been with this to the American public. I mean, there are charts buried in the proposed rule where somebody maybe with a Ph.D. can go infer this information about double counting, but have you or the Administrator explained this issue in your speeches and public statements about the ozone? Have you told the American people that the benefits are coming from somewhere else, from a pollutant that is already well regulated by the EPA?

Ms. McCABE. We're very clear. And I myself personally have talked about co-benefits that are achieved by programs that we implement.

Mr. JOHNSON. Yes. Well, I think it is a shell game, Ms. McCabe, and I think it is economically destructive to my region of the country and to other industries that are providing the jobs and the economic vitality of America today.

Mr. Chairman, I yield back.

Mr. WHITFIELD. The gentleman yields back.

I have a couple of other questions I want to ask her, Mr. Rush, and then—

I wanted to ask you a couple of other questions, Ms. McCabe.

The Science Advisory Committee is appointed by who?

Ms. McCABE. The Science Advisory Committee is—there is an office within EPA that administers the Science Advisory Board and has a very open process for—

Mr. WHITFIELD. But the people who serve on the Science Advisory Committee, how are they selected?

Ms. McCABE. They are nominated.

Mr. WHITFIELD. By who?

Ms. McCABE. Either by themselves or by others, and that is through a public process.

Mr. WHITFIELD. And then who makes the decision of who serves?

Ms. McCABE. That is a decision made within the Agency by our Office of the Science—

Mr. WHITFIELD. So EPA decides who serves on the science committee?

Ms. McCABE. Through a robust public process.

Mr. WHITFIELD. OK. And how long do they serve?

Ms. McCABE. I don't know the answer to that.

Mr. WHITFIELD. And how many people serve on that committee?

Ms. McCABE. I don't know the answer to that.

Mr. WHITFIELD. Could you get us a list of the names of people on the committee and how long their term of office is?

Ms. MCCABE. Yes. Yes. I believe it is, you know, on the order of 4 to 6 years, something like that.

Mr. WHITFIELD. OK. Thank you.

Mr. RUSH. Ms. McCabe, how long has that committee been in existence?

Ms. MCCABE. How long has—

Mr. RUSH. How long has it been in existence?

Ms. MCCABE. The Agency?

Mr. RUSH. No. The science committee.

Ms. MCCABE. Gosh, I don't know, Congressman Rush. But we can certainly find out. Many, many years. Many years.

Mr. RUSH. Through both Republican and Democratic administrations?

Ms. MCCABE. Yes. Absolutely. And the committees and the panels are very well balanced to make sure that there is a range of views represented.

Mr. RUSH. Would you say that it is bipartisan?

Ms. MCCABE. Yes, I would.

Mr. RUSH. OK. Oh, yes. Mr. Chairman, I have one more question.

Ms. McCabe, we keep hearing about the President's decision in 2010 on the ozone standard, and let me read from that. With that in mind, this is what I want to read.

Statement by the President: "Work is already underway to update a 2006 review of the science that would result in the reconsideration of the ozone standard in 2013. Ultimately"—and this comes directly from the President on the ozone National Ambient Air Quality Standards issued on September 2, 2011—"Ultimately, I did not support asking State and local governments to begin implementing a new standard that will soon be reconsidered."

Do you have any comments? Do you remember that statement by the President?

Ms. MCCABE. Yes. So the President was recognizing that the regular 5-year review of the ozone standard was already underway, and that is what he was directing the Agency to focus its attention on.

If I could just clarify something I said before, Congressman Rush, I agreed with your characterization of the Science Advisory Board as bipartisan. I think it is probably more accurate to call it nonpartisan.

Mr. RUSH. Nonpartisan. OK. All right. Well, thank you so much.

Mr. Chairman, I don't have any additional questions, but I do have a unanimous consent request to enter into the record a letter from public health organizations opposing legislation or amendments that would block or delay EPA's work to update ozone standards and, also, a letter from the National Association of Clean Air Agencies supporting the EPA's proposal to revise the current ozone air standards. And I ask for unanimous consent that they be entered into the record.

Mr. WHITFIELD. Without objection, so ordered.

[The information appears at the conclusion of the hearing.]

Mr. RUSH. With that, I yield back the balance of my time.

Mr. WHITFIELD. And then I would also like to ask unanimous consent that the following documents be entered into the record:

Number one, a survey released by the Association of Air Pollution Control Agencies entitled “State Environmental Agency Perspectives on Background Ozone and Regulatory Relief”; number two, a June 2015 article from the Journal of Science entitled “Challenges of a Lowered U.S. Ozone Standard”; and, number three, comments of one of the Texas Commission on Environmental Quality on EPA’s Proposed Ozone Rule—a Texas commissioner’s comments.¹

Without objection, that will be entered into the record as well.

[The information appears at the conclusion of the hearing.]

Mr. WHITFIELD. And that concludes today’s hearing.

Once again, Ms. McCabe, thank you for being with us. We look forward to continuing engagement with you as we move forward.

And we will keep the record open for 10 days for any additional questions or comments or materials.

And, with that, the hearing is now adjourned.

[Whereupon, at 12:45 p.m., the subcommittee was adjourned.]

[Material submitted for inclusion in the record follows:]

PREPARED STATEMENT OF HON. FRED UPTON

This morning, we’re here to examine the EPA’s latest proposed new National Ambient Air Quality Standard for ground-level ozone. I welcome Acting Assistant Administrator McCabe.

In 2012, President Obama set a goal of creating one million new manufacturing jobs during his second term—which certainly was a goal we all could get behind. The following January, the president’s New Year’s resolution was to do “whatever it takes” to create jobs. Yet the administration’s policies do not match the president’s words. When you couple this ozone rule with other EPA rules like the Clean Power Plan and “Waters of the United States” rules, the likely outcome will be stifled growth, missed opportunities, and lost jobs.

Make no mistake, the new ozone rule would be a jobs killer—especially in the manufacturing industry. An ozone nonattainment designation would make it significantly more difficult for industries to invest and create businesses in communities across the United States. Even existing factories would face higher operating costs and red tape. EPA estimates that hundreds of counties across the country would not meet the proposed standards, including many in my home state of Michigan. We also need standard that make sense. In southwest Michigan, in Allegan County, you could remove all of the human activity and the region would still be in nonattainment because of ozone generated in Chicago, Milwaukee, and Gary, Indiana.

A study conducted by NERA for the National Association of Manufacturers tells the story with predictions that are truly frightening. The total cost of the new rule could reach \$140 billion annually, making it EPA’s most expensive regulation ever. In fact, the study states that Michigan could face \$1 billion in compliance costs and stands to lose 20,000 jobs per year over the next couple decades. Not exactly the right medicine in times of recovery.

At a time when America’s natural gas abundance has given domestic manufacturers an edge over the global competition, regulation after regulation is chipping away at that advantage—and a new ozone rule may well prove to be the last straw that shifts the advantage back to foreign-based facilities.

Job creators are paying attention. In a recent survey of manufacturers conducted by NAM, more than half the respondents said they would not undertake a new project or a major expansion in an ozone nonattainment area.

Not surprisingly, NAM, the Chamber of Commerce, the Auto Alliance and just about every other organization that represents manufacturers has come out strongly against this proposed rule. And it should be noted that the NAM study focused solely on manufacturing and did not consider the very real threat these new regulations pose to America’s energy renaissance. Energy producing regions may have to cut back on oil and natural gas output to comply with the new ozone standard.

To make its case, EPA declares ozone still poses a serious public health threat, but that raises the question why the agency has delayed implementation of the cur-

¹The comments have been retained in committee files and are also available at <http://docs.house.gov/meetings/ef/ef03/20150612/103590/hhrg-114-ef03-20150612-sd005.pdf>.

rent ozone rule. The 2008 ozone standard has languished at the agency for years. It was only last March—more than 6 years into the administration—that the agency finally issued the implementing regulations necessary for state and local governments to begin putting the new standard in place.

I strongly support efforts to reduce smog and I supported the ozone standard finalized in 2008. We have seen significant progress and I endorse reasonable measures to ensure that air quality continues to improve but we must strike a balance that doesn't hinder economic growth and job creation. For these reasons, I believe that we don't need a new ozone standard—we need EPA to implement the existing one.



**RESOLUTION OF THE BOARD OF DIRECTORS OF
CABARRUS REGIONAL CHAMBER OF COMMERCE
IN SUPPORT OF
THE CURRENT NATIONAL AMBIENT AIR QUALITY STANDARDS FOR OZONE**

Resolution #01-2015

WHEREAS, the Cabarrus Regional Chamber of Commerce strongly supports clean-air standards at a level that ensures public health and improves quality of life for all our residents; and

WHEREAS, both state and local governments and private industry are making measurable progress in improving air quality, with the national average for ozone levels having decreased by 21 percent from 1980 to 2006; aggregate emissions of six principal pollutants down more than half since 1980 despite a 46 percent increase in population; and programs in place that cut power plant emissions by more than 40% since 2010 in 30 eastern jurisdictions, reduce emissions vehicles by 77 to 95 percent from 2004 levels, dramatically reduce airborne levels of mercury and virtually eliminate diesel emissions; and

WHEREAS, state and local governments and business are working diligently to meet the Environmental Protection Agency's current National Ambient Air Quality Standard for ground level ozone by the 2020 deadline, investing approximately \$20 billion each year, according to EPA estimates; and

WHEREAS, the Environmental Protection Agency, in the course of its required review of NAAQS, is nevertheless considering a further tightening of the ozone standard to 0.065 parts per million; and

WHEREAS, further tightening the ozone standard, even before the current standard is met, could significantly expand the number of nonattainment areas/counties and result in emissions controls in additional rural areas with minimal population, thereby imposing significant administrative and regulatory burdens on more citizens, businesses and local governments; and

WHEREAS, the Agency is proposing this action with little evidence that the change in standards will result in significant health benefits and with virtually little analysis of the enormous costs that will be charged to the Cabarrus Region's urban area businesses and consumers;

NOW, THEREFORE, BE IT RESOLVED, that the Cabarrus Regional Chamber of Commerce, advise and strongly urge EPA to retain the existing NAAQS for ozone; and

BE IT FURTHER RESOLVED, that the EPA is urged to identify any unfunded mandates or other administrative and economic burdens for state or local governments or agencies that would derive from changes to the NAAQS for ozone.

Adopted this the 19th day of February 2015.

Tammy Whaley
Chair, Board of Directors

Patrick Coughlin
President & CEO
Cabarrus Regional Chamber of Commerce

Greg Edds, Chairman
 Jim Greene, Vice-Chairman
 Mike Caskey
 Judy Klusman
 Craig Pierce



Aaron Church, County Manager
 Carolyn Barger, Clerk to the Board
 John W. Dees, II, County Attorney

Rowan County Board of Commissioners

130 West Innes Street • Salisbury, NC 28144
 Telephone 704-216-8180 • FAX 704-216-8195

RESOLUTION IN SUPPORT OF THE CURRENT NATIONAL AMBIENT AIR QUALITY STANDARDS FOR OZONE

WHEREAS, the Rowan County Board of Commissioners strongly supports clean-air standards at a level that ensures public health and improves quality of life for all our residents; *and*

WHEREAS, both state and local governments and private industry are making measurable progress in improving air quality, with the national average for ozone levels having decreased by 21 percent from 1980 to 2006; aggregate emissions of six principal pollutants down more than half since 1980 despite a 46 percent increase in population; and programs in place to cut power plant emissions by more than 40% from today's levels by 2010 in 30 eastern jurisdictions, reduce emissions vehicles by 77 to 95 percent from 2004 levels, dramatically reduce airborne levels of mercury and virtually eliminate diesel emissions; *and*

WHEREAS, state and local governments and business are working diligently to meet the Environmental Protection Agency's current National Ambient Air Quality Standard (NAAQS) for ground level ozone by the 2020 deadline, investing approximately \$20 billion each year, according to EPA estimates; *and*

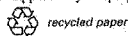
WHEREAS, the Environmental Protection Agency, in the course of its required review of NAAQS, is nevertheless considering a further tightening of the ozone standard to 0.065 parts per million; *and*

WHEREAS, further tightening the ozone standard, even before the current standard is met, could significantly expand the number of nonattainment areas/counties and result in emissions controls in additional rural areas with minimal population, thereby imposing significant administrative and regulatory burdens on more citizens, businesses and local governments; *and*

WHEREAS, the Agency is proposing this action with little evidence that the change in standards will result in significant health benefits and with virtually no analysis of the enormous costs that will be charged to Cabarrus-Rowan Urban Area businesses and consumers.

NOW, THEREFORE, BE IT RESOLVED, that the Rowan County Board of Commissioners, advise and strongly urge EPA to retain the existing NAAQS for ozone; *and*

Equal Opportunity Employer



BE IT FURTHER RESOLVED, that the EPA is urged to identify any unfunded mandates or other administrative and economic burdens for state or local governments or agencies that would derive from changes to the NAAQS for ozone.

Adopted this the 16th day of February 2015.

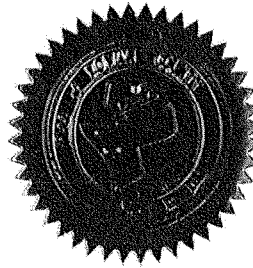


Greg Edds, Chairman
Rowan County Board of Commissioners

ATTEST:



Carolyn Barger, MMC, NCCCC
Clerk to the Board /
Assistant to the County Manager





**CABARRUS - ROWAN URBAN AREA
METROPOLITAN PLANNING ORGANIZATION**

CABARRUS COUNTY • CHINA GROVE • CLEVELAND • CONCORD • GRANITE QUARRY • HARRISBURG • KANNAPOLIS • LANDIS
MIDLAND • MOUNT PLEASANT • ROCKWELL • EAST SPENCER • ROWAN COUNTY • SALISBURY • SPENCER • FAITH

March 3, 2015

Ms. Gina McCarthy, Administrator
US Environmental Protection Agency
Mail Code 28221T
Attention Docket ID No. OAR-2008-0699
1200 Pennsylvania Avenue, NW
Washington, DC 20460

RE: Resolution in Support of the Current National Ambient Air Quality Standards for Ozone

Dear Secretary McCarthy:

This letter is to convey the Cabarrus-Rowan Metropolitan Planning Organization (CR MPO) support of the current National Ambient Air Quality Standards for Ozone. The Cabarrus-Rowan MPO is made up of 16 local governments in Cabarrus and Rowan Counties. Our MPO strongly supports the clean air standards at a level that balances public health goals with patience for realizing some of the tangible progressive efforts already underway in our state and region. We are striving to meet the existing standard through cooperative efforts of the business community, local governments, and the general public. We believe a lower standard may compromise this spirit of cooperation and result in added social and financial costs that will not translate into equitable gains in the air we breathe. At the January 28, 2015 meeting, the CR MPO passed the enclosed resolution and requests your consideration of its' contents.

Thank you for any assistance that you can provide to us on this matter.

Sincerely,

[Redacted Signature]

Phil Conrad, Executive Director
Cabarrus-Rowan MPO

enclosure

cc: Carl Ford, NC House of Representatives
Harry Warren, NC House of Representatives
Fletcher Hartsell, NC Senate
Andrew Brock, NC Senate
Larry Pittman, NC House of Representatives
Linda Johnson, NC House of Representatives

**RESOLUTION IN SUPPORT OF THE CURRENT NATIONAL AMBIENT AIR
QUALITY STANDARDS FOR OZONE**

WHEREAS, the Cabarrus-Rowan MPO strongly supports clean-air standards at a level that ensures public health and improves quality of life for all our residents; and

WHEREAS, both state and local governments and private industry are making measurable progress in improving air quality, with the national average for ozone levels having decreased by 21 percent from 1980 to 2006; aggregate emissions of six principal pollutants down more than half since 1980 despite a 46 percent increase in population; and programs in place to cut power plant emissions by more than 40% from today's levels by 2010 in 30 eastern jurisdictions, reduce emissions vehicles by 77 to 95 percent from 2004 levels, dramatically reduce airborne levels of mercury and virtually eliminate diesel emissions; and

WHEREAS, state and local governments and business are working diligently to meet the Environmental Protection Agency's current National Ambient Air Quality Standard for ground level ozone by the 2020 deadline, investing approximately \$20 billion each year, according to EPA estimates; and

WHEREAS, the Environmental Protection Agency, in the course of its required review of NAAQS, is nevertheless considering a further tightening of the ozone standard to 0.065 parts per million; and

WHEREAS, further tightening the ozone standard, even before the current standard is met, could significantly expand the number of nonattainment areas/counties and result in emissions controls in additional rural areas with minimal population, thereby imposing significant administrative and regulatory burdens on more citizens, businesses and local governments; and

WHEREAS, the Agency is proposing this action with little evidence that the change in standards will result in significant health benefits and with virtually no analysis of the enormous costs that will be charged to Cabarrus-Rowan Urban Area businesses and consumers;

NOW, THEREFORE, BE IT RESOLVED, that the Cabarrus-Rowan MPO, advise and strongly urge EPA to retain the existing NAAQS for ozone; and

BE IT FURTHER RESOLVED, that the EPA is urged to identify any unfunded mandates or other administrative and economic burdens for state or local governments or agencies that would derive from changes to the NAAQS for ozone.

Adopted this the 28th day of January 2015.


Chair, Cabarrus-Rowan Transportation Advisory Committee



June 2, 2015

Dear Representative:

The undersigned public health and medical organizations urge you to strongly oppose any legislation or amendments that would block, weaken or otherwise hinder the U.S. Environmental Protection Agency's work to update and enforce strong limits on dangerous air pollution.

With the passage of the Clean Air Act more than 40 years ago, Congress made a commitment that the air in the United States would be safe for all to breathe, based on the best evidence from the health and medical science. This set our nation on a path toward safe, healthy air for all – including children, the elderly, and those with lung or heart disease. Thanks to that commitment, we have made tremendous progress to reduce pollution.

Implementing and enforcing the Clean Air Act is a strong investment in the health of our nation. Reducing air pollution saves lives and reduces health care costs by preventing thousands of adverse health outcomes, including cancer cases, asthma attacks, strokes, heart attacks, emergency department visits, and hospitalizations. A rigorous, peer reviewed analysis, *The Benefits and Costs of the Clean Air Act from 1990 to 2020*, conducted by EPA, found that the air quality improvements under the Clean Air Act will save \$2 trillion by 2020 and prevent at least 230,000 deaths annually.

With benefits like these, it is no surprise that the American public supports EPA efforts to reduce pollution, and believes overwhelmingly that Congress should not interfere with EPA scientists as they work to protect public health. A recent bipartisan poll by the American Lung Association found that more than two-thirds of voters enter the debate supporting safer, stricter standards. An overwhelming 68 percent of voters across party and demographic lines support EPA setting stricter smog pollution standards to protect public health.

Despite the success of the Clean Air Act and the strong public support for continued protection, some in Congress have proposed legislation that would dismantle or delay Clean Air Act safeguards. Doing so would undermine the health of our nation, and could expose millions of Americans to unsafe levels of air pollution, increasing the number of missed work and school days due to illness, hospitalizations for respiratory and cardiovascular distress, and premature deaths due to air pollution.

Therefore, we ask you to support full implementation of the Clean Air Act and resist any efforts to weaken, delay or block progress toward the continued implementation of these vital public health protections. Further, we ask that you speak out publicly in defense of the fundamental human right to breathe healthy air.

Sincerely,

Allergy and Asthma Network
 American College of Preventive Medicine
 American Heart Association
 American Lung Association
 American Public Health Association
 American Thoracic Society
 Asthma and Allergy Foundation of America
 Health Care Without Harm
 National Association of County & City Health Officials
 National Association of Hispanic Nurses
 Trust for America's Health



March 17, 2015

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U.S. Environmental Protection Agency

EPA Docket Center

Mailcode: 28221T

Attention Docket ID No. EPA-HQ-OAR-2008-0699

1200 Pennsylvania Avenue, NW
Washington, DC 20460

To Whom It May Concern:

On behalf of the National Association of Clean Air Agencies (NACAA), we are pleased to provide the following comments on the U.S. Environmental Protection Agency's (EPA) proposed National Ambient Air Quality Standards (NAAQS) for ozone, published by the agency on December 17, 2014 (79 Fed. Reg. 75,234). NACAA is a national, non-partisan, non-profit association of air pollution control agencies in 41 states, the District of Columbia, four territories and 116 metropolitan areas. The air quality professionals in our member agencies have vast experience dedicated to improving air quality in the U.S. This testimony is based upon that experience. The views expressed in this testimony do not represent the positions of every state and local air pollution control agency in the country.

NACAA welcomes this EPA proposal to revise the current ozone NAAQS, which were established in 2008. In particular, NACAA supports EPA's use of scientific evidence to establish a primary ozone NAAQS that protects public health based on the agency's assessment that the current standard is not adequate to do so. The serious threats to public health from exposure to ozone are well documented. For example, in its Integrated Science Assessment for this NAAQS review, the agency concluded, among other things, that ozone pollution causes respiratory harm; is likely to cause premature death and adverse cardiovascular impacts; and may cause damage to the central nervous system and reproductive and developmental effects.

In addition, EPA's independent science advisors, the Clean Air Scientific Advisory Committee (CASAC), also believe the primary ozone NAAQS must be more protective of public health. As the group stated in its June 26, 2014 letter to EPA on the agency's *Second Draft Policy Assessment for the Review of the Ozone National Ambient Air Quality Standard*, "In addressing the adequacy of the primary standard, the Second Draft PA presents scientifically sound information on the health effects evidence for each major effect category....The CASAC finds scientific justification that current evidence and the results of the exposure and risk assessment call into question the adequacy of the current standard. Furthermore, there is clear scientific support for the need to revise the standard. The CASAC supports the scientific rationale

presented in the Second Draft PA on these points.” CASAC also went on to say that it “further concludes that there is adequate scientific evidence to recommend a range of levels for a revised primary ozone standard from 70 ppb to 60 ppb.”

NACAA, therefore, supports EPA’s proposed revised primary NAAQS – within the range of 0.065 to 0.070 parts per million (ppm) – which is at the upper end of the science-based range recommended by CASAC.

With respect to the secondary ozone NAAQS, we note that CASAC supports EPA’s scientific conclusion that the current secondary standard is not adequate to protect against current and anticipated welfare effects of ozone on vegetation. CASAC has advised EPA to revise the secondary NAAQS to a standard based on the biologically based cumulative exposure “W126 index” at a level of 7 ppm-hrs to 15 ppm-hrs. Rather than follow CASAC’s recommendation, EPA has proposed a secondary NAAQS identical to the proposed primary standard – that is, within a range of 0.065 ppm to 0.070 ppm – contending that this would provide an equivalent level of protection.

We believe the agency has not adequately justified why it chose to diverge from CASAC’s recommendation or how it reached its conclusion of equivalent protection. As with the primary standard, we urge EPA to base the secondary standard on solid scientific data. Therefore, before EPA moves forward with its secondary NAAQS proposal we urge the agency to provide a better scientific justification for its proposal and its claim of equivalency.

On the issue of the Air Quality Index (AQI), NACAA supports EPA’s proposal to revise the AQI at the same time that it finalizes the revised ozone NAAQS. The AQI is a risk communication tool developed by EPA to keep the general public informed about its local air quality and to help make educated decisions about exposure to air pollutants. Air quality is measured by monitors that record the concentrations of major pollutants each day at thousands of locations across the country. Those raw measurements are then converted into AQI values using standard formulas developed by EPA. The effectiveness of the AQI as a public health tool will be undermined if EPA undertakes regulatory changes to the ozone NAAQS without simultaneously revising the AQI. Therefore, we are pleased that EPA has proposed to move forward with revisions to the NAAQS and the AQI at the same time.

With respect to the proposal’s ambient monitoring provisions, NACAA agrees that the ozone monitoring seasons should better reflect the times of year when ozone may approach or exceed the standard in order to more fully realize the health benefits of the revised NAAQS. We believe EPA’s analysis makes a strong case that the current ozone monitoring seasons are not long enough in many areas of the country and we support the agency’s proposal to extend the seasons. We note that some of EPA’s specific proposed changes to the ozone monitoring seasons may present regional consistency issues; for example, a nonattainment area may extend over adjoining states with different ozone seasons. We support the retention of the regulatory language allowing EPA Regional Administrators to grant waivers allowing deviations from ozone season monitoring requirements where monitoring agencies demonstrate that such deviations are appropriate.

EPA is also proposing to revise the existing Photochemical Assessment Monitoring Stations (PAMS) network by requiring PAMS measurements at existing NCore stations in nonattainment areas. NACAA supports this change to the network design but notes that the PAMS requirements will require significant equipment investment and ongoing expenditures and will require additional federal funding. We

agree that there may be some existing NCore sites that are not well-suited for making PAMS measurements (e.g., where an NCore site is not located in the best place for PAMS sampling, or the site does not have the capacity for PAMS instrumentation), and we therefore support EPA's proposal to allow the Regional Administrators the authority to approve an alternative location for a required PAMS site where appropriate.

With respect to required PAMS measurements, NACAA is concerned with EPA's proposal to require agencies to collect eight, 3-hour averaged carbonyls samples on a daily basis for the entire PAMS season. This level of sampling would require a substantial amount of agency resources and seems unduly burdensome. This is particularly true in light of the data quality issues presented by the known shortcomings with the current method for measuring carbonyls in the PAMS program, Method TO-11a. In addition, NACAA members are experiencing difficulty in locating vendors that manufacture eight-channel carbonyl samplers necessary to meet this sampling frequency. We urge EPA to consider a less-frequent carbonyl-sampling requirement.

EPA is also proposing to require monitoring agencies to measure mixing heights at PAMS sites. NACAA believes it would be much more practical and cost-effective to obtain this mixing height data by upgrading the ceilometers operated by the National Oceanic and Atmospheric Administration (NOAA) as part of the Automated Surface Observing System (ASOS), so that individual state and local monitoring agencies are not required to purchase their own ceilometer equipment. We strongly encourage EPA to continue its efforts to work with NOAA to make this upgrade to the ASOS network, and we agree with EPA's proposal to allow state and local agencies to use ASOS or other nearby mixing height data to fulfill this requirement, if and when such data become available.

Finally, while NACAA firmly believes EPA must maintain a strong firewall between standard-setting issues and implementation issues, we do acknowledge that whatever decisions EPA makes on the primary and secondary ozone NAAQS will have a profound impact on the work of state and local air pollution control agencies. EPA must also recognize this and take timely actions on several fronts.

First, EPA should commit to, and follow through on, proposing the implementation rule for the revised ozone standards at the same time it issues the final revised standards and issuing the final implementation rule within one year following such proposal. It is imperative that development of the implementation rule and any related guidance be done in close collaboration with state and local air agencies. EPA should also work in close partnership with state and local air agencies to increase efficiencies in the planning process.

Second, EPA should take timely action to adopt, or further strengthen, federal measures to control a range of emission sources. It is extremely important that these measures be adopted and implemented in time for the associated emission reductions to contribute to attainment by the specified deadlines. Further, EPA should ensure that states are able to take credit for federal measures that achieve real emission reductions.

Third, in order to fulfill their responsibilities to attain more protective ozone standards by the prescribed deadlines, state and local air agencies will need more resources than they currently have. This is especially true since many areas of the country will face nonattainment status for the first time and will require additional training and resources to develop and implement state plans. EPA must assist states and localities in this regard and request additional, adequate federal funding to enable them to successfully

fulfill their statutory responsibilities and their obligation to provide their citizens with clean, healthful air as expeditiously as practicable.

On behalf of NACAA, we thank you again for the opportunity to provide comments on this proposal and look forward to working with EPA and other stakeholders to ensure that a final rule is promulgated by October 1, 2015.

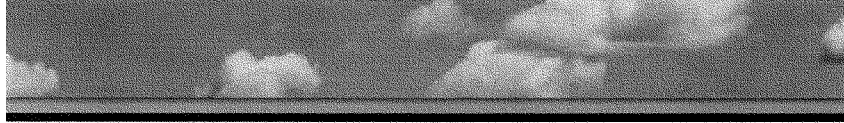
Sincerely,



George S. (Tad) Aburn, Jr.
(Maryland)
NACAA Co-President



Merlyn Hough
(Springfield, OR)
NACAA Co-President



**STATE ENVIRONMENTAL AGENCY
PERSPECTIVES ON BACKGROUND OZONE &
REGULATORY RELIEF**

Results of a Survey by the
Association of Air Pollution Control Agencies (AAPCA)

June 2015

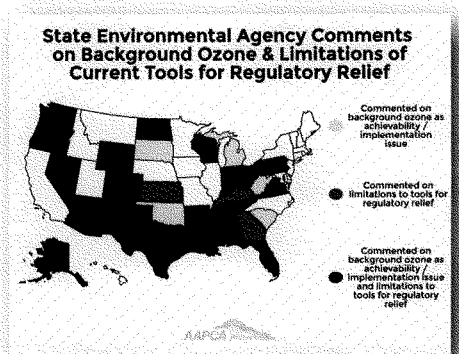


Executive Summary

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)¹ 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.

¹ 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 (O₃) under the Clean Air Act (CAA),² the Agency acknowledged that "... there can be events where O₃ 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 O₃, wildfire O₃ plumes, or long-range transport of O₃ from sources outside the U.S."³ 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 O₃ would increase were O₃ concentrations to decrease with a lower level of the O₃ NAAQS."⁴ 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 O₃ concentrations, as opposed to previous reviews which only considered risk above background levels."⁵

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."⁶ Later in the preamble, EPA also suggests that "For a prospective standard of 70 ppb, the EPA does not believe that background O₃ would create significant implementation-related challenges at locations throughout the U.S. and prevent attainment of the NAAQS."⁷

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.⁸

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"⁹:

- **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.

² <http://www.gpo.gov/fdsys/pkg/FR-2014-12-17/pdf/2014-28674.pdf>.

³ 79 FR 75382.

⁴ 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>.

⁵ Ibid., 2-12 – 2-13.

⁶ 79 FR 75382.

⁷ 79 FR 75383.

⁸ EPA Fact Sheet, "Tools for Addressing Background Ozone," November 25, 2014, <http://www.epa.gov/airquality/ozonepollution/pdfs/20141125fs-tools.pdf>.

⁹ Ibid.



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).¹⁰ 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 O₃.”¹¹

In an April 2015 presentation to the Western States Air Resources Council,¹² 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)¹³ anticipates a Notice of Proposed Rulemaking on rule revisions for the Treatment of Data Influenced by Exceptional Events in October 2015.

¹⁰ 79 FR 75382-75383.

¹¹ 79 FR 75383.

¹² http://www.westar.org/Docs/Business%20Meetings/Spring15/SF15/06.1%20AWOOD_westar_FINAL.pdf.

¹³ <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 jointly¹⁴ by these agencies but not comments filed by national or regional associations on behalf of state agencies.
- 44 state environmental agencies filed individual or joint comments on EPA's proposed revision to ozone NAAQS.¹⁵
 - 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

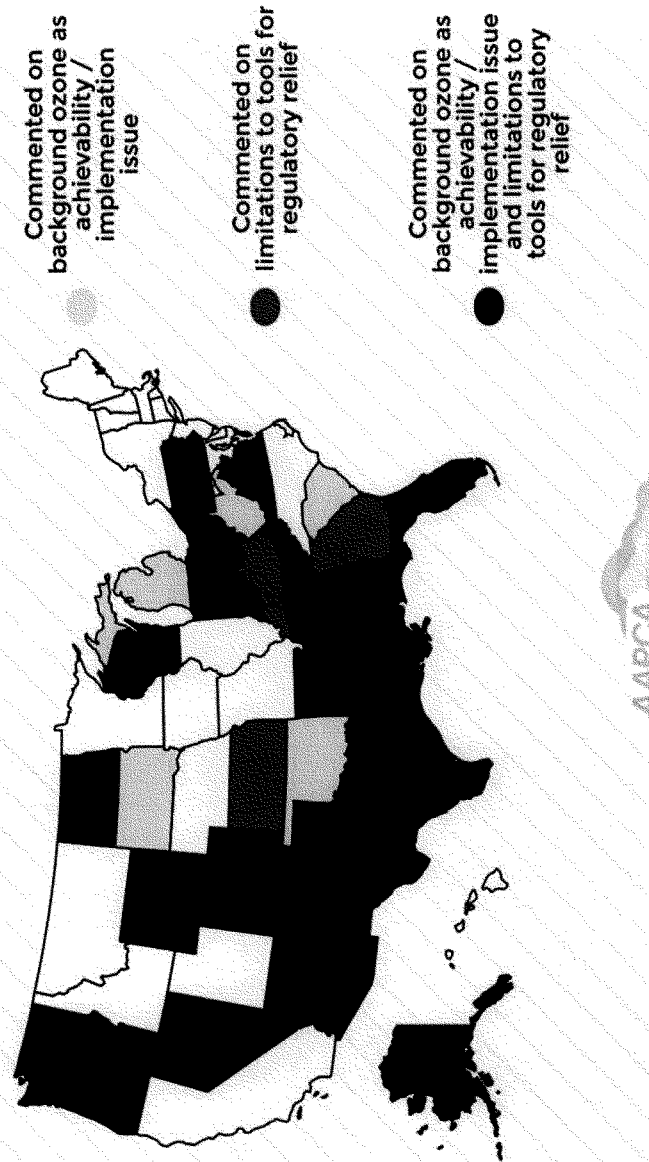
"Tennessee...urges extreme caution in selecting a value that approaches background due to the many likely implementation issues that will follow. While the courts may have ruled that costs are not to be considered in setting a health based standard, the practicality of implementation irrespective of costs must absolutely be considered."
- Tennessee Department of Environment and Conservation

¹⁴ 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.

¹⁵ All state comments can be viewed at: http://www.csg.org/aapca_site/news/OzoneNAAQSComments.aspx

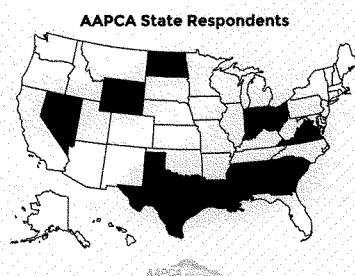


State Environmental Agency Comments on Background Ozone & Limitations of Current Tools for Regulatory Relief



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.

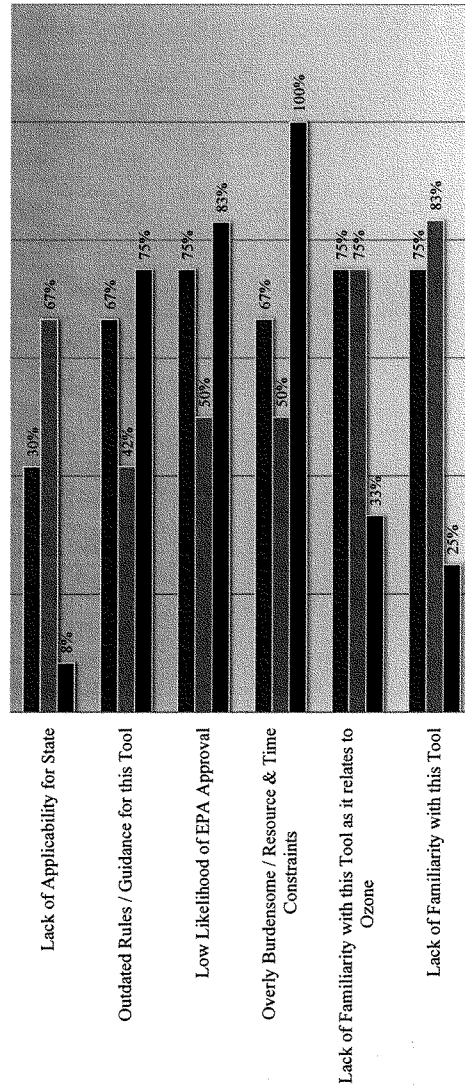
"The [Exceptional Events Rule] places an undue burden on states by requiring a very stringent 'but for' demonstration, which goes well beyond the requirements in the Clean Air Act."
- Virginia Department of Environmental Quality

"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



ATMOSPHERE

Challenges of a lowered U.S. ozone standard

Source attribution science can help areas of the U.S. west

By Owen R. Cooper,^{1,2*} Andrew O. Langford,² David D. Parrish,^{1,2} David W. Fahey²

At Earth's surface, ozone is an air pollutant that causes respiratory health effects in humans and impairs plant growth and productivity (1). The Clean Air Act (CAA) of 1970 mandates that the U.S. Environmental Protection Agency (EPA) assess the ozone standard every 5 years and revise when necessary to protect human health.

POLICY With a decision expected in October 2015 as to whether the standard will be toughened, we discuss limitations of ozone and precursor observations that hinder the ability of state and local air pollution-control agencies to accurately attribute sources of ozone within their jurisdictions. Attaining a lower standard may be particularly challenging in high elevations of the western United States, which are more likely to be affected by ozone that has been transported long distances or that originated in the stratosphere.

Understanding the origins of surface ozone is complicated by its multitude of sources. Ozone is transported to the surface from the natural reservoir in the stratosphere or produced from precursor gases [nitrogen oxides (NO_x) and volatile organic compounds] that react in the presence of sunlight. Ozone precursors have natural sources—such as vegetation, wildfires, and lightning—and are also emitted by human activity—such as combustion of fossil fuels and human-caused biomass burning.

The current primary (health-based) EPA standard is 75 parts per billion by volume (ppbv), with 227 U.S. counties, home to 123 million people, classified as not having attained the standard (www.epa.gov/airquality/greenbook/index.html). In November 2014, EPA proposed a revised primary ozone standard in the range of 65 to 70 ppbv in order to improve public health protection (2). The most recent ozone "design values" were used to determine whether ozone observations comply with the standard (which is based on

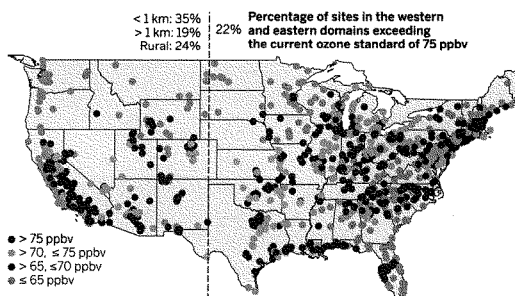
the 3-year average of the fourth-highest daily maximum 8-hour ozone average in each year) at all EPA-approved ozone-monitoring sites (see the chart). The highest values are in large urban areas. Recent data from 2011 to 2013 reveal that 358 and 558 counties have design values that would exceed a revised ozone standard of 70 and 65 ppbv, respectively (www.epa.gov/groundlevelozone/maps.html). The good news is that ozone design values are declining because of ongoing reductions in precursor emissions resulting from regulations such as the "NO_x SIP Call," a state implementation plan that took effect across 22 eastern states in 2003, and the nationwide Tier 2 Vehicle and Gasoline Sulfur Program that began in 2004. EPA expects these emissions trends to continue through 2025 owing to already promulgated regulations (3).

Although ozone design values are generally declining across the United States, the trends are weakest at rural high-elevation sites in the western United States (>1.5 km above sea level) (4). One potential reason is greater exposure to enhanced "baseline" ozone that flows across the North Pacific Ocean or is transported downward from the lower stratosphere (5–9). Base-

line ozone is transported from all upwind sources (natural and anthropogenic) before modification by recent, localized emissions; it includes aged ozone, produced many days earlier from U.S. emissions, that is returned to the United States after circling the globe. Baseline ozone can be directly observed by surface or airborne instrumentation along the West Coast or U.S. political borders and above inland regions of the western United States in air masses not influenced by recent U.S. emissions. Note that baseline ozone plumes produced from routine anthropogenic emissions outside of the United States cannot be classified as exceptional events, which are unusual exceedances of the ozone standard that EPA removes from consideration when classifying an area as having nonattainment.

Observed springtime baseline ozone 3 to 8 km above western North America has increased significantly since the 1980s and 1990s, and the trend is strongest in air masses that are transported directly from South and East Asia (4). High-elevation regions of the western United States are more strongly influenced by baseline ozone than locations at lower elevations, especially in springtime (7–9). However, model studies

EPA-approved ozone monitoring sites



Ozone design values at all EPA ozone monitors operating during 2011–2013. The vertical dashed line separates the high-elevation regions (>1.5 km) of the west from the east. Western sites are divided into those above and below 1 km above sea level, with a separate overlapping category of rural sites. [Ozone values source: www.epa.gov/airtrends/values.html]

¹Cooperative Institute for Research in Environmental Sciences, University of Colorado, Boulder, CO 80309, USA. ²Chemical Sciences Division, NOAA Earth System Research Laboratory, Boulder, CO 80305, USA.

*Corresponding author. E-mail: owen.r.cooper@noaa.gov

(10–12) and ozone observations above the California coast (9) and rural Nevada (6) also indicate substantial baseline ozone at low-elevation rural and urban (<1.5 km) sites in the western United States.

EPA is aware of ozone variations across the western United States and has conducted targeted research for the latest ozone standard review (1, 3) by focusing on the estimation of North American background ozone levels (10, 11). This is ozone that would exist in the absence of any anthropogenic ozone precursor emissions from North America. Although background ozone is a large component of baseline ozone, it differs from baseline ozone because it cannot be measured by instruments but must be calculated by global-scale atmospheric chemistry-transport models. Background ozone indicates the proportion of observed North American ozone that is beyond the control of domestic air pollution-control measures; these estimates also inform U.S. air-quality managers how much domestic emissions must be reduced in order to attain the ozone standard. Although the CAA requires EPA to set the ozone standard at levels requisite to protect public health and welfare without regard to the source of the pollutant, EPA does view background ozone as an important concept to understand and quantify in developing implementation policies. Using two separate global-to-regional air-quality modeling approaches, EPA estimated that background ozone makes substantial contributions to surface ozone in the western United States (1, 3). Seasonal (April to October) mean background levels ranged from 40 to 45 ppbv across much of Arizona, Colorado, Nevada, New Mexico, Utah, and Wyoming, with some individual days approaching the range of the proposed standard (i.e., 65 to 70 ppbv).

EPA has stated that “[e]xisting and upcoming EPA regulations and guidance will assist states in ensuring background ozone does not create unnecessary control obligations” (13). However, these mechanisms require states and EPA to be able to quantify the overall contribution and sources of background ozone. The role of scientists is to inform the decision-making by conducting research to accurately quantify background ozone. The challenges are model accuracy and limited observations of baseline ozone, which require further development and enhancement in order to improve the quantification of background ozone. A comparison of two global models shows that they differ in their estimates of monthly mean background ozone by as much as 10 ppbv and produce different seasonal cycles (12). Global models also have deficiencies in re-

producing long-term observed ozone trends at northern mid-latitudes, which indicates the need for model improvements related to production or transport of ozone (14). Although the U.S. surface-ozone observation network is extensive, the observations for evaluating model estimates of surface and free troposphere baseline ozone along the 1800-km U.S. West Coast are extremely limited. There are only two measurement sites representative of marine boundary layer ozone (Trinidad Head, CA, and Cheeka Peak, WA), and two coastal mountain sites representative of lower tropospheric baseline ozone (Mt. Bachelor, OR (15), and

“Background ozone... estimates also inform U.S. air-quality managers how much domestic emissions must be reduced...”

Chews Ridge, CA). The only routine ozone profiles from sea level to the stratosphere on the West Coast are made just once per week at Trinidad Head.

From both scientific and regulatory points of view, a lower ozone standard will motivate air quality-control planners to seek more accurate and precise attribution of observed ozone to local, upwind, and stratospheric sources of ozone to determine how much domestic emissions must be reduced in order to attain that standard. A lower ozone standard will also increase the probability that the standard will be exceeded in springtime, which would require the attribution of ozone episodes beyond the typical summertime period of concern. Accurate quantification of background ozone under this new paradigm would require enhanced baseline ozone observations at a spatial density and temporal frequency adequate for evaluating and improving the models. Once the models can replicate baseline ozone, greater confidence can be placed in their estimates of background and locally produced ozone.

Additional observations include routine vertical ozone profiles at multiple coastal and inland sites using balloon-borne ozonesondes, ground-based ozone lidars, or, possibly, commercial aircraft. Related options include augmenting the U.S. Tropospheric Ozone Lidar Network (TOLNet), the U.S. National Oceanic and Atmospheric Administration (NOAA) Global Greenhouse Gas Reference Network aircraft program, or the European In-Service Aircraft for a Global Observing System (IAGOS). New

ozone and precursor monitoring sites at inland rural locations (especially high elevation) would be useful for gauging the descent of baseline ozone from the free troposphere into the boundary layer.

These additional observations would improve detection of interannual variability (12) and long-term trends in baseline ozone. The observations would be used to improve the coarse-scale global models needed for the routine estimation of background ozone and precursors that are subsequently down-scaled and included in the best regional air-quality models covering the United States. Along these lines, the United Nations Task Force on Hemispheric Transport of Air Pollution is evaluating multiple global- and regional-scale model estimates of baseline and background ozone across the western United States—but only for a very limited time period when sufficient observations are available. If a revised ozone standard is adopted, air quality-control programs will have a greater need to precisely and accurately attribute ozone sources on a continuous basis, and systematic and long-term efforts of scientists will be required to help identify and fill gaps in observations and modeling capabilities in coming years. ■

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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) 225-3641

July 2, 2015

The Honorable Janet McCabe
Acting Assistant Administrator
Office of Air and Radiation
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, N.W.
Washington, D.C. 20460

Dear Acting Administrator McCabe:

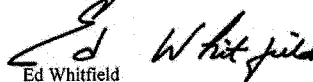
Thank you for appearing before the Subcommittee on Energy and Power on Friday, June 12, 2015, to testify at the hearing entitled "EPA's Proposed Ozone Rule."

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 Friday, July 17, 2015. Your responses should be mailed to Will Batson, Legislative Clerk, Committee on Energy and Commerce, 2125 Rayburn House Office Building, Washington, D.C. 20515 and e-mailed to 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 L. Rush, Ranking Member, Subcommittee on Energy and Power

Attachment



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

SEP 25 2015

OFFICE OF CONGRESSIONAL
AND INTERGOVERNMENTAL RELATIONS

The Honorable Ed Whitfield
Chairman
Subcommittee on Energy and Power
Committee on Energy and Commerce
U.S. House of Representatives
Washington, D.C. 20515

Dear Mr. Chairman:

Thank you for your July 2, 2015, letter to EPA Acting Assistant Administrator Janet McCabe requesting responses to Questions for the Record following the June 12, 2015, hearing before the Subcommittee on Energy and Power entitled, "EPA's Proposed Ozone Rule."

The responses to the questions are provided as an enclosure to this letter. If you have any further questions, please contact me, or your staff may contact Josh Lewis at lewis.josh@epa.gov or (202) 564-2806.

Sincerely,

A black rectangular box redacting the signature of Nichole Distefano.

Nichole Distefano
Deputy Associate Administrator
for Congressional Affairs

Enclosure

Attachment-Additional Questions for the Record Following the June 12, 2015, Energy and Power Subcommittee hearing "EPA's Proposed Ozone Rule."

The Honorable Ed Whitfield

1. Your Regulatory Impact Analysis for the proposed ozone rule provides only a snapshot of annual costs for one year, 2025.
 - A. Please provide an estimate of the total costs to meet the current standard of 75 parts per billion (ppb).
 - B. Please provide an estimate of the annual costs of control in 2020 and in 2030.
 - C. What is the total cost of this program if you were to add up all the costs imposed every year?

Answer: Consistent with Executive Order 12866, and OMB guidance, the EPA prepared a Regulatory Impact Analysis accompanying the proposed updates to the ozone NAAQS that shows the benefits and costs of illustrative control scenarios that states may choose in complying. Because states have flexibility in how to meet their goals, the actions taken to meet the goals may vary from what is modeled in the illustrative scenarios. Specific details, including information about how costs and benefits are estimated for these illustrative scenarios and about costs over time are available in the RIA
 (<http://www.epa.gov/ttn/ecas/regdata/RIAs/20141125ria.pdf>).

2. In EPA's ozone proposal, the agency said it would update certain rules and guidance that would be needed to comply with the proposed rule, including the i) "Exceptional Events Rule;" ii) guidance for the nonattainment designation process; and iii) implementing regulations.
 - A. For each of these rulemakings or guidance documents, what is the current status?
 - B. For each of these rulemakings or guidance documents, what is EPA's current schedule for proposing and finalizing them?
 - C. Will these rulemakings and guidance be finalized before states are required to submit their nonattainment designation recommendations?

Answer: The EPA intends to propose revisions to the Exceptional Events Rule in the fall of 2015 in a notice and comment rulemaking. At that time, we will also issue a Notice of Availability and public comment for draft exceptional events implementation guidance that will address Exceptional Events Rule criteria for wildfires that influence ozone concentrations. The EPA intends to assess comments and finalize the rulemaking in the

summer of 2016. This would be in advance of the date by which states, and any tribes that wish to do so, would be required to make area designation recommendations for any potential revised NAAQS (e.g., October 2016 if the ozone NAAQS is revised). The wildfire guidance is expected to be finalized in the same timeframe as the rule revisions.

The EPA intends to issue additional guidance on ozone designations (if the standard is revised) soon after the promulgation of a new standard. The EPA intends to propose and finalize implementing regulations, as necessary, no later than the date of nonattainment designations.

3. In EPA's ozone proposal, the agency also stated that "EPA is planning a rulemaking in the spring of 2015 to consider whether to update Appendix W." What is the status of this rulemaking?

Answer: Consistent with its commitment to engage in a rulemaking process to determine whether updates to Appendix W in 40 CFR part 51 are warranted, the EPA proposed a rulemaking on July 14, 2015, to consider whether to update Appendix W. The EPA concluded that it is technically and scientifically appropriate to propose revisions to Appendix W as part of that rulemaking and also provide associated technical guidance. In the meantime, in order to demonstrate that a proposed source or modification does not cause or contribute to a violation of the applicable O₃ NAAQS, PSD permit applicants would follow the current provisions in Appendix W until any revisions to them are finalized and in effect.

4. In EPA's proposal, the agency has estimated there would be 358 counties with ozone monitors that would violate a standard of 70 ppb, and 558 counties that would violate a 65 ppb standard.
 - A. Based on previous nonattainment designations, in addition to these 358 to 558 counties, how many nearby counties could also be designated as being in nonattainment?

Answer: Designations decisions for any revised ozone standard, including which counties or partial counties to include within the boundaries of any nonattainment area, would depend on a number of factors that are currently highly uncertain, including future monitored air quality data, state recommendations of nonattainment area boundaries (due to EPA in late 2016), and joint EPA-state evaluation of area-specific information relevant to the Clean Air Act's definition for nonattainment (i.e., any area that does not meet the ozone standard, and any nearby area that contributes to the area that does not meet the ozone standard). This evaluation would include a detailed, area-specific assessment of monitored air quality data, relevant sources of emissions, ozone-related meteorology, relevant topography, and jurisdictional factors.

While it is true that in the RIA accompanying its proposal to revise the ozone NAAQS, EPA estimated 358 counties had air quality not meeting a 70 ppb standard and 558 counties had air quality not meeting a 65 ppb standard based on ambient monitoring data from 2011 to 2013, these are not the same data that will be used to designate areas

for any revised ozone standards and are not a reliable indicator of how many counties, or which specific counties, would be determined in the future to be nonattainment for any revised standard.

- B. Do these estimates of 358 to 558 counties include EPA's proposal to extend the ozone monitoring season?

Answer: The EPA proposed to extend the O₃ monitoring seasons for 33 states, effective starting January 1, 2017. If finalized, the extended seasons would not affect the 2014 to 2016 data which EPA anticipates would be used to designate areas for the revised O₃ standards, and are not included in EPA's estimates.

- C. Do these estimates of 358 to 558 counties include the values and readings from CASTNET monitors?

Answer: The CASTNET monitoring network became part of EPA's regulatory O₃ monitoring network starting in 2011, and thus the CASTNET monitors are included in EPA's estimates of counties that would not meet 70 ppb and 65 ppb based on 2011 to 2013 air quality data.

5. How many counties in the country do not currently have ozone monitors?

- A. Provide an estimate of how many of these counties may violate a 70 ppb standard and could be in "nonattainment" if they had a monitor.

Answer: There were approximately 814 U.S. counties (26%) with ozone monitors reporting data to EPA in 2013, and 2,330 counties (74%) with no ozone monitoring. EPA's ozone monitoring network requirements are population-oriented, and thus the 814 counties with ozone monitors represent about 229 million Americans, or 74% of the U.S. population based on 2010 Census estimates. EPA has not estimated how many counties without a monitor might violate a 70 ppb standard. States are not required to monitor every location in the U.S. The state and local ozone monitoring network specifications are found in 40 CFR Part 58, Appendix D. The minimum number of monitors in urbanized areas ranges from 0 to 4 depending on the size of MSA and severity of air quality. Appendix D does not require monitoring in MSAs that have less than 350,000 population unless the design value is likely to be in excess of 63 ppb. EPA's monitoring network design requirements for ozone do not require monitoring for areas with less than 50,000 population.

- B. Provide an estimate of how many of these counties may violate a 65 ppb standard and could be in "nonattainment" if they had a monitor.

Answer: EPA has not estimated how many counties without a monitor might violate a 65 ppb standard.

- C. Provide an estimate of how many counties nationwide could ultimately be designated to be in nonattainment with the new standards.

Answer: As provided in the response to Part A of this question, the designation determinations will be based a number of factors including the use of future year air quality monitoring data. Therefore it is premature to estimate how many counties will be designated nonattainment for the revised O3 standards at this time.

6. EPA projects that after 2025, only 9 counties outside of California would violate a 70 ppb standard.

A. If only 9 counties outside of California are projected to be in nonattainment in 2025, why is the cost of the program so high?

B. Would these 9 counties come into attainment based on federal measures if more time was given beyond 2025?

Answer: Consistent with Executive Order 12866, and OMB guidance, the EPA prepared a Regulatory Impact Analysis accompanying the proposed updates to the ozone NAAQS that shows the benefits and costs of illustrative control scenarios that states may choose in complying. Because states have flexibility in how to meet their goals, the actions taken to meet the goals may vary from what is modeled in the illustrative scenarios. Specific details, including information about how costs and benefits are estimated for these illustrative scenarios are available in the RIA (<http://www.epa.gov/ttn/ecas/regdata/RIAs/20141125ria.pdf>).

7. Recently, a survey was released indicating that 26 states have "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."

A. Do you agree that naturally occurring ozone and also foreign emissions will make it difficult for certain areas to meet the proposed standards if they are finalized?

Answer: The Clean Air Act contains provisions that can assist states in ensuring background ozone does not create unnecessary control obligations as they continue their work to improve air quality. If a state provides an adequate assessment or demonstration, there are a few types of CAA-authorized relief they can legally invoke, which are described in the ozone NAAQS proposal. As examples, an area may be able to rely upon the exceptional events provisions of the Act to exclude certain emissions data from consideration during the process of area designations under a revised NAAQS, which could impact whether an area is designated nonattainment. An area also may be able to rely on certain provisions of the Act addressing international emissions when making attainment demonstrations, which could limit their ultimate control requirements and any consequences for failing to attain by the area's attainment date. Finally, the Administrator can determine that certain qualifying nonattainment areas are Rural Transport Areas, thus eliminating the need for states to develop an attainment plan. All of these CAA-authorized provisions have been used in the past for implementing ozone standards.

8. This survey of state environmental agency comments on EPA's proposed rule also indicated that 24 states identified limitations to the Clean Air Act "tools" that EPA highlights for regulatory relief to address background ozone.

A. For example, EPA points to the "Exceptional Events Rule" as one of these measures.

- i. How many Exceptional Events requests has the agency received and how many has the agency approved? If the agency does not track this information, why doesn't the agency track this information?
- ii. How long does EPA take to respond to such a request? What is the range of time EPA has taken to act on such requests?
- iii. Does EPA have an estimate of the costs for states to prepare and submit Exception Events requests?
- iv. What changes is EPA considering with respect to the Exceptional Events Rule and how would those changes make it easier or more cost-effective for states to submit such requests?

B. A second regulatory relief tool EPA points to is the "Rural Transport Areas" designation under section 182(h) of the Clean Air Act.

- i. How many times has EPA designated an area to be a Rural Transport Area? Please identify each instance in which this has occurred.
- ii. What do areas need to demonstrate to be designated as a "Rural Transport Area"?
- iii. Are areas reclassified as "Rural Transport Areas" subject to Transportation Conformity or General Conformity requirements that would affect federal projects, including federally funded transportation projects?
- iv. Would applicants for PSD or NNSR permits in areas reclassified as a "Rural Transport Area" need to comply with the new standards?

C. A third type of regulatory relief EPA points to is the "International Transport" provisions under section 179B of the Clean Air Act.

- i. What do areas need to do to demonstrate international transport of ozone and ozone precursor emissions?
- ii. How many requests has EPA received under the "International Transport" provisions, and how many times has EPA granted the requested relief?

- iii. Has relief under the "International Transport" provisions ever been provided for emissions from any countries other than Mexico or Canada? If yes, which countries?
- iv. Does EPA have an estimate of the costs for states to prepare and submit requests under the "International Transport" provisions? If yes, please provide the agency's estimate.

Answer: Please see the answers to questions 2 & 7, above, for discussion of the tools that may be available to states and of the exceptional events provision.

For the 1997 and 2008 ozone standards, no states requested that the EPA consider a nonattainment area as a rural transport area.

The rural transport provision was last used for designations in 1991 for the 1979 ozone standards. At that time, four states requested that EPA consider areas as rural transport areas. After evaluating the requests, the EPA determined that the four areas qualified to be treated as rural transport areas. These areas are: Door County Area, WI; Edmonson County Area, KY; Essex County Area (Whiteface Mountain), NY; and Smyth County Area (White Top Mountain), VA.

The CAA section 182(h) Rural Transport Area provision provides the Administrator with the discretion to treat an ozone nonattainment area as a rural transport area if the area is not part of, or adjacent to, a metropolitan statistical area and emissions from within the area do not make a significant contribution to ozone concentrations in the area or in other areas. The EPA developed draft guidance in 2005, titled "Criteria For Assessing Whether an Ozone Nonattainment Area is Affected by Overwhelming Transport" that explains the kinds of technical analyses that states could use to establish that transport of ozone and/or ozone precursors into the area is so overwhelming that the contribution of local emissions to an observed 8-hour ozone concentration above the level of the NAAQS is relatively minor and determine that emissions within the area do not make a significant contribution to the ozone concentrations measured in the area or in other areas. The document is available at http://www.epa.gov/scram001/guidance/guide/owt_guidance_07-13-05.pdf. The EPA will work with states to ensure all nonattainment areas eligible for treatment as rural transport areas are identified.

Transportation conformity and general conformity apply to all areas that are designated nonattainment, including Rural Transport Areas. In any area that is designated nonattainment, permit applicants would need to address the NNSR requirements for ozone. PSD regulations do not apply to pollutants for which an area is designed nonattainment.

Section 179B of Clean Air Act allows the EPA to approve an attainment demonstration for a nonattainment area if: (1) The attainment demonstration meets all other applicable requirements of the CAA; and (2) the submitting state can satisfactorily demonstrate that "but for emissions emanating from outside of the United States," the area would attain and maintain the ozone standard. The EPA has historically evaluated these "but for"

demonstrations on a case-by-case basis, based on the individual circumstances, the classification of the area and the data provided by the submitting state. These data have included ambient air quality monitoring data, modeling scenarios, emissions inventory data and meteorological or satellite data.

The EPA is aware of five nonattainment areas for which a 179B demonstration was approved. To date, all demonstrations have involved emissions from Mexico. Three of these SIPs addressed PM10, one addressed CO, and one addressed ozone. The EPA does not have estimates specific to the costs for eight states to prepare and submit requests under the "International Transport" provisions.

9. According to your proposal, in certain areas this rule is getting close to background ozone levels that are uncontrollable. An article this week in the journal "Science" stated:

"Attaining a lower standard may be particularly challenging in high elevations of the western United States, which are more likely to be affected by ozone that has been transported long distances or that originated in the stratosphere."

The article also noted that observation and modeling of background levels is not very precise, and stated: "If a revised ozone standard is adopted, air quality-control programs will have a greater need to precisely and accurately attribute ozone sources on a continuous basis, and systematic and long-term efforts of scientists will be required to help identify and fill gaps in observations and modeling capabilities in coming years.

- A. Does EPA believe its standard will be set above background ozone levels in all areas of the country?
- B. If key researchers in the field are expressing uncertainty, what analysis does EPA rely on to make sure that states and cities will not be forced into nonattainment because of background levels they cannot control?
- C. If there is so much uncertainty, how can states make requests for Exceptional Events or the "International Transport" provisions under section 179B of the Clean Air Act, and how can EPA approve such submissions?
- D. Why is it sound policy to subject states to regulatory burdens and risks when there is so much uncertainty, especially when we know further improvements in air quality will occur without the standard?

Answer: EPA discussed these background ozone and associated issues in the proposal at 79 FR 75382. We are currently reviewing the more than 430,000 comments we received on the proposal, many of which discussed background ozone.

10. EPA maintains most States can meet the new ozone requirements by 2025 with existing "federal measures" such as the "Mercury and Air Toxics" (a/k/a "MATS" or "Utility

MACT") Rule or Tier 3 standards.

A. For states that would have to prepare State implementation plans to meet a new ozone standard, would states be able to point to these federal measures?

B. Will states get full credit up front in their plans for expected reductions from existing federal measures and thereby avoid the need for unnecessary local controls? For example, could a state rely on the reductions expected to occur under the Utility MACT Rule or Tier 3 standards to meet the new ozone standards?

Answer: EPA projections show the vast majority of U.S. counties would meet the proposed standards by 2025 just with the rules and programs now in place or under way, including the Tier 3 fuel standards. States are able to take federal measures into account in developing any required attainment plans. Any controls implemented for purposes of meeting MATS could be included in a state's control strategy for attainment planning purposes as long as the control requirements remain permanent and enforceable.

11. EPA did not finalize its implementation regulations for the 2008 standard until March of 2015.

A. Will states have to comply with these implementation regulations if EPA revises the 2008 standard?

B. If EPA revises the 2008 standard, will areas still have to comply with that standard or will the agency revoke that standard?

Answer: Sections 108 and 109 of the Clean Air Act (CAA) govern the establishment, review, and revision, as appropriate, of the NAAQS to protect public health and welfare. The CAA requires the EPA to periodically review the air quality criteria—the science upon which the standards are based—and the standards themselves. This rulemaking is being conducted pursuant to these statutory requirements.

The final State Implementation Plan (SIP) Requirements Rule, signed by the Administrator on February 13, 2015, provides EPA's interpretation of Clean Air Act requirements that state, tribal, and local air quality management agencies will need to meet as they develop their plans to implement the 2008 ozone NAAQS. In that final rule, the EPA determined it appropriate to revoke the prior (1997) primary and secondary 8-hour NAAQS given that the 2008 ozone NAAQS was more stringent. Unless and until EPA makes such a determination for the 2008 ozone NAAQS relative to any revised ozone NAAQS, states and tribes with nonattainment or maintenance areas for the 2008 ozone NAAQS must continue to meet all applicable statutory and regulatory requirements related to that particular NAAQS.

12. Section 165(a)(3) of the Clean Air Act requires that a PSD permit applicant demonstrate that its proposed project will not cause or contribute to a violation of any National Ambient

Air Quality Standards.

- A. Is EPA confident that applicants in all areas of the country will be able to make this demonstration given the proximity of the proposed standards to background levels?

Answer: New or modified major stationary sources that must get a PSD permit must show that the project will not cause or contribute to a violation of a revised ozone standard upon the effective date of that standard. The EPA has proposed a grandfathering provision for PSD permit applications that are sufficiently far enough along in the approval and issuance process on the effective date of a revised standard [79 FR 75234 (December 17, 2014) at page 75379]. Those in-pipeline permit applications meeting the qualification criteria in EPA's final rule would not need to be revised in order to be approved. For permit applications that are subject to the revised standards, EPA believes based on past experience that it is unlikely that a source will not be able to make the required demonstration. EPA regulations (51.165(b)(3)) also provide that state programs may contain an approach that would enable an applicant to obtain a permit by offsetting its adverse ambient impact.

13. In 2012, the President issued an Executive Order to address the problem of permitting delays for major federal infrastructure projects. The order created a Steering Committee to be chaired by the Chief Performance Officer, and included many of the large federal agencies.

- A. Has EPA consulted with the Steering Committee regarding the impacts of EPA's proposed rule on major federal infrastructure projects?
- B. If yes, when did those consultations occur and with whom did EPA consult?
- C. Has EPA analyzed the potential impacts of its change in ozone standards on major infrastructure projects? If yes, what was the result of that analysis and is it publically available

Answer: The Clean Air Act directs the EPA to set National Ambient Air Quality Standards (NAAQS) at a level requisite to protect public health with an adequate margin of safety and to protect the public welfare from any known or anticipated adverse effects of air pollutants. The NAAQS are based on consideration of the most up-to-date scientific evidence and technical information, expert advice from independent advisory committees, and public comments. The EPA is prohibited by law from considering the costs of implementation in setting the level of the NAAQS. The U.S. Supreme Court ruled in *Whitman v. American Trucking Associations*, 531 U.S. 457 (2001), that the EPA may not consider the costs of implementation in setting standards that are requisite to protect public health and welfare, as provided in section 109(b) of the Clean Air Act. Moreover, if EPA were to consider such costs, it would be "grounds for vacating the NAAQS, because the Administrator

had not followed the law". Id. at n. 4. However, when designing their state implementation plans to implement the NAAQS, state and local officials have the authority to consider several factors, including employment impacts and costs of controls.

14. Has EPA consulted with other Federal agencies, such as the Department of Transportation, regarding the potential impacts of EPA's proposed ozone standards on major infrastructure projects?

A. If yes, which agencies did EPA consult with and when did the consultations occur?

Answer: In accordance with Executive Order 12866, the Office of Management and Budget coordinated the interagency Executive Branch review of the proposed ozone standard before the rule was published. The Department of Transportation participated in this review. With respect to the potential impacts of EPA's proposed ozone standards on major infrastructure projects, the Clean Air Act directs the EPA to set National Ambient Air Quality Standards (NAAQS) at a level requisite to protect public health with an adequate margin of safety and to protect the public welfare from any known or anticipated adverse effects of air pollutants. The NAAQS are based on consideration of the most up-to-date scientific evidence and technical information, expert advice from independent advisory committees, and public comments. The EPA is prohibited by law from considering the costs of implementation in setting the level of the NAAQS. The U.S. Supreme Court ruled in *Whitman v. American Trucking Associations*, 531 U.S. 457 (2001), that the EPA may not consider the costs of implementation in setting standards that are requisite to protect public health and welfare, as provided in section 109(b) of the Clean Air Act. Moreover, if EPA were to consider such costs, it would be "grounds for vacating the NAAQS, because the Administrator had not followed the law". Id. at n. 4. However, when designing their state implementation plans to implement the NAAQS, state and local officials have the authority to consider several factors, including employment impacts and costs of controls.

15. The EPA's proposed "Clean Power Plan" envisions a major shift nationwide from coal-fired generation to heavy reliance on natural gas to generate electricity.

A. What is EPA's estimate of the impact the ozone rule will have on natural gas production?

B. What is EPA's estimate of the impact of the ozone rule on the permitting of new natural gas plants or the expansion of existing natural gas plants in areas that are designated nonattainment?

Answer: Consistent with Executive Order 12866, and OMB guidance, the EPA prepared a Regulatory Impact Analysis accompanying the proposed updates to the ozone NAAQS that shows the benefits and costs of illustrative control scenarios that states may choose in complying. Because states have flexibility in how to meet their goals, the actions taken to

meet the goals may vary from what is modeled in the illustrative scenarios. Specific details, including information about how costs and benefits are estimated for these illustrative scenarios and about costs over time are available in the RIA (<http://www.epa.gov/ttn/ecas/regdata/RIAs/20141125ria.pdf>).

16. In the proposed rule, EPA assumes that ozone levels will decline due to the implementation of other regulations, such as the Utility MACT Rule, Tier 3 standards and other rules. EPA also assumes that its proposed "Clean Power Plan" will be implemented and includes it in the agency's "baseline" for calculating costs.

A. What would the costs of EPA's ozone rule be if the agency did not assume the Clean Power Plan in the baseline?

Answer: In analyzing the emission reductions that may be needed to meet a standard, EPA believes it is important to represent any major federal action that will have a substantial impact on emissions sources being evaluated. This allows us to provide the public with as accurate a picture of the baseline (the starting point for this action) as possible. Including the Clean Power Plan in the baseline provides a more representative projection of where future emissions reductions may be needed and the amount of those emissions reductions in order to attain any revised standard. We did not specifically analyze the potential cost of implementing a revised standard with an alternate scenario where the CPP is not in the baseline.

17. In your testimony, you state that the agency cannot consider costs or feasibility in setting National Ambient Air Quality Standards.

A. Does EPA believe that under the Clean Air Act it must set standards even if those standards are infeasible regardless of the costs to implement?

Answer: The Clean Air Act directs the EPA to set National Ambient Air Quality Standards (NAAQS) at a level requisite to protect public health with an adequate margin of safety and to protect the public welfare from any known or anticipated adverse effects of air pollutants. The NAAQS are based on consideration of the most up-to-date scientific evidence and technical information, expert advice from independent advisory committees, and public comments. The EPA is prohibited by law from considering the costs of implementation in setting the level of the NAAQS. The U.S. Supreme Court ruled in *Whitman v. American Trucking Associations*, 531 U.S. 457 (2001), that the EPA may not consider the costs of implementation in setting standards that are requisite to protect public health and welfare, as provided in section 109(b) of the Clean Air Act. Moreover, if EPA were to consider such costs, it would be "grounds for vacating the NAAQS, because the Administrator had not followed the law". *Id.* at n. 4. However, when designing their state implementation plans to implement the NAAQS, state and local officials have the authority to consider several factors, including employment impacts and costs of controls.

18. Many commenters have indicated that EPA's proposed ozone standards are so low that even the Grand Canyon and Yellowstone National Parks may not meet the proposed standards.

- A. Is it correct that there are areas where national parks are located that may not meet the proposed standards?
- B. Can you confirm that there are no areas with national parks that would violate the proposed standards?
- C. If national parks are located in areas that do not meet the proposed standards, will the remedy be to limit vehicle traffic and visitors to the park?

Answer: If the ozone standard is revised, states would have primary responsibility for determining what control strategies to employ to attain the standard. The attainment plan for each area is unique in that it considers the appropriate set of emissions controls necessary to successfully achieve a standard in that area based on the characteristics of elevated ozone levels in each area.

19. EPA's 2010 Regulatory Impact Analysis of the Renewable Fuel Standard (RFS) concluded that the program would contribute to ozone as a consequence of increased ethanol use. Nonetheless, EPA recently proposed its latest targets for the RFS through 2016 which would lead to higher levels of ethanol in the nation's fuel supply.

- A. Does the proposed RFS rule potentially undercut the nation's efforts to reduce ozone?

Answer: EPA and the States have the tools and flexibilities to both reduce ozone and increase renewable fuels. For example, EPA has the authority it needs to set vehicle emissions and fuel standards to improve air quality as necessary. In fact, just last year EPA issued the new "Tier 3" vehicle emissions and fuel standards that will reduce ozone precursors by over 300,000 tons in 2017, with increasing annual reductions in future years.

States also develop their own plans to attain and maintain the ozone standard, and they have the flexibility to identify and adopt control strategies that are most appropriate for their local circumstances. This is important because air quality modeling of RFS reveals that the ozone impacts are variable from region to region, with some areas experiencing increases and others experiencing decreases. When States develop their attainment and maintenance plans, they will be accounting for the impacts of renewable fuel use. EPA's motor vehicle emissions model, which States use in their air quality planning, includes our most up-to-date understanding of how renewable fuels affect motor vehicle emissions. Thus, we can all ensure that our efforts to reduce ozone and implement the RFS program are not occurring

independently.

Finally, it is important to note that the RFS program does not specify the type of renewable fuel. The emissions impacts of renewable fuels depend on the specific types of renewable fuels and feedstocks the market chooses to comply with the RFS standards. There are certainly opportunities over time to increase the use of renewable fuels and production processes that have fewer emissions impacts, and EPA will consider possible ways to encourage such developments, consistent with the statutory program.

B. I understand that a May 8, 2015, Journal of Geophysical Research article measured emissions of ozone-forming VOCs from ethanol refineries at levels 5 times higher than those assumed by EPA, and a December 20, 2014, study in the Proceedings of the National Academy of Sciences found that the use of ethanol in vehicles results in greater emissions of ozone-forming compounds and other air pollutants than the gasoline it replaces. Do these and other recent studies suggest that the impact of ethanol on ozone may be greater than previously thought?

Answer: The scientific understanding of the emissions impacts of ethanol production and use has continued to evolve since EPA's 2010 analysis. However, the results of all studies, including EPA's 2010 analysis, depend on assumptions about the ethanol content of the fuel and where it is used, and where and how it is produced. The geographic variability of the ozone impacts of renewable fuels are partly a function of these assumptions. We believe the studies of ethanol and ozone over the past few years are generally consistent with the conclusions of the 2010 Regulatory Impact Analysis of the Renewable Fuel Standard (RFS), given the differences in assumptions. With respect to emissions from ethanol plants specifically, the study published in the Journal of Geophysical Research focused on one plant that is not representative of the vast majority of U.S. plants, so it is difficult to draw conclusions from that study about the industry in general. The plant studied is a coal-fired wet mill plant, whereas most U.S. plants are natural gas dry mill.

C. What implications do these and other studies have on the ability to achieve attainment with existing and proposed new ozone standards while at the same time complying with the agency's proposed RFS targets that necessitate increases in ethanol usage?

Answer: As discussed above, we can attain the ozone standards and at the same time comply with RFS. Our inventories and air quality modeling analyses account for the impacts of renewable fuels, and we will continue to work with States to design air quality plans and policies that will enable attainment of the ozone standard even as the RFS program is being implemented. We also note that the RFS does not necessarily require increases in ethanol use, though such increases are a possible market response to the increasing mandates.

20. Pursuant to section 211(v) of the Clean Air Act, EPA was required to complete a study of the adverse air quality impacts of the RFS by June of 2009, and promulgate rules to

mitigate any such impacts by December of 2010.

A. Has EPA complied with either of these requirements? If not, why not?

Answer: EPA has not completed the “anti-backsliding” study required by Clean Air Act section 211(v). Our first steps were to conduct vehicle emissions testing to determine how ethanol and other fuel properties affect the emissions of newer-model vehicles, and to update our vehicle emissions model with that new data. Those steps have now been completed. Other time-consuming and resource-intensive elements have not yet been completed, such as developing emissions inventories and air quality modeling analyses.

B. Do you believe the agency should simultaneously move ahead with both a new ozone rule and a new RFS rule when the agency is years behind schedule in determining the extent the RFS contributes to ozone and before it has taken steps to mitigate any impact?

Answer: Yes, for several reasons. First, we are legally obligated to do both, and we have specific timelines established under the Clean Air Act. Furthermore, the two actions are not contradictory. The ozone rule will define the National Ambient Air Quality Standard for ozone—that is, the level of ozone that will protect public health with an “adequate margin of safety.” This is about informing Americans about what is healthy air quality so we can take steps as a country, over time, to achieve healthy air for all. This is an important and statutorily required responsibility. In addition, as described above, EPA and the states have the tools and flexibilities to both attain the ozone standard and implement the RFS program.

C. Is EPA planning to take into account its proposed ozone rule when setting targets in the RFS and vice versa, or is the agency going to essentially promulgate both of these potentially contradictory rules independently of each other?

Answer: As described above, EPA does not view Congress’ direction for these two programs as contradictory, and we are not pursuing them in isolation. For example, the air quality modeling in the Regulatory Impact Analysis supporting the ozone NAAQS final rule will be accounting for the use of renewable fuels.

The Honorable Bill Flores

1. During its 2010 reconsideration of the 2008 ozone standard, EPA projected that compliance with a 60 ppb standard could cost as much as \$90 billion. However, in the 2014 ozone proposal, EPA projected that compliance with a 60 ppb standard would be significantly less expensive, costing as much as \$40 billion. During the hearing, I asked you to explain what happened in that four year period to make those costs projections go down. You attributed the change to methodological differences in the two projections, explaining that the 2010 projection analyzed the costs of reducing ozone from an 84 ppb standard, while the 2014 projection analyzed the costs of reducing ozone from a 75 ppb standard. However, EPA's Regulatory Impact Analysis from the 2010 reconsideration projected that reducing ozone from 84 ppb to 75 ppb would cost only \$7.6 to \$8.8 billion.¹ Thus even when netting out compliance costs for reducing ozone concentrations from 84 ppb to 75 ppb, the 2014 proposal still projects substantially lower costs to reduce ozone from 75 ppb (by as much as \$12.3 billion to 70 ppb, \$20.2 billion to 65 ppb, and \$42.2 billion to 60 ppb) than EPA did during the 2010 reconsideration. As your explanation only covers a small portion of the change in question, please provide a detailed account of the differences between the Regulatory Impact Analyses for the 2010 reconsideration and for the 2014 proposal resulting in this reduction of projected compliance costs.

Answer: The difference between the 2011 and 2014 Regulatory Impact Analyses for the ozone NAAQS is described in the RIA (Section 5.3 Updated Methodology Presented in this RIA, page 5-8 and Section 8.2 Discussion of Results, page 8-8). In general, the differences in the cost projections between 2011 and 2014 result from analysis of a baseline year of 2025, rather than 2020, which allows for more time to attain and for Federal measures to be fully implemented; different current and proposed standards than in previous analyses; and improvements in air quality that substantially reduce the emissions reductions needed to meet any revised standard.

The Honorable David McKinley

1. As you know, some counties with little or no industrial presence may not be able to comply with new ozone standards through no fault of their own. There may be many factors that are causing these counties to be in non-compliance with an ozone standard, including high background levels or emissions that are otherwise beyond the county's control.
 - A. How does EPA expect a county (described above) to comply with the proposed ozone standards? What policies are in place to address these situations?
 - B. Are there policies in place to ensure that non-compliant counties (described above) can continue to attract manufacturers and other industry and ensure job growth?

Answer: The Clean Air Act contains provisions that assist states in ensuring ozone in their area that results from certain sources of emissions outside their control does not create unnecessary control obligations as they continue their work to improve air quality. If a state can provide an adequate assessment or demonstration to legally invoke statutory and regulatory relief, there are a few types of CAA-authorized relief that are described in the ozone NAAQS proposal. As examples, an area may be able to rely upon the exceptional events provisions of the Act to exclude certain emissions data from consideration during the process of area designations under the possible revised NAAQS, which could impact whether an area is designated nonattainment. An area also may be able to rely on the international emissions provisions of the Act when making attainment demonstrations, which could limit their ultimate control requirements. Finally the Administrator can determine that certain qualifying nonattainment areas are Rural Transport Areas, thus eliminating the need for states to develop an attainment plan. All of these CAA-authorized provisions have been used in the past for implementing ozone standards.

2. How does EPA work with states to ensure that a non-compliant county (described in question 1 above) that is surrounded by other non-compliant counties can meet ozone standards?

Answer: As explained above, the Clean Air Act contains provisions that can assist states in ensuring ozone in their area that results from certain sources of emissions outside their control does not create unnecessary control obligations as they continue their work to improve air quality. EPA has and will continue to work with states that can provide an adequate assessment or demonstration to legally invoke the appropriate statutory and regulatory relief.

3. Section 109 of the Clean Air Act expressly requires that that the Clean Air Scientific Advisory Committee, in reviewing any National Ambient Air Quality Standards, "advises the Administrator of *any adverse public health, welfare, social, economic, or energy effects* which may result from various strategies for attainment and maintenance

of such national ambient air quality standards."

- A. Has EPA ever asked CASAC to review the adverse public health effects that may result from implementing a new national ambient air quality standard?
- B. In a June 26, 2014 letter to EPA, the Clean Air Scientific Advisory Committee told EPA that it would be willing to review these effects for the pending ozone proposal if EPA requested such a review. Has EPA requested such a review for its proposed ozone standard?

Answer: The Clean Air Act directs the EPA to set National Ambient Air Quality Standards (NAAQS) at a level requisite to protect public health with an adequate margin of safety and to protect the public welfare from any known or anticipated adverse effects of air pollutants. The NAAQS are based on consideration of the most up-to-date scientific evidence and technical information, expert advice from independent advisory committees, and public comments. The EPA is prohibited by law from considering the costs of implementation in setting the level of the NAAQS. The U.S. Supreme Court ruled in *Whitman v. American Trucking Associations*, 531 U.S. 457 (2001), that the EPA may not consider the costs of implementation in setting standards that are requisite to protect public health and welfare, as provided in section 109(b) of the Clean Air Act. Moreover, if EPA were to consider such costs, it would be "grounds for vacating the NAAQS, because the Administrator had not followed the law". *Id.* at n. 4. EPA has not sought advice from CASAC on the costs of implementation as part of the NAAQS review to avoid undermining the public health and legal basis for the revised NAAQS. However, when designing their state implementation plans to implement the NAAQS, state and local officials have the authority to consider several factors, including employment impacts and costs of controls.

¹ See *Updated Regulatory Impact Analysis (RIA) for the Reconsideration of the 2008 Ozone National Ambient Air Quality Standard (NAAQS)*, pg. SI-4, Table SI.

