

# COOPERATIVE FEDERALISM UNDER THE CLEAN AIR ACT: STATE PERSPECTIVES

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## HEARING

BEFORE THE

SUBCOMMITTEE ON CLEAN AIR  
AND NUCLEAR SAFETY

OF THE

COMMITTEE ON  
ENVIRONMENT AND PUBLIC WORKS  
UNITED STATES SENATE

ONE HUNDRED FIFTEENTH CONGRESS

SECOND SESSION

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APRIL 10, 2018

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Printed for the use of the Committee on Environment and Public Works



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Available via the World Wide Web: <http://www.govinfo.gov>

U.S. GOVERNMENT PUBLISHING OFFICE

30-463 PDF

WASHINGTON : 2018

COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS

ONE HUNDRED FIFTEENTH CONGRESS  
SECOND SESSION

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## **COOPERATIVE FEDERALISM UNDER THE CLEAN AIR ACT: STATE PERSPECTIVES**

**TUESDAY, APRIL 10, 2018**

U.S. SENATE,  
COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS,  
SUBCOMMITTEE ON CLEAN AIR AND NUCLEAR SAFETY,  
*Washington, DC.*

The Subcommittee met, pursuant to notice, at 10:03 a.m. in room 406, Dirksen Senate Building, Hon. Shelley Moore Capito (Chairwoman of the Subcommittee) presiding.

Present: Senators Capito, Inhofe, Boozman, Wicker, Fischer, Ernst, Whitehouse, Carper, Gillibrand, Markey, and Barrasso.

### **OPENING STATEMENT OF HON. SHELLEY MOORE CAPITO, U.S. SENATOR FROM THE STATE OF WEST VIRGINIA**

Senator CAPITO. I want to thank everybody for being here today. I apologize for getting started a couple minutes late.

This hearing of the Clean Air and Nuclear Safety Subcommittee is called to order.

I will begin by recognizing myself for a brief opening statement before turning over the floor to the Ranking Member, Senator Whitehouse, for 5 minutes. Then we will hear from our panel of expert witnesses.

I will recognize myself for 5 minutes.

The concept of cooperative federalism is enshrined in all of our major environmental statutes. The Clean Air Act is no exception. Previous Congresses realized that environmental preservation and its importance to human health, the economy, and the public's enjoyment of our country's national heritage is the responsibility of government at every level.

Predecessors also recognized that different levels of government should have different responsibilities. Not every aspect of our environmental policy can or should be dictated from here in Washington.

The EPA lacks the expertise and the capacity to conduct oversight on our ecologically and industrially diverse country. The EPA's role must be to dutifully implement environmental laws as crafted by Congress and then to collaborate and support our States with matters within our jurisdiction.

The States know their environmental and economic opportunities and challenges better than anyone else. The system has clearly worked. Even without the implementation of the Clean Power Plan, U.S. carbon dioxide emissions peaked in 2005. Since then we have

seen a decline in carbon emissions of 12.4 percent in absolute terms and 19.9 percent on a per capita basis.

These reductions have been led by the private sector seeking greater efficiencies to lower costs for their consumers and not by government mandates. Since 2000 the U.S. has reduced its carbon footprint by greater tonnage than any other country.

According to the EPA, since 1970 national concentrations of air pollutants have been reduced by 85 percent for lead, 84 percent for carbon monoxide, 67 percent for sulfur dioxide, 60 percent for nitrogen dioxide, 37 percent for fine particulate matter, and 69 percent for coarse particulate matter. These achievements have reduced mortality rates and health care expenditures due to air pollution, benefited agriculture by improving yields, and helped to preserve habitats and threatened species.

Economic growth has continued even as emissions have declined. Setting achievable, consensus based standards in consultation with industry, State, local, and tribal governments has decoupled emissions—and for the first time in recent years, energy consumption itself—from economic growth.

In 1970 our GDP was \$1.09 trillion. Today, it is \$19.74 trillion. Even with all the emission reductions, clearly the model has worked. Yet it has been under pressure.

The Obama administration upended the consensus based model for setting environmental regulations. We had several hearings that flushed out this. The EPA imposed standards across a host of industries, especially the power sector, that were unachievable with commercially available technologies.

Their economic analysis routinely overstated the benefits and understated the economic costs associated with the regulations. I have heard from my constituents in the public and private sector in my State of West Virginia that their comments were routinely ignored.

Finally, underscored by the Clean Power Plan, the EPA routinely overstepped its jurisdiction. For its part, the CPP attempted to regulate “beyond the fence line,” directing States to impose carbon taxes on cap and trade structures to achieve emissions targets that could not otherwise be met.

This is why the EPA never provided model State implementation plans for the Clean Power Plan. The data simply could not be tortured enough to make its implementation by the States legal, or importantly, feasible.

During all of this State clean air regulators, like those before us today, were sidelined. Half the States sued, and it is no wonder they did.

I hope we can work across the aisle with every level of government and private industry to continue the good work we have set in place. If we follow the law, pursue goals achievable with modern technology, and control methods, and collaborate, we can continue to grow the economy while reducing emissions.

We must also never lose sight of the fact that the American dream of economic prosperity is what provided our citizenry with two centuries of continuous advancements in health and development, which in itself has enabled our modern focus on environmental improvement. Far from zero-sum, economic and environmental benefits track together.

I look forward to hearing from our State experts from across the country about their ideas on how to continue this cycle based on their experiences engaging with the EPA.

I will now recognize Ranking Member Whitehouse for his opening statement.

**OPENING STATEMENT OF HON. SHELDON WHITEHOUSE,  
U.S. SENATOR FROM THE STATE OF RHODE ISLAND**

Senator WHITEHOUSE. Thank you very much, Senator Capito.

I welcome the witnesses here today.

We are here to talk about cooperative federalism, two words which have become something of a mantra for EPA Administrator Scott Pruitt. They are among his most trusted talking points, right up there with another favorite catch phrase, “back to basics.”

What does cooperative federalism really mean? Particularly, what does it mean to Administrator Pruitt?

Cooperative federalism should mean that EPA and the States work together to reduce pollution. Reducing pollution involves doing scientific analyses, gathering data, writing rules, setting targets, and enforcing the rules and targets. This work can—and should—be done together by EPA and the States.

It used to be, but that is not what Scott Pruitt means by cooperative federalism. The Pruitt cooperative federalism means having EPA do less to reduce pollution and hand over more of the work to the States, all while proposing fewer financial resources to the States to do this work.

If some States are less interested in reducing pollution or do not have the resources to develop and enforce rules limiting pollution, then so much the better because you see, that is Pruitt’s goal here. Cooperative federalism is code for EPA and some States walking away from their core mission of protecting human health and the environment.

The proof is that at any time a State takes strong action to reduce pollution, Pruitt’s EPA either opposes the initiative or slow walks it. Pruitt’s version of cooperative federalism is a one-way street toward more pollution. States are encouraged to take the lead in reducing pollution so long as they do not actually try to reduce pollution.

Pruitt’s recent decision to water down corporate average fuel economy standards, the CAFE standards, is an example of how cooperative federalism, under Pruitt, really works. These CAFE standards were negotiated in 2012 by EPA, California, and the auto industry. All parties agreed to these standards, which are estimated to save consumers \$1.7 trillion at the pump, an average of \$8,000 over the life of a car purchased in 2025, and of course, to reduce carbon emissions by 6 billion metric tons.

Why did Pruitt decide to roll back those agreed to CAFE standards? Not because California asked him to, but because industry did. Is it cooperative federalism to ignore the States and do industry’s bidding?

When you get beyond the rhetoric, Pruitt is not really interested in cooperative with States. His real interest is in cooperating with corporations which have bankrolled his entire political career. You might actually call it cooperative corporatism.

Now that California, Rhode Island, Delaware, and many of the other 10 States and the District of Columbia that follow California emission standards have objected to his decision to water down the CAFE standards, Pruitt has suggested that he may revoke the waiver granted to California under the Clean Air Act that allows it to set its own emissions standards. How is that for cooperation?

Pruitt's desire to centralize decisionmaking in his own hands is not limited only to the Clean Air Act. He recently announced that all decisions relating to determining whether a project has a significant environmental impact on waterways will be made by him. So much for local control and cooperative federalism.

My home State of Rhode Island has a long coastline that is particularly vulnerable to sea level rise. The CAFE standards represent an important part of our efforts to combat climate change, which is responsible for sea level rise.

The Clean Power Plan is also critical to reducing the carbon emissions driving climate change. Pruitt is trying to repeal that too. Do you think he consulted with Rhode Island officials or the officials in any coastal State on repealing the Clean Power Plan?

If you need any further proof that Scott Pruitt's cooperative federalism is a one-way street sham, must look at his proposed budget for fiscal year 2019. He proposes cutting grants to the States for clean air programs by over \$160 million. Some programs he eliminates entirely.

Rhode Island's Department of Environmental Management receives about \$10 million a year in grants from EPA. About \$2.4 million of this goes to clean air programs. How does Pruitt expect States to step up and lead on protecting clean air when he tries to cut the money they receive to do this work?

The answer is, he does not. Scott Pruitt's mission at EPA is cooperative corporatism, to serve the interests of the industry that has always backed him. You see this in decision after decision where State input is ignored. You see this in industry cronies installed at EPA.

Scott Pruitt has sullied the doctrine of cooperative federalism just as his disregard for EPA's mission has sullied the agency and his actions stand to sully our environment.

I salute States like Rhode Island, California, and Delaware that are working so hard to protect our environment. We do it better with an effective partner in the EPA. It is time for EPA to get serious about protecting the environment and public health. That, after all, is its true mission.

Thank you, Madam Chair.

Senator CAPITO. Thank you, Senator.

To begin our introductions, Chairman Barrasso is here.

I would ask if you would like to introduce our witness from Wyoming.

Senator BARRASSO. Thank you very much, Madam Chairman.

I would, and I am so pleased to introduce Nancy Vehr, who serves as the Air Quality Administrator for the Wyoming Department of Air Quality.

Administrator Vehr has led Wyoming's efforts to improve air quality and implement the Clean Air Act since 2015. Before serving as Air Quality Administrator she worked at the Wyoming Attorney

General's Office. In that office, she served as the Assistant Attorney General and represented the State's Division of Air Quality.

Administrator Vehr has also had broad experience in the private sector where she handled a wide variety of civil and environmental matters. Her wealth of experience with the Clean Air Act and her deep familiarity of Wyoming have served the State very well, for which we are very grateful.

Due to our unique location, geography, and natural resources, Wyoming needs flexibility to implement the Clean Air Act. I look forward to hearing your testimony today and listening as you explain the challenges faced by the State of Wyoming in implementing the Clean Air Act and how the EPA can better partner with States—specifically with the State of Wyoming—to solve these challenges.

Welcome. Thank you for being here, and thank you for your willingness to testify.

Thank you, Madam Chairman.

Senator CAPITO. Thank you.

Now, I would like to recognize our Ranking Member, Senator Carper, if he would like to make an introduction.

Senator CARPER. I would. Thank you, Madam Chair.

This is like "Welcome Back, Kotter," but welcome back, Shawn, to the Environment and Public Works Committee. We are happy you could join us.

Shawn and I spent some time trying to get here this morning on a train that was not really cooperative. Thank you for sticking with it and making it down here.

Shawn, did you ever work for Joe Biden?

Mr. GARVIN. I did.

Senator CARPER. How long?

Mr. GARVIN. Two years.

Senator CARPER. Two years. Would you say they were the happiest 2 years of your life?

Mr. GARVIN. I think the 20 years I have been married to my wife.

Senator CARPER. That's right. You mean the mother of your son, Dillon, right?

Mr. GARVIN. Yes.

Senator CARPER. Is he in high school or college?

Mr. GARVIN. High school.

Senator CARPER. Going to college soon?

Mr. GARVIN. Soon.

Senator CARPER. So you worked for Joe Biden and kept him out of trouble for at least 2 years, and for your efforts, you ended up as EPA Administrator for Region III for 8 years.

After that, you ended up as a Secretary to the Department of Natural Resources and Environmental Control.

Is there anyone in the room who also previously held that position? Who would that be? Christophe Tulou was the Secretary for my 8 years as Governor.

We have known Shawn for a long time, admire him, and have great affection for him and his family. We are happy you are with us today. Thank you for your continued service not just to the people of Delaware but to the people of our country. Give your family our best.

Thank you for joining us.

Senator CAPITO. Thank you, Senator Carper.

I will introduce the rest of the witness panel, and then we will begin.

In addition to Ms. Vehr and Mr. Garvin, we have Mr. Sean Alteri, who serves as the Director of the Division for Air Quality, Kentucky Energy and Environment Cabinet, Department for Environmental Protection. That is a long title.

Mr. Alteri has previously served as the President of the Association of Air Pollution Control Agencies and continues to play a leadership role in that organization.

Welcome.

We also have Mr. Toby Baker, who is a Commissioner of the Texas Commission on Environmental Quality, first nominated by then Governor Rick Perry, in 2012.

Welcome.

We also have Mr. Matthew Rodriguez, who serves as California's Secretary for Environmental Protection.

I want to thank all of the witnesses for being here. I will now recognize our witnesses for their opening statements. As a reminder, your full written testimony has been submitted for the hearing record.

Ms. Vehr, I would recognize you for 5 minutes.

Senator CARPER. Madam Chairman, may I ask unanimous consent that my statement for today be inserted at an appropriate place in the hearing record.

Thank you so much.

Senator CAPITO. Without objection.

Senator CARPER. Thank you so much.

[The prepared statement of Senator Carper follows:]

STATEMENT OF HON. THOMAS R. CARPER,  
U.S. SENATOR FROM THE STATE OF DELAWARE

Thank you, Madam Chairman, for convening this timely hearing, and thank you to our witnesses for joining us today.

The Clean Air Act requires EPA to partner with States to address air pollution, especially air pollution that crosses State borders. The Act ensures all States are good neighbors when it comes to clean air.

These protections are critical for my home State of Delaware because we are located at the end of what I call "America's tailpipe." This means other States' dirty emissions from cars and power plants drift east into our State. This cross-State air pollution makes it impossible for Delaware to meet national health air pollution standards without the cooperation of upwind States and the EPA.

EPA Administrator Pruitt repeatedly insists that he is committed to cooperative federalism and that the EPA "needs to work together with the States to achieve better outcomes." However, like most things pertaining to this EPA Administrator, Pruitt says one thing, but does another when it comes to cooperative federalism.

Instead of working with States to create solutions, Pruitt's EPA has made it harder for States, especially downwind States, to meet clean air goals. For example, Pruitt's EPA has rejected requests from Northeast States to expand State coordination between upwind and downwind States to address regional ozone pollution.

At the same time Pruitt's EPA has failed to answer State petitions—four of which are from the State of Delaware—that ask EPA to require upwind power plants to install, or consistently operate already installed, pollution controls.

Pruitt's EPA has also failed to meet Clean Air Act deadlines to designate who is living in unhealthy ozone areas, so States can take further actions to protect public health.

Furthermore, Pruitt's EPA is cutting State air program funding, weakening enforcement, and rolling back critical clean air protections that will further exacerbate the ongoing air pollution confronting our States.



For instance, just 2 weeks ago Administrator Pruitt announced that he plans to weaken the greenhouse gas tailpipe standards that had been supported by the auto industry, environmental organizations, and the State of California. While I believe that a “win-win” exists that could provide the automobile industry with regulatory certainty in exchange for assuring California that advanced technology vehicles will continue to be incorporated into the fleet well into the future, serious negotiations to achieve that outcome have not yet even begun. “Cooperative federalism” means actually cooperating, and that is simply not what I have seen Administrator Pruitt do.

So we have a situation in which Pruitt’s EPA is denying downwind States’ efforts to hold upwind States accountable for their air pollution contributions, expanding the air pollution that crosses State borders and taking away critical financial tools and programs to help States address pollution.

Cooperative federalism means cooperation between the Federal Government and the States to solve problems. As we will hear today from several of our witnesses, many States are not finding much cooperation with this administration, and instead, are finding more problems.

**STATEMENT OF NANCY VEHR, ADMINISTRATOR, DIVISION OF AIR QUALITY, WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY**

Ms. VEHR. Good morning, Chairman Capito, Ranking Member Whitehouse, and members of the Subcommittee.

I have the honor and pleasure of serving the great State of Wyoming as the Administrator for the Air Quality Division. Our department is an active member of the Environmental Council of States, ECOS, with several of the other presenters also serving.

Our Division is a member of the Association of Air Pollution Control Agencies where I serve as Vice President and the Western States Air Resource Council, WESTAR, where I also serve as Vice President. While my testimony may reference these organizations, I am not here to testify on their behalf.

In order to put my remarks in context, I would like to share a few facts about Wyoming to help you get to know who we are. Wyoming has been blessed with amazing and abundant natural resources. We are home to Yellowstone and Grand Teton National Parks and other special and scenic places that some of you may have visited.

Our abundant mineral resources provide the Nation, our State, and our citizens with revenue and jobs. Our leading industries are energy, tourism, and agriculture. We are the ninth largest State, roughly 93 times the size of Rhode Island. Our largest county is roughly four times as large as Delaware. The Federal Government owns and manages about half the land in Wyoming.

We are also the least populous State, not quite 600,000 of us, in small, rural communities or in the large expanses in between. Only nine communities in Wyoming have more than 10,000 people each.

Wyoming wants and is working toward improved relationships and interactions with the EPA. It is Wyoming’s experience that EPA shares this desire and is doing the same. Why are improvements to cooperative federalism so important? It is because we want better outcomes and air quality improvements.

My testimony highlights some of the progress made in the recalibration of State and Federal roles, which leads to more effective air quality environmental management at lower cost. My written testimony highlights some of these examples. My remarks today touch on one—regional haze.

With respect to cooperative federalism, EPA sets the deadlines and standards. States develop plans with implementation strategies to meet those deadlines and standards. When that process works, the result is improved air quality at lower cost.

Wyoming treasures her magnificent resources and vistas. In the 1977 Clean Air Act amendments, Congress established a goal to restore visibility in national parks and wilderness areas to natural conditions.

Some 20 years later EPA adopted the Regional Haze Rule. The rule mandates that States submit plans to reduce regional haze emissions. However, right in the midst of the regional haze plan submittal and approval timeframes, the cooperative federalism process failed.

Instead of approving innovative State plans to improve air quality, EPA oftentimes failed to act or imposed a one size fits all Federal plan on a State. Wyoming is one of those States in which EPA imposed a regional haze Federal plan that came with a much higher price tag and no added visibility benefit as compared to the State's plan.

The work involved to develop and submit a State plan is time consuming and costly. For regional haze, the process in this first round took more than a decade and cost the State hundreds of thousands of dollars on the technical work alone.

Wyoming's plan achieved significant emission reductions, including almost 10,000 tons of nitrogen oxides by installing \$100 million worth of pollution controls. Wyoming's plan demonstrated that Wyoming would be on track to meet its visibility improvement progress goals.

Instead of approving Wyoming's plan, EPA imposed its own Federal plan. EPA's plan had a price tag of \$600 million but did not meaningfully improve visibility. These issues are now tied up in litigation.

The challenges of the second round of regional haze plans are due in a few years. Federal and State collaboration is underway in that process. Wyoming remains hopeful that those collaborative efforts will continue and be fully implemented.

If so, the result will be continued improvement and progress toward meeting the Clean Air Act visibility goals at a cost and resource savings to Wyoming's citizens.

Thank you to the Committee for inviting Wyoming and listening to the department's perspective on cooperative federalism under the Clean Air Act.

Thank you.

[The prepared statement of Ms. Vehr follows:]



**Nancy Vehr**  
**Administrator; Division of Air Quality**  
**Wyoming Department of Environmental Quality**  
**Cheyenne, WY**

Nancy has been the Air Quality Administrator for the Wyoming Department of Environmental Quality (DEQ) since November 2015, when she returned to public service after having worked for a couple of years as special counsel for a Wyoming law firm. Her first career as a Nurse spanned fifteen years following the receipt of her Bachelors of Science in Nursing from Creighton University in Omaha, Nebraska.

Nancy launched into her second career after obtaining her Juris Doctorate from the University of Wyoming, College of Law, in 1999. Following graduation, she joined the Wyoming Attorney General's Office where she represented the Wyoming Department of Environmental Quality, Air Quality Division in all regulatory and litigation matters. She is truly humbled and honored every day to serve the people of the great State of Wyoming.

**Testimony of Nancy E. Vehr, Air Quality Division Administrator**

**Wyoming Department of Environmental Quality**

**to the**

**U.S. Senate Committee on Environment and Public Works**

**Subcommittee on Clean Air and Nuclear Safety**

**Hearing on: “Cooperative Federalism Under the Clean Air Act: State Perspectives”**

**Tuesday, April 10, 2018, 10:00 a.m.**

**Room 406 of the Dirksen Senate Office Building**

Good morning Senator Barrasso, Chairman Capito, Ranking Member Whitehouse, and members of the Subcommittee. My name is Nancy Vehr. I have the honor and pleasure of serving the great State of Wyoming as the Administrator for the Wyoming Department of Environmental Quality, Air Quality Division. Our Division is responsible for implementing the Clean Air Act and the Air Quality provisions of Wyoming’s Environmental Quality Act. Our Department is an active member of the Environmental Council of States (ECOS), with our Director currently serving as President. Our Division is a member of one national and one regional air quality organization: the Association of Air Pollution Control Agencies (AAPCA), where I serve as Vice-President; and the Western States Air Resource Council (WESTAR) where I also serve as Vice-President. While my testimony may reference these organizations, I am not here to testify on behalf of those organizations. I thank the subcommittee for inviting Wyoming and listening to the Department’s perspective on Cooperative Federalism under the Clean Air Act.

My testimony highlights some of the progress that has been made in the recalibration of state and federal roles which leads to more effective air quality environmental management at a lower cost. Some of the positive examples of cooperative federalism include: disaster planning; increased diverse state participation on EPA Science Advisory Boards - specifically the EPA Board of Scientific Counselors (BOSC), subcommittee on air and energy; and E-Enterprise for the Environment.

My testimony also draws attention to some of the areas that still have room for improvement – where continued advancements in cooperative federalism are still needed. A few of these areas include: Regional Haze; Exceptional Events; and State Implementation Planning.

#### **Introduction to Wyoming:**

In order to place my testimony into context for the subcommittee, I would like to share a few of the key relevant characteristics of Wyoming.

Size: Wyoming is the 9<sup>th</sup> largest state covering 97,814 square miles of land, yet is the least populous of any state at about 584,000 citizens. To put this into perspective, with respect to land, Wyoming is roughly 93 times the size of Rhode Island. However, Wyoming's low population density of about six (6) people per square mile ranks at 49<sup>th</sup> in the nation. The size of Wyoming's largest county – Sweetwater County – at 10,425 square miles, ranks as the eighth largest county in the nation and is roughly four times as large as the entire state of Delaware. About half of the land in Wyoming is owned and managed by the federal government. Much of Wyoming consists of small rural communities with large expanses in between. In fact, Wyoming only has nine "cities" with populations greater than 10,000 people.

Elevation: Wyoming's mean elevation of 6,700 feet above sea level places us at 2<sup>nd</sup> in height, with Colorado being the highest. In comparison, the mean elevation of east coast states falls under 1,100 feet.

Natural Resources: Wyoming has been blessed with amazing and abundant natural resources. We are home to Yellowstone and Grand Teton national parks, and other special and scenic places. Our abundant mineral resources provide the nation, our State, and her citizens with revenue and jobs. Our leading industries are energy, tourism, and agriculture. The energy industry is the largest contributor to Wyoming's economy. In 2017, Wyoming ranked 8<sup>th</sup> in the nation for crude oil production, 6<sup>th</sup> for natural gas, and leads the nation in the production of coal, bentonite, and trona. Aggregating the production and export of all fossil-based minerals, Wyoming is the number one producer of energy to the nation. In terms of renewable energy, Wyoming also ranks high at 15<sup>th</sup> in the nation for wind energy production.

Wyoming values the protection of its natural resources. The mission of the Wyoming Department of Environmental Quality is: "To protect, conserve and enhance the quality of Wyoming's environment for the benefit of current and future generations." As the Department and the Air Quality Division carry out this mission, we do so in a balanced manner – protecting our natural resources and providing for responsible energy production. As Governor Mead has stated, "It is a false question to ask: Do we want energy production or environmental stewardship?" In Wyoming we must have and do both.

### Cooperative Federalism

As Wyoming DEQ Director Parfitt noted last year in comment to the House Science, Space and Technology, Environment Subcommittee on its “Expanding the Role of States in EPA Rulemaking” hearing:

One of the original foundational concepts established to ensure effective public health and environmental outcomes is cooperative federalism. Under this arrangement, congress establishes the law, federal agencies implement the law by establishing national minimum standards, and the states obtain the authority, develop, and implement the programs necessary to achieve or surpass these standards.

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Notwithstanding Congress’ original intent, the cooperative relationship shifted over time towards the federal government and away from the states. This shift resulted in the development of one-size-fits-all laws, regulations, policies, and guidance that overrode legitimate state authority and failed to consider the unique geophysical ecological, social, and economic conditions of each state. Mandates, directives, and increasingly prescriptive regulations limited state flexibility in identifying priorities, implementing innovated solutions tailored to local conditions, and achieving operational efficiencies. This meant that states were left to enforce national policies developed without the benefit of any local understanding.

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Wyoming is committed to a strong federal-state relationship and looks forward to working with its federal partners in an effective and balanced cooperative federalism approach that provides effective environmental and public health outcomes.

Letter, WDEQ Director Parfitt to Science, Space and Technology Committee (May 22, 2017).

States such as Wyoming, want an effective relationship and partnership with EPA that recognizes states and EPA as co-regulators, co-funders, and partners in a federal environmental protection system. *See* ECOS Resolution 00-1 on Environmental Federalism, March 22, 2018 (revised). State principles for the roles and functions of states and EPA in cooperative federalism, and changes implied by those principles, is reflected in ECOS’ “Cooperative Federalism 2.0: Achieving and Maintaining a Clean Environment and Protecting Public Health” (June 2017).

**Examples of Continued Advancements Needed in Cooperative Federalism:****1) State Implementation Plan Process**

One of the cornerstone measures established by Congress that epitomizes the need for functional cooperative federalism is the State Plan process to improve air quality. State Plans include regulatory and non-regulatory measures that a State implements to achieve the federal air quality standard or objective.

Under this process, EPA sets state plan submittal deadlines and other plan requirements. For example, when EPA revises an ambient standard, it establishes the deadlines by which states must submit plans to meet those standards and demonstrate that the state has sufficient resources and program infrastructure in place to implement the new standard. When cooperative federalism works, EPA communicates early and often with their state counterparts, and timely acts. And, states do the same – tailoring plans to meet objectives given the unique characteristics and challenges facing the state and its air quality. “Cooperative” federalism results in positive air quality outcomes at a lower cost to Wyoming’s citizens and industry.

Over the recent past, however, EPA has shifted that paradigm to the point that many refer to it as “uncooperative” federalism. One reason for this shift is that EPA shifted its “lane” into the “lane” historically occupied by states. EPA’s “lane-shift” does not improve air quality, or allow for innovative measures to address the state’s unique characteristics and challenges.

The Division’s experience is that “uncooperative” federalism delays implementation of state measures designed to improve air quality. “Uncooperative” federalism brings about conflicts, distrust, duplication, delays, unnecessary expenditures, and diversion of resources with little to no air quality benefit. Given the level of effort and time that it takes for states to develop plans, for EPA to approve plans, and the attendant litigation that oftentimes seems to follow



challenging state and or EPA action or inaction; it is not surprising that states, citizens, and industrial sources are frustrated and confused.

State Plan development is a “state-driven air quality planning process.”<sup>1</sup> Under Wyoming’s State Plan process, measures are adopted at the state level and then submitted to the EPA region for approval. Under state law, public comment and input is a key part of the process. What this means, is that Wyoming’s citizens and industry have a voice and participate in the process at the State level. With that level of input and participation, it is not uncommon for the data collection, analysis, rule development, public input, and revision processes at the state level to take a year or more. Oftentimes, the process requires the adoption of state laws or rules.<sup>2</sup> Under “uncooperative” federalism, affected entities must expend resources to comply with state rules, while at the same time facing uncertainty as to whether the EPA will disregard the state law, move the decision-making marker, and impose a Federal Plan; or simply not act.

One of EPA’s recent improvements is moving from a paper-based State Plan submittal process to an electronic submittal, review, and tracking process referred to as SPeCS (State Plan Electronic Collection System). Among the benefits of EPA’s electronic process are time and cost savings, and improved communication through information and tracking access. As part of EPA’s mid-2017 roll-out to states, Wyoming participated in beta testing, and provided comments and suggestions to improve the system, and recently began submitting State Plans via SPeCS. Wyoming is hopeful that efficiency improvements like this will lead to reduced SIP backlogs and timely action on State Plans.

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<sup>1</sup> See AAPCA letter to EPA re: Draft FY 2018 – 2022 EPA Strategic Plan (Docket ID: EPA-HQ-OA-2017-0533) (Oct. 31, 2017).

<sup>2</sup> For a flowchart of the Division’s rulemaking process, see [http://deq.wyoming.gov/media/attachments/Air%20Quality/Rule%20Development/Rulemaking%20Process/AQD-Rule-Development\\_Rulemaking-Process-Flowchart.pdf](http://deq.wyoming.gov/media/attachments/Air%20Quality/Rule%20Development/Rulemaking%20Process/AQD-Rule-Development_Rulemaking-Process-Flowchart.pdf)

Wyoming has reason to be optimistic given EPA Region 8's action on Wyoming's Plan revision for the Sheridan PM10 moderate nonattainment area. In that action, EPA acted in ten months to determine that the Sheridan, Wyoming, PM10 moderate nonattainment area had attained the 1987 24-hour PM10 standard; and concurrently redesignated the area to attainment and approved Wyoming's Limited Maintenance Plan. 83 Fed. Reg. 14373 (April 4, 2018).

Sheridan had attained the standard almost two decades ago. But as a result of unique set of circumstances, no significant exploration of the possibility of redesignation had occurred until late 2015. At that time, the Division collaborated with the Region and embarked on the State Plan revision process, submitting its Plan revisions to EPA in June, 2017. Seven months later, EPA proposed full approval of Wyoming's request to redesignate the Sheridan PM10 moderate nonattainment area to attainment and Limited Maintenance Plan. 83 Fed. Reg. 4015 (Jan. 29, 2018). And last week, 10 months after submittal, EPA approved Wyoming's request. Given the EPA timeframe that Wyoming had experienced in previous State Plan submittals, the Region's communication with the Division, and timely decision-making are remarkably welcome change, confirming improvements to air quality and public health and removing economic impacts that result from non-attainment.

The Division encourages EPA to continue advancements like this as the cooperative federalism relationship is rebalanced.<sup>3</sup> The attendant results will benefit states, including Wyoming's, air quality and her citizens.

## **2) Regional Haze**

Wyoming's citizens treasure the state's magnificent resources and vistas. In the 1977 Clean Air Act amendments, Congress established a goal to restore visibility in national parks and

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<sup>3</sup> See Letter, Western Governors' Association to EPA Asst. Administrator William Wehrum (Feb. 12, 2018) providing recommendations for improving air quality policy and regulation in the west.

wilderness areas to natural conditions.<sup>4</sup> Some twenty years later, EPA adopted the Regional Haze Rule. The Rule mandates that states identify and implement pollution control strategies to progress towards “natural” visibility<sup>5</sup> conditions by 2064. With respect to cooperative federalism, EPA’s Rule set the deadlines and standards. States develop Plans with implementation strategies to meet those deadlines and standards. That process worked and resulted in improved air quality.

However, over the past five to ten years, the process failed – some referred to it as “uncooperative” federalism – instead of approving innovative state plans to improve air quality, EPA often times failed to act or imposed a one-size-fits-all Federal Plan on a state. Wyoming is one of those states in which EPA imposed a Regional Haze Federal Plan that came with a much higher price tag and no added visibility benefit as compared to the State’s Plan.

Some of the pollutants that contribute to haze include sulfur dioxides, nitrogen oxides, and particulate matter. EPA’s Regional Haze Rule required states to develop and submit plans to reduce regional haze emissions. Wyoming submitted its first plan in 2003, and submitted several revisions over the next decade. Wyoming’s Plan achieved significant emission reductions through implementation of Best Available Retrofit Technology (BART) or better-than-BART control strategies. Wyoming’s Plan provided for a reduction of nearly 10,000 tons of nitrogen oxides that would be achieved by the installation of \$100 million in pollution controls. Wyoming’s Plan demonstrated that Wyoming would be on track to meet its progress goals towards improving visibility.

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<sup>4</sup> Class I areas include many of the nation’s largest National Parks and Wilderness Areas. Wyoming is home to seven Class I areas: Bridger Wilderness, Fitzpatrick Wilderness, Grand Teton National Park, North Absaroka Wilderness, Teton Wilderness, Washakie Wilderness, and Yellowstone National Park.

<sup>5</sup> EPA measures visibility improvement or impairment using a haze index metric known as the “deciview.” Each unit change in deciview represents a change in perception. The approximate threshold for human perception of this change in visibility is at about one full deciview.

Wyoming's Regional Haze Progress Report submitted to EPA in November 2017, confirms and also demonstrates that visibility has improved and that Wyoming is meeting or exceeding its visibility goals. Wyoming, New Mexico, Utah, and Albuquerque/Bernalillo County participate in a regional haze sulfur dioxide milestone and backstop trading program. The program is a success with actual sulfur dioxide emissions having declined every year since 2003:

**Regional Sulfur Dioxide Emissions and Milestone Report Summary**

Year	Reported SO <sub>2</sub> Emissions (tons)	3-Year Milestone Average (tons)
2003	330,679	447,383
2004	337,970	448,259
2005	304,591	446,903
2006	279,134	420,194
2007	273,663	420,637
2008	244,189	378,398
2009	143,704	234,903
2010	131,124	200,722
2011	117,976	200,722
2012	96,246	200,722
2013	101,381	185,795
2014	92,533	170,868
2015	81,454	155,940

Wyoming's 2017 Regional Haze Progress Report, Table 3.3-1.

Other visibility impairing pollutant emissions have also decreased:

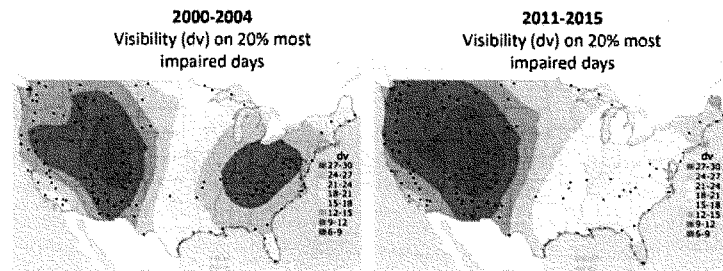
**Table 3.3-2 NO<sub>x</sub>, Ammonia, VOC, POA, EC, Fine Soil and Coarse Mass Emissions**

Emissions (tons/year)	2002 (Plan02d)	2008 (WestJump2008)	Percent Change
Oxides of Nitrogen	287,974	230,678	-57,296 (-20%)
Ammonia	33,032	27,024	-6,007 (-18%)
Volatile Organic Compounds	816,904	339,534	-477,370 (-58%)
Primary Organic Aerosol	29,194	25,027	-4,167 (-14%)
Elemental Carbon	8,066	6,105	-1,961 (-24%)
Fine Soil	23,020	55,959	32,940 (>100%)
Coarse Mass	102,660	366,673	264,014 (>100%)

Wyoming's 2017 Regional Haze Progress Report, Table 3.3-2. Note, the differences in emissions for fine and coarse material is likely due to changes in dust emissions inventory methodology instead of actual emissions. See also § 3.4.3 of Wyoming's Report describing the impact of wildfire smoke on visibility.

Not surprisingly, EPA also agrees that visibility improved:

## First Implementation Period: Visibility is Improving

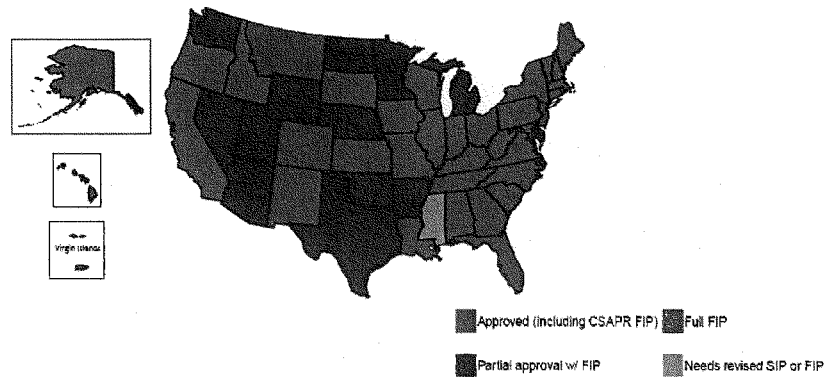


EPA, Dec. 5, 2017.

Sounds like a success story. But, there is more to the story. In 2014, EPA disapproved Wyoming's Plan. EPA imposed its own Federal Plan. EPA's Plan had a price-tag of \$600 million dollars but did not meaningfully improve visibility. Wyoming and the affected utilities appealed EPA's disapproval and requested the Court stay implementation of EPA's Federal Plan. The Court has stayed implementation. Last year, EPA and one of the utilities agreed to settle. The utility agreed to specific "Better than BART" emission reductions and controls. Those changes required Wyoming to expend time and resources in order to revise its State Plan, and Wyoming recently submitted those changes to EPA for action.

The status of Regional Haze, Round 1 - nineteen years after EPA adopted the Regional Haze Rule - is reflected on this EPA map:

### Regional Haze: Status of Actions from First Implementation Period



The status for Wyoming and eleven other states are reflected on EPA's map in blue as "Partial approval w/ FIP."

On January 10, 2017, EPA revised its Regional Haze Rule. 82 Fed. Reg. 3078. One of the key revisions was to extend the deadline for states to submit their second round of regional haze state plans from July 2018 to July 2021. This past fall, EPA made preliminary 2028 visibility modeling data, results, and other technical information available to help inform round two of the state plan development process. See Memorandum from Richard A. Wayland, Director, Air Quality Assessment Division, EPA Office of Air Quality Planning and Standards, re: *Availability of Modeling Data and Associated Technical Support Document for the EPA's Preliminary 2028 Visibility Air Quality Modeling* (Oct. 19, 2017).

Regional Haze visibility modeling is complex and costly. The inputs and outputs – the data alone - associated with EPA's "preliminary" 2028 modeling has a total file size of

approximately 19 terabytes.<sup>6</sup> That amount of data can only be provided via hard-drive to those who request it. And the various hardware option configurations to run the models is also expensive, on the nature of \$6600/month to \$20,800/month.<sup>7</sup>

In order to meet the 2021 State Plan submittal deadline, States and their multi-jurisdictional organizations, such as WESTAR, have already mobilized and started to work on gathering the data that will need to be analyzed in order to prepare state plans. The time and cost that states must devote to the data collection, analysis and ultimate development of these plans is significant. Wyoming estimates that its share of the western regional modeling and analytical costs alone may ultimately exceed several hundred thousand dollars.

However, federal and state collaboration is underway. Wyoming participated in WESTAR's December 2017 Regional Haze workshop, with many other states, EPA, and other federal agencies also attending. Wyoming remains hopeful that these cooperative federalism efforts will continue and be fully implemented. If so, the result will be continued improvement and progress meeting the Clean Air Act's visibility goals at a cost and resource savings for Wyoming's citizens.

### **3) Exceptional Events**

Ambient air quality monitoring data is important as the basis for numerous regulatory decisions. However, not all monitoring data may be appropriate to use. For example, when “‘exceptional’ events cause exceedances or violations of the national ambient air quality standards (NAAQS) that subsequently affect certain regulatory decisions, the normal planning

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<sup>6</sup> According to Wikipedia, “1 terabyte of data would require about 1428 CD-ROMs, 212 DVDs or 40 single-layer Blu-ray Discs.”

<sup>7</sup> AAPCA 2018 Spring Meeting Presentation, Photochemical Grid Modeling 101, Jim Boylan, Manager, Planning and Support Program, Georgia EPD – Air Protection Branch (April 5, 2018).

and regulatory process established by the CAA may not be appropriate.” *See* Preamble to EPA Final Rule, Treatment of Data Influenced by Exceptional Events. 81 Fed. Reg. 68216 (Oct. 3, 2016). Therefore, when an “exceptional” event influences the ambient monitored data and causes an exceedance or violation of the ambient standard, an air agency can request the exclusion of that event-influenced data, and the EPA can agree to exclude that data from use for certain regulatory decisions.

In order for an event to qualify as “exceptional,” the event: 1) must have affected air quality in such a way that there exists a clear causal relationship between the specific event and the monitored exceedance or violation; 2) was not reasonably controllable or preventable, and 3) was caused by human activity that is unlikely to recur at a particular location or was a natural event. *Id.*, *see also* CAA § 319(b). Exceptional events may include wildfire smoke, high winds, stratospheric ozone intrusions, and the like.

Wyoming, like other states, relies upon and utilizes the Exceptional Event Rule to exclude event-influenced ambient monitoring data from use in certain regulatory decisions, or from ultimately being considered a “violation” of the ambient standard. Exceptional event demonstrations are resource intensive and costly, and place a significant burden on already strained state resources.

Two examples highlight the state resources required, cost, and burden to make an exceptional event demonstration. The first example relates to stratospheric ozone intrusions. Wyoming’s demonstration took just under a year to develop, required assistance from staff with meteorological expertise, assistance from EPA’s stratospheric ozone intrusion workgroup, a group of state and federal regulators, and academics focused on stratospheric ozone intrusions. Wyoming submitted five demonstrations to EPA for stratospheric ozone intrusion causing



exceedances of the Ozone ambient standard. EPA acted on only one of those demonstrations, which was ultimately approved by EPA. The second example relates to wildfire events that cause ozone exceedances. Wyoming has not prepared such an exceptional event demonstration, but has reviewed the examples that EPA has posted. Wyoming estimates that it would take about 15 months and contractor assistance at a costs of over \$150,000 to produce just one of those demonstrations. Resource and funding to produce demonstrations of this complexity and cost are simply impractical.

As mentioned previously, in the past, EPA oftentimes would not act on Wyoming's requests. For example, Wyoming submitted more than 45 demonstrations of exceptional event influences on PM<sub>2.5</sub>, PM<sub>10</sub>, and ozone ambient monitoring data for calendar years 2007 – 2015. Wyoming's submittals indicated that the exceedances were affected by high winds, wildfires, and stratospheric intrusions. While EPA reviewed and concurred with some of Wyoming's demonstrations, EPA "shelved" the majority of them.

EPA's decision to "shelve" Wyoming's demonstrations was problematic for several reasons. First, it signaled EPA's disregard for Wyoming's significant expenditure of money, time and resources to prepare submittals. Second, until EPA excludes the event-influenced data, it must be used for regulatory decisions. Use of data that should have been properly classified as "exceptional" may delay issuance of permits, create inaccurate public perception and understanding of ambient air quality, or result in federal policies that rest on a foundation of event-influenced data that should have been excluded. Ultimately, the EPA's consideration of data bereft of an exceptional event demonstration decision, results in a misrepresentation of the adequacy of existing state regulations and shifts state resources from addressing areas of concern to addressing situations that are not problematic.

Wyoming is starting to see that EPA is changing when it comes to exceptional events. I believe part of this change occurred after EPA revised the exceptional event rule in 2016 and then started listening to state questions and concerns related to Rule implementation.

Wyoming – as a co-regulator - reached out to EPA regional staff – asked questions, expressed concerns, offered suggestions for implementation, and invited region staff to participate in Wyoming’s ambient monitor training for industrial sources. Region staff attended and heard directly from Division staff and from Wyoming industrial sources.

Wyoming requested and suggested that regional and national EPA reduce regulatory uncertainty by: 1) timely action on ALL submittals under the revised rule; 2) accepting “right-sized” demonstrations; and 3) providing technical guidance, specifically in regards to the alternative pathways demonstrations for regulatory significant monitored data.

And, the Division has been pleasantly surprised. While, Wyoming’s requests and suggestions have not yet achieved full implementation, both the regional and national EPA offices are moving towards reducing regulatory uncertainty. At the WESTAR fall meeting, states raised questions and concerns. EPA national and regional staff listened and asked questions to gain a greater understanding of state concerns.

One of the EPA workgroups focuses on stratospheric ozone intrusions. EPA sought and invited Wyoming to review and comment on draft “Guidance on the Preparation of Exceptional Event Demonstrations for Stratospheric Ozone Intrusions.” Wyoming provided constructive feedback and reiterated the usefulness of this workgroup:

This group sends out notifications when [Stratospheric Ozone Intrusions] SI’s occur. They are also a readily available resource for small agencies that do not have full time forecasters to predict or diagnose SI’s in real time. Workgroup members from various agencies and institutions have been very helpful in producing many of the technical products needed for demonstrations. Again it can be difficult for smaller agencies to have the resources or staff to assemble

some of the technical products. The AQD requests that EPA continue to devote resources to the SI Workgroup and other groups like it.

Comment letter from Cara Keslar, Monitoring Section Supervisor, Wyoming DEQ – Air Quality Division, to Gail Tonnesson, EPA Region 8 and Pat Dolwick OAQPS (April 6, 2018).

And, just this past week, at the AAPCA spring meeting, EPA noted that: across its regions, it has concurred on nine ozone exceptional event demonstrations; is focused on addressing concerns, ensuring timely reviews, right-sizing demonstrations, fostering national consistency, and providing technical guidance. This is how cooperative-federalism should work.

Wyoming appreciates EPA's efforts to work with Wyoming and other states as a co-regulator and looks forward towards full implementation at the regional level. It is at that point that the positive environmental benefits of cooperative federalism will be realized. Those positive outcomes include exceptional event-related data that is properly excluded from state and federal regulatory decisionmaking so that information about Wyoming's ambient air quality is accurate,<sup>8</sup> permits are not delayed because of event-related data, and state and federal policies will rest on a more solid data foundation. All of these positive outcomes benefit Wyoming's environment and air quality because it allows the state, and EPA, to focus staff and resources on addressing areas of concern, instead of situations that are not, but appear to be, problematic, because EPA did not act to exclude event-related data.

Now, I'd like to share some positive examples of Cooperative Federalism.

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<sup>8</sup> Real time information about Wyoming's ambient air quality may be found at <http://www.wyvisnet.com/>. See also the Division's 2017 Air Quality Awareness Week outreach activities which included a hip-hop song that was inspired in part by AAPCA's "The Greatest Story Seldom Told – Profiles and Success Stories in Air Pollution Control" (April 2017), and written and performed by Division public policy staff member Mike Morris: <https://www.youtube.com/watch?v=DicFvsqIN00>

**Positive Examples of Cooperative Federalism:**

**1) E-Enterprise for the Environment**

E-Enterprise for the Environment is a model for collaborative leadership among co-regulators. E-Enterprise puts cooperative federalism into practice. Working together, co-regulators are able to “deliver better results, often with lower costs and less burden, for the benefit of the public, the regulated community and government agencies.” *See* EPA, About E-Enterprise for the Environment. “By streamlining business processes and leveraging technology under joint governance, E-Enterprise is enabling the nation’s environmental protection enterprise to be more informed, timely and productive, resulting in better health and environmental outcomes while supporting local jobs and communities. E-Enterprise helps foster greater trust among the regulated community, the public, and co-regulators by improving data integrity and communication.”

The Division, through Emissions Inventory Section Supervisor Ben Way, has actively participated in E-Enterprise, including its Facility Team and Combined Air Emission Reporting (CAER) projects for the past two years. Each of these projects is founded on reducing the flow and management of redundant facility data into and out of multiple data systems. The goals of the Facility Team Project are to improve facility data accuracy, reduce the burden associated with multiple system data entry, and provide the public with a more complete picture of regulatory obligations and environmental interests at each facility. The purpose of the CAER project is to make the emissions data reporting process more efficient by consolidating those processes using modern data sharing technologies and streamlined program collaboration.

Ultimately, the results from the E-Enterprise model of collaborative federalism CAER and Facility Team projects will result in better air quality outcomes.

## 2) A Seat at the Table – EPA’s Board of Scientific Counselors

Cooperative Federalism is also about how decisions are made. Last year, Wyoming learned of AAPCA’s “States at the Table” joint project with the Council of State Government’s (CSG) to develop a “comprehensive resource for state leaders from all three branches of government regarding opportunities to interact with federal energy and environmental agencies through Federal Advisory Committees (FACs).”<sup>9</sup> Among the goals of this joint project is to “promote [cooperative] federalism” and provide state officials with “a potential ‘seat at the table’ with their federal counterparts in the early stages of regulatory, scientific, or intergovernmental decision making. When geographically diverse states participate in these discussions, EPA benefits from the “boots on the ground” experiences in implementing the Clean Air Act.”<sup>10</sup>

In June 2017, EPA’s Office of Research and Development (ORD) provided AAPCA members with an overview of EPA’s Board of Scientific Counselors. The BOSC provides ORD with “advice and recommendations” on all aspects of ORD’s research programs. Those recommendations help improve the quality and focus of ORD’s research, translation to users, and utility of ORD’s research. The composition of the BOSC and its subcommittees is diverse, reflecting a balanced representation and different points of view to provide independent, expert research reviews.

In November 2017, EPA appointed Wyoming’s Air Quality Monitoring Section Supervisor, Ms. Cara Keslar, to this subcommittee. As a representative from the West and

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<sup>9</sup> <http://www.csg.org/aapca/>

<sup>10</sup> See AAPCA Comments, List of Candidates for the U.S. Environmental Protection Agency’s (EPA) Clean Air Scientific Advisory Committee (CASAC) (Sept. 15, 2017), and AAPCA Comments, List of Candidates for the U.S. Environmental Protection Agency’s (EPA) Chartered Science Advisory Board (SAB) (Sept. 28, 2017).

Wyoming, Cara brings a new perspective and a wealth of technical expertise and knowledge of western air issues and energy development, and a strong dose of Western practicality.

Again, by having a seat at the table early in the process and next to other state and federal co-regulators, the benefits to come from cooperative federalism through shared accountability may be realized – improved air quality.

### **3) Disaster Planning**

Last week, at the American Association of Pollution Control Agencies' Spring Meeting in Lexington, Kentucky, we heard about the Disaster Planning and Implementation efforts related to Hurricanes Harvey and Irma that took place between EPA, Texas and Florida. These states said that EPA's Disaster Planning and Response is one area where cooperative federalism is working well. EPA and states noted that with these disasters, EPA did not wait until after the disaster hit to mobilize, EPA reached out to the states beforehand. Key to the successful implementation was constant communication, "boots on the ground," and an "all hands on deck" approach that facilitated rapid and appropriate operational and regulatory responses. As one EPA speaker noted "In an actual emergency the EPA team is available seven days a week, day and night." Again, one of the benefits to come from cooperative federalism in these situations is to timely address air quality health protections. While Wyoming has not experienced a hurricane, the Division finds it reassuring to know that EPA has processes in place to address these situations and that work well.



**Testimony of the  
Association of Air Pollution Control Agencies  
U.S. Senate Appropriations Subcommittee on Interior, Environment, and Related Agencies  
Regarding Fiscal Year (FY) 2019 Appropriations for the  
U.S. Environmental Protection Agency (EPA) State and Local Air Quality Management Grants  
April 27, 2018**

The Association of Air Pollution Control Agencies (AAPCA)<sup>1</sup> appreciates the opportunity to provide written testimony on the FY2019 proposed budget for U.S. EPA, including state and local air quality management grants under the State and Tribal Assistance Grant (STAG) program. AAPCA's state and local air agency members believe that stable, adequate resources, including state and local air quality management grants funded at a level at least equal to FY2018, are critical to core Clean Air Act activities.

The *Consolidated Appropriations Act, 2018* (H.R. 1625), passed on March 23 of this year, recognized the need for these investments. H.R. 1625 funded the STAG program at \$3.562 billion, with \$1.076 billion provided for categorical grants, including \$228.219 million for the State and Local Air Quality Management grant program, and \$75 million for the Diesel Emission Reductions Grant program (prior to rescissions).<sup>2</sup>

Grants to state and local air agencies, including under Sections 103 and 105 of the Clean Air Act, fund essential activities related to planning, modeling, monitoring, training, developing emissions inventories and rules, permitting, inspections, and enforcing key elements of the National Ambient Air Quality Standards (NAAQS), air toxics, and regional haze programs. State and local air agencies have found creative ways to amplify these federal grant resources to fulfill core Clean Air Act functions, and, through the framework of cooperative federalism, achieve significant success in virtually every measure of air pollution control.<sup>3</sup>

On February 12, the White House released the President's budget proposal for FY2019.<sup>4</sup> The budget requests \$5.4 billion to fund U.S. EPA, approximately a 33-percent decrease from the appropriations omnibus that passed on March 23. The budget also proposes a nearly 45-percent reduction in categorical grants, or \$478.65 million less than enacted FY2018 levels. Further, U.S. EPA's FY2019 Justification of Appropriation Estimates for the Committee on Appropriations shows the elimination of several air-related programs, including reducing state and local air quality management grants by more than 33 percent.<sup>5</sup>

AAPCA recognizes that your Subcommittee is in the early stages of the FY2019 appropriations process, and that H.R. 1625 did not adopt similar figures proposed by the Administration for FY2018. Congressional budgets for at least the past 15 fiscal years have recognized the need for stable, adequate

<sup>1</sup> AAPCA is a national, non-profit, consensus-driven organization focused on assisting state and local air quality agencies and personnel with implementation and technical issues associated with the federal Clean Air Act. AAPCA represents more than 40 state and local air agencies, and senior officials from 20 state environmental agencies currently sit on the AAPCA Board of Directors. AAPCA is housed in Lexington, Kentucky as an affiliate of The Council of State Governments. You can find more information about AAPCA at: <http://www.cleanairact.org>.

<sup>2</sup> H.R. 1625 – *Consolidated Appropriations Act, 2018* (Public Law 115-141).

<sup>3</sup> <http://cleanairact.org/documents/GreatestStory4-17-17.pdf>.

<sup>4</sup> <https://www.whitehouse.gov/wp-content/uploads/2018/02/budget-fy2019.pdf>.

<sup>5</sup> <https://www.epa.gov/sites/production/files/2018-02/documents/fy-2019-congressional-justification-all-tabs.pdf>.



ASSOCIATION OF AIR POLLUTION CONTROL AGENCIES

funding for state and local air quality management grants. Since FY2008, funding for these grants has averaged nearly \$230 million, and the average year-to-year change has never been less than three percent.<sup>6</sup>

Instability in funding for key grant programs may affect each state or local air agency differently. Recent communication from the Environmental Council of States (ECOS) indicated that "As Categorical Grants make up on average 27% of state environmental agency budgets, decreases in these grants have significant impacts on the work that state environmental agencies are able to accomplish."<sup>7</sup> Providing stable, adequate funding for these grant programs through the appropriations process allows for state and local air agencies to continue the important and essential work that has driven success in air quality.

Thank you for the attention to this testimony. AAPCA and its members look forward to working with your Subcommittee as Congress develops its priorities for FY2019 appropriations. If you have any questions, please contact Mr. Jason Sloan, Executive Director, at [jsloan@csg.org](mailto:jsloan@csg.org) or (859) 244-8043.

Sincerely,

Stuart Spencer  
Associate Director, Arkansas Department of  
Environmental Quality  
President, AAPCA

<sup>6</sup> Figures assume dollars not adjusted for inflation.

<sup>7</sup> <https://www.ecos.org/wp-content/uploads/2018/03/FY18-EPA-Budget-Letter.pdf>.



**Senate Committee on Environment and Public Works  
Subcommittee on Clean Air and Nuclear Safety  
Hearing entitled, "Cooperative Federalism Under the Clean Air Act: State Perspectives."  
April 10, 2018  
Questions for the Record for Administrator Vehr**

**Chairman Barrasso:**

1. Administrator Vehr, does the Clean Air Act give EPA the authority to second-guess states' choices in the Regional Haze Program when their plans meet statutory requirements? What improvements could be made to the program in the second implementation period?

*The Clean Air Act does not give EPA the authority to second-guess state's choices when their plans meet Regional Haze Program statutory requirements. Under cooperative federalism principles, EPA sets the deadlines and state plan requirements and States develop and submit plans with implementation strategies to meet those deadlines and state plan requirements.*

*One improvement that could be made to EPA's approval process moving forward would include providing timely guidance to states on state plan requirements so that states are best positioned to submit approvable state plans. As my written testimony noted, States have already mobilized and started gathering data that will need to be analyzed in order to develop state plans to meet the 2021 submittal deadline. The data collection, analysis, and state plan development process requires significant state resources. Another improvement suggestion would for EPA's guidance to address international contributions to visibility impairment. EPA also announced that it intends to commence a notice-and-comment rulemaking to address portions of the Regional Haze Rule including provisions related to Reasonably Attributable Visibility Impairment and Federal Land manager consultation. The Division looks forward to participation in that process.*

2. Administrator Vehr, how can innovative projects, such as the Integrated Test Center at Dry Fork station outside Gillette, WY, ultimately assist your work at the Wyoming Department of Environmental Quality?

*The mission of the Department of Environmental Quality is to "protect, conserve and enhance the quality of Wyoming's environment for the benefit of current and future generations." The Division must carry out this mission in a balanced manner – protecting our natural resources while providing for economic development. The purpose for the Integrated Test Center is to study the "capture, sequestration and management of carbon emissions from a Wyoming power plant." Along with testing capture technologies, "research will look at taking flue gas and turning it into a marketable commodity." The innovations that may result from this project may lead to emission reductions or transform an air pollutant into a valuable commodity.*

3. Administrator Vehr, how would you describe Wyoming's experience in submitting exceptional events demonstrations in the past? Under EPA's current process, is the

exceptional events rule a viable option for addressing background ozone? Are additional policy changes and flexibilities needed to fully address background ozone?

*Wyoming was extremely frustrated with and by EPA's failure to act on exceptional event demonstrations that Wyoming submitted in the past. Exceptional event demonstrations are resource intensive and costly to prepare. Wyoming followed EPA's process. EPA shelved 46 demonstrations that Wyoming had submitted for calendar years 2007 – 2015. Recently, however, EPA has actively engaged with Wyoming and other states to improve the timeliness of their actions, accept "right-sized" demonstrations, and develop technical guidance for alternative pathways. The Division is optimistic that this progress will continue and result in timely and appropriate action for future submittals. In addition, the Division is engaged in discussions with EPA about how to address the 46 shelved demonstrations.*

*The exceptional event rule is not a viable option for addressing background ozone. Other policy changes and flexibilities are needed to properly manage the challenges created by the presence of background ozone.*

**Ranking Member Carper:**

Please provide a response to each question, *including each sub-part.*

4. In the President's EPA budget for fiscal year 2019, there are deep cuts to EPA programs, especially for funds that help assist state air programs<sup>1</sup>. What would these budget cuts mean for your state if Congress adopted the President's budget for fiscal year 2019?

*The Division concurs with the Association of Air Pollution Control Agencies (AAPCA) April 27, 2018 testimony submitted to the U.S. Senate Appropriations Subcommittee on Interior, Environment, and Related Agencies, "members believe that stable, adequate resources, including state and local air quality management grants funded at a level at least equal to the FY2018, are critical to core Clean Air Act activities." A copy of that testimony is attached.*

*While Wyoming appreciates the federal funding it receives to carry out Clean Air Act objectives, the Division's experience has been that it has received minimal federal funding. Wyoming's legislature recently approved its balanced biennial budget. That budget includes Wyoming's Air Quality Program which is funded over a two-year biennium by 7% federal funds (\$1,464,314), 61% special revenues (\$12,672,881), and 32% state general funds (\$6,599,112).*

5. As I mentioned in the hearing, Senator Udall and I sent a letter<sup>2</sup> to EPA regarding concerns about a proposal that would allow some of the dirtiest heavy-duty diesel trucks, called glider trucks, to circumvent clean air cleanups. Glider trucks look like new trucks outside, but are equipped with old, high-polluting diesel engines on the inside. As we state in the letter, according to internal agency research - not released until after EPA published this proposal - a new 2017 glider truck can emit up to 450 times the particulate

<sup>1</sup> <https://www.epa.gov/planandbudget/fy2019>

<sup>2</sup> <https://www.epw.senate.gov/public/index.cfm/2018/3/carper-udall-question-epa-decision-to-repeal-air-emissions-standards-for-high-polluting-glider-trucks>

matter (PM) pollution, and up to 43 times the nitrous oxide (NOx) pollution, of model year 2014 and 2015 trucks. Other EPA analyses concluded that, if left unregulated, glider vehicle emissions could prematurely kill thousands of people, and increase instances of lung cancer, chronic lung disease, heart disease, and severe asthma attacks. This is additional pollution that will be emitted in my state, in your state and states across the country. I fear that if this proposal went final, it could further burden states already struggling to meet ambient air health standards.

- a. Comments on the glider proposal submitted by the Diesel Emissions Reduction Act (DERA) Coalition, which is a broad coalition of environmental, public health, industry and state groups who support clean diesel, included the following statement:

“We are concerned that EPA’s decision to encourage the continued proliferation of older engines through the glider industry would increase emissions from medium and heavy-duty vehicles and undermines the work of the Coalition and cooperative federalism with the EPA and states.”<sup>3</sup>

Do you share the DERA Coalition’s concerns? If not, why not?

*It is my understanding that on October 25, 2016, EPA adopted regulations addressing glider engines. See 81 Fed. Reg. 73512. On November 16, 2017, EPA proposed to repeal the emission standards and other requirements for heavy-duty glider vehicles, glider engines, and glider kits, based on a proposed interpretation of the Clean Air Act under which glider vehicles would be found not to constitute ‘new motor vehicles’, glider engines would be found not to constitute ‘new motor vehicle engines’, and glider kits would not be treated as ‘incomplete’ new motor vehicles. Under EPA’s proposed interpretation, EPA would “lack authority to regulate glider vehicles, glider engines, and glider kits under the Clean Air Act.” See 82 Fed. Reg. 53442.*

*Wyoming appreciates that under the Cooperative Federalism framework, EPA develops national standards after working with and obtaining the input from co-regulators and other interested stakeholders. If a court determines that EPA lacks authority to regulate glider engines under the Clean Air Act, then the DERA Coalition will be free to evaluate other options that are consistent with the Clean Air Act to achieve their objectives, which may include state-specific strategies. If a court determines that EPA has authority, then it would be appropriate for the DERA Coalition to engage EPA regarding their concerns.*

- b. Removing gliders from the definition of a new motor vehicle will also mean that California will not need a Section 209 waiver to enforce its own glider standards, which are currently set as the same as federal standards, but could get tighter over time. At the same time, all other states would be free to set their own standards, also without first needing to request a waiver from EPA, setting up a patchwork of state standards for gliders. Would it be better to retain the federal standard or finalize the glider proposal that will create regulatory uncertainty and the potential for 50 different state standards for the industry?

<sup>3</sup> <http://www.lung.org/assets/documents/advocacy-archive/dera-coalition-comments-re.pdf>

*The Clean Air Act framework established by Congress vests the EPA with authority to set and enforce new motor-vehicle emission standards. Under that framework, states are prohibited from adopting or attempting to enforce "any standard relating to the control of emissions from new motor vehicles or new motor vehicle engines." Also under that framework, Congress provided that California may adopt its own vehicle emission standards, which other States may follow. The question appears to turn on whether EPA had legal authority to adopt the standards, and not on whether it is "better" to retain the current standards. If EPA lacks authority to regulate glider engines under the Clean Air Act, then states may evaluate other options and approaches under their state authorities.*

**Senator Whitehouse:**

6. Do you support the proposed cuts to EPA programs funding state clean air initiatives?

*The Division concurs with the Association of Air Pollution Control Agencies (AAPCA) April 27, 2018 testimony submitted to the U.S. Senate Appropriations Subcommittee on Interior, Environment, and Related Agencies, "members believe that stable, adequate resources, including state and local air quality management grants funded at a level at least equal to the FY2018, are critical to core Clean Air Act activities." A copy of that testimony is attached.*

7. Do you believe that climate change is occurring and that it is caused by human emissions of greenhouse gases?

*I appreciate your question, however, it appears to be a separate topic and digresses from the focus of a hearing devoted to "cooperative federalism under the Clean Air Act in hopes of providing a greater understanding of the opportunities and challenges facing states as they engage with Environmental Protection Agency to implement regulations within the authorities of Clean Air Act." Given the focus of the hearing, I offer the following perspective.*

*As noted in my written testimony, Cooperative Federalism is a congressionally established foundational concept to ensure effective public health and environmental outcomes. Over time, that concept shifted towards the federal government and away from states. As stated in my testimony, that shift resulted in the development of one-size-fits-all laws, regulations, policies, and guidance that overrode legitimate state authority and failed to consider the unique geophysical, ecological, social, and economic conditions of each state. Ultimately, that shift limits state flexibility, and leaves states to enforce national policies developed without the benefit of local understanding.*

*EPA recently closed comment on its proposed repeal of the 2015 Carbon Pollution Emission Guidelines for existing power plants, commonly known as the "Clean Power Plan." The DEQ's comments focused on practical and legal concerns related to EPA's statutory authority and fundamental methodology. These comments reflect that the Wyoming Department of Environmental Quality remains committed to working with EPA and other federal partners in an effective and balanced cooperative federalism approach that recognizes states and EPA as co-regulators, co-funders, and partners in a system that provides effective environmental and public health outcomes.*

*The Division develops and implements strategies consistent with federal and state law. This is done in part by reducing air pollution emissions that ultimately leads to positive environmental and public health outcomes. The Division recognizes that Wyoming's strategies are tailored to Wyoming's unique circumstances and that other states tailor strategies to address their unique circumstances.*

Senator CAPITO. Thank you.  
Mr. Alteri.

**STATEMENT OF SEAN ALTERI, DIRECTOR, DIVISION OF AIR QUALITY, KENTUCKY DEPARTMENT FOR ENVIRONMENTAL PROTECTION**

Mr. ALTERI. Good morning, Chair Capito, Ranking Member Whitehouse, and members of the Subcommittee.

My name is Sean Alteri, and I currently serve as the Director of the Kentucky Division for Air Quality. I am honored to testify today, and thank you for this opportunity to share a State's perspective related to cooperative federalism under the Clean Air Act.

In addition to my work with the Kentucky Division for Air Quality, I also serve as the Past President for the Association of Air Pollution Control Agencies. Our association is a national, non-partisan, consensus driven organization focused on improving air quality. The Association represents more than 45 State and local air agencies.

As Senator Inhofe remarked during a 2016 hearing, "Cooperative federalism is a core principle of environmental statutes, including the Clean Air Act, where EPA and the States work together to meet environmental goals."

Obviously, mutual respect is essential and necessary to forge a strong working relationship between EPA and State regulators. Working together, cooperatively, will allow all of us to achieve our environmental goals and objectives.

Specific to the Clean Air Act, cooperative federalism is more than a catch phrase. Once EPA establishes a standard or an applicable requirement under Title I of the Act, the States are primarily responsible for the implementation and enforcement of those standards and requirements.

These standards include national ambient air quality standards, standards of performance, national emission standards for hazardous air pollutants, and waste incineration rules. To ensure that States are provided with the ability to carry out their obligations under the Clean Air Act and effectively administer its delegated authorities, EPA must establish nationally uniform emission standards based on sound science.

Additionally, EPA must promulgate reasonable regulations and fully consider implementation requirements of State, tribal, and local air pollution control agencies. Importantly, EPA must allocate stable and adequate resources and funds to State, tribal, and local air pollution control agencies.

Also, EPA must provide timely implementation guidance and technical support. Finally, EPA must meet all of its non-discretionary statutory duties by the prescribed deadlines. EPA's strategic plan for fiscal years 2018–2022 underscores each of these necessities.

In its strategic plan, EPA establishes a goal of cooperative federalism and sets forth its objectives to "enhance shared accountability" and "to increase transparency and public participation." EPA's goal and objectives are consistent with those of State, tribal, and local air pollution control agencies.

In Kentucky, we take our responsibilities seriously and work diligently to fulfill our obligations under the Clean Air Act. We are proud of the significant improvement in air quality, and we understand that there is more work to conduct.

In the spirit of cooperative federalism, I would like to provide a status report on the air quality in Kentucky and detail activities conducted by our Cabinet to fulfill our obligations.

Air quality in Kentucky is improving dramatically. In the last 10 years emissions of sulfur dioxides from our electric generating units decreased by more than 83 percent, and emissions of nitrogen oxides decreased by more than 70 percent. Our robust ambient air monitoring network measures these positive results.

Currently, all monitors in the Commonwealth, except for one ozone monitor in Louisville, measure compliance with all of the national ambient air quality standards including the 2015 ozone standard.

These reductions and our success in air quality improvement are achieved through significant investments to install and upgrade air pollution controls. In the last 10 years our utilities invested more than \$8 billion for air pollution controls. These expenditures are shared by all of the ratepayers in the Commonwealth.

Despite these efforts, EPA, during the last Administration, disapproved several State implementation plan revisions and issued Federal implementation plans as a result. EPA's negative actions to disapprove or issue a Federal implementation plan resulted from sue and settle decisions.

In closing, the Commonwealth of Kentucky is meeting its statutory obligations under the Clean Air Act, and we are good neighbors by reducing our emissions and providing the rest of the country with all the manufactured goods and products necessary to improve the quality of life for all.

To accommodate cooperative federalism and strong working relationships, we request that EPA apply a State implementation approach rather than aggressive Federal overreach.

Again, thank you for the opportunity to testify today. I look forward to any questions or comments you may have regarding my testimony.

[The prepared statement of Mr. Alteri follows:]



**Sean Alteri**  
**Director, Division for Air Quality**  
**Commonwealth of Kentucky**  
**Energy and Environment Cabinet**  
**Frankfort, KY**

Mr. Sean Alteri serves as the Director of the Division for Air Quality. The Division is comprised of 166 full-time employees divided into 4 technical branches and 20 specialized sections and is responsible for carrying out the Clean Air Act requirements on behalf of the Commonwealth.

During his 20-year career with the Division, Mr. Alteri worked as a Permit Engineer Assistant, Regulation Development Supervisor, Technical Services Branch Manager, and the Assistant Director. Currently, Sean is also serving as the Past-President of the Association of Air Pollution Control Agencies (AAPCA), a national, non-partisan, consensus-driven organization focused on improving air quality and is a board member of the Southeastern States Air Resources Managers (SESARM).

Mr. Alteri is a graduate of the University of Kentucky, College of Engineering (BS Chemical, 1997).





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COMMISSIONER

TESTIMONY OF SEAN ALTERI

ON

"COOPERATIVE FEDERALISM UNDER THE CLEAN AIR ACT: STATE PERSPECTIVES"

BEFORE THE

UNITED STATES SENATE ENVIRONMENT AND PUBLIC WORKS

SUBCOMMITTEE ON CLEAN AIR AND NUCLEAR SAFETY

APRIL 10, 2018

Good morning, Chair Capito, Ranking Member Whitehouse, and members of the Subcommittee. My name is Sean Alteri and I currently serve as the Director of the Kentucky Division for Air Quality. I am honored to testify today and thank you for this opportunity to share a state's perspective related to "cooperative federalism" under the Clean Air Act.

In addition to my work with the Kentucky Division for Air Quality, I also serve as the Past-President for the Association of Air Pollution Control Agencies. Our association is a national, non-partisan, consensus-driven organization focused on improving air quality. The Association represents more than 45 state and local air agencies.

As Senator Inhofe remarked during a 2016 hearing, "Cooperative federalism is a core principle of environmental statutes, including the Clean Air Act...where EPA and the states work together to meet environmental goals." Obviously, mutual respect is essential and necessary to forge a strong working

relationship between EPA and state regulators. Working together, cooperatively, will allow all of us to achieve our environmental goals and objectives.

Specific to the Clean Air Act, "cooperative federalism" is more than a catch phrase. Once EPA establishes a standard or an applicable requirement under Title I of the Clean Air Act, the states are primarily responsible for the implementation and enforcement of those standards and requirements. These standards include national ambient air quality standards, standards of performance, national emission standards for hazardous air pollutants, and waste incineration rules.

To ensure that states are provided with the ability to carry out its obligations under the Clean Air Act and effectively administer its delegated authorities, EPA must:

- Establish nationally uniform emission standards based on sound science;
- Promulgate reasonable regulations and fully consider implementation requirements of state, tribal, and local air pollution control agencies;
- Allocate stable and adequate resources and funds to state, tribal, and local air pollution control agencies;
- Provide timely implementation guidance and technical support; and,
- Meet all of its non-discretionary statutory duties by the prescribed deadlines.

EPA's Strategic Plan for FFY 2018-2022 underscores each of these necessities. In its strategic plan, EPA establishes a goal of "Cooperative Federalism" and sets forth its objectives to "enhance shared accountability" and "increase transparency and public participation." EPA's goal and objectives are consistent with those of state, tribal, and local air pollution control agencies.

In Kentucky, we take our responsibilities seriously and work diligently to fulfill our obligations under the Clean Air Act. We are proud of the significant improvement in air quality, and we understand that there is more work to conduct.

In the spirit of cooperative federalism, I would like to provide a status report on the air quality in Kentucky and to detail activities conducted by our Cabinet to fulfill our obligations under the Act. Air Quality in Kentucky is improving dramatically. In the last 10 years, emissions of sulfur dioxides from Kentucky electric generating units decreased by more than 83% and emissions of nitrogen oxides decreased by more than 70%. Our robust ambient air monitoring network measures these positive results. Currently, all of the monitors in the Commonwealth, except for one ozone monitor in Louisville, measure compliance with all of the national ambient air quality standards, including the 2015 ozone standard.

These reductions and our success in air quality improvement are achieved through significant investments to install and upgrade air pollution controls. In the last 10 years, our utilities invested more than \$8 Billion dollars for air pollution controls. And these expenditures are shared by all of the ratepayers in the Commonwealth.

Generally, the State Implementation Plan serves as the roadmap of the state's ability to implement, maintain, and enforce primary and secondary national ambient air quality standard; whereas, a state or local air quality permit program acts as the vehicle for the implementation of the standards and requirements for stationary sources. And finally, the inspections and compliance evaluations performed by an agency establish accountability and enforcement of the applicable requirements. EPA provides oversight and is the approving authority for these delegated activities.

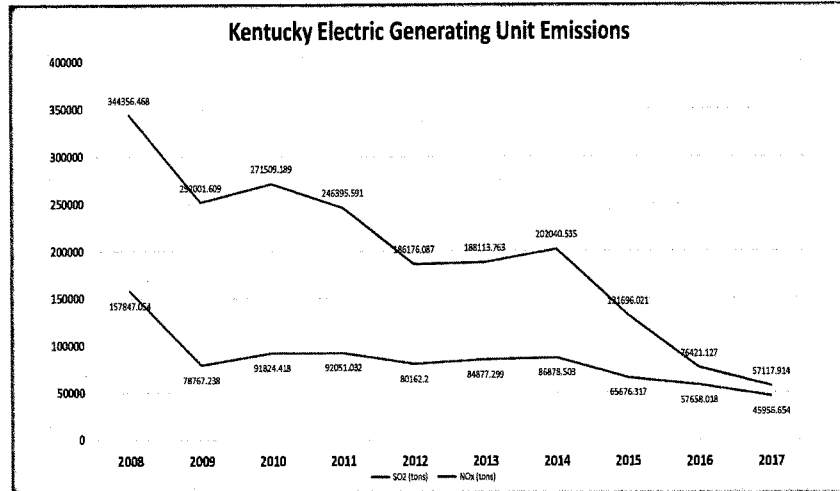
Relative to Kentucky's air quality permitting program, I am pleased to report that all of the Title V operating permits in at least the last 5 years were issued under Part 70 of 40 CFR, the state's authority, and no permits were issued by EPA under Part 71. During calendar year 2017, the Cabinet issued 368 permit actions that contained federally-enforceable requirements. Similarly, our stationary source inspectors conducted 327 full compliance evaluations for sources located in Kentucky; whereas, EPA only conducted 3 stationary source inspections. Clearly, Kentucky serves as the primary authority to implement and enforce the Clean Air Act requirements related to stationary sources.

Despite these efforts, EPA during the last Administration disapproved several State Implementation Plan revisions and issued Federal Implementation Plans as a result. The vast majority of EPA's negative actions to disapprove or issue a Federal Implementation Plan resulted from "Sue-and-Settle" decisions.

For today's hearing, I would like to highlight and provide context to the Administrator's statement: "Past sue-and-settle tactics, however, undermined this principle of cooperative federalism by excluding states from meaningfully participating in procedural and substantive Agency actions." The Administrator correctly assesses the negative impact of sue-and-settle negotiations when states are excluded from meaningful participation. As mentioned, several issues related to Kentucky's State Implementation Plan have been and are subject to third-party litigation. EPA settled those matters with no input or interaction with our agency or any representative of the Commonwealth. When Kentucky's air quality representatives would inquire on the status or substance of the litigation, EPA would explain that those are matters under litigation and EPA is prevented from discussing the issues with the affected states.

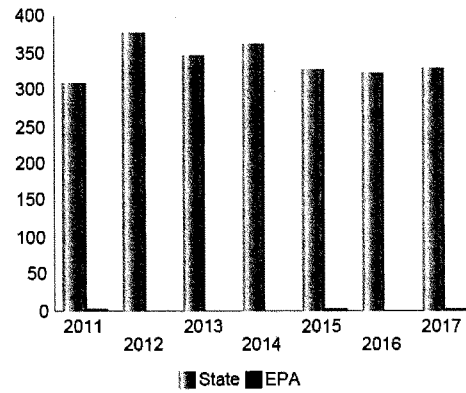
It is also worth noting that there are instances where matters related to the Kentucky State Implementation Plan are filed and decided in the U.S. District Court for the Northern District of California. Although our Cabinet counsel has explained to me the legality of the venue; as a layperson, I do not understand, nor agree, why a judge in Northern California should decide a matter relating to the Kentucky State Implementation Plan or the designation schedule of a national ambient air quality standard. The venue of the Northern California District Court limits the Commonwealth's ability to meaningfully participate in the procedural and substantive EPA actions related to the Kentucky State Implementation Plan. Instead, national ambient air quality standards, or actions related to state implementation plans, are matters affecting national policy and law and should be decided in the DC Circuit to establish national consistency.

In closing, the Commonwealth of Kentucky is meeting its statutory obligations under the Clean Air Act and we are “Good Neighbors” by reducing our emissions and providing the rest of the country with the manufactured goods and products necessary to improve the quality of life for all. To accommodate “cooperative federalism” and strong working relationships, we request that EPA apply a state implementation approach rather than aggressive federal overreach. Again, thank you for the opportunity to testify today, and I look forward to any questions or comments you may have regarding my testimony.



Source: EPA's Clean Air Markets Division (<https://ampd.epa.gov/ampd/>)

Number of Facilities with a Full Compliance  
Evaluation



<https://echo.epa.gov/trends/comparative-maps-dashboards/state-air-dashboard?state=KY&view=activity>



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R. BRUCE SCOTT  
DEPUTY SECRETARY

May 10, 2018

Hon. John Barrasso  
Hon. Thomas R. Carper  
EPW Committee  
410 Dirksen Senate Office Building  
Washington, DC 20510  
Attn: Ms. Beth Trenti

Dear Chair Barrasso and Ranking Member Carper,

On April 10, 2018, I appeared before the Senate Committee on Environment and Public Works, Subcommittee on Clean Air and Nuclear Safety to testify at the hearing entitled, "Cooperative Federalism Under the Clean Air Act: State Perspectives." I sincerely appreciated the opportunity to discuss one state's perspective on cooperative federalism under the Clean Air Act. Included in this letter, please find my responses to questions for the record.

**Chairman Barrasso:**

1. Director Alteri, you noted that over the last ten years, Kentucky has reduced emissions of sulfur dioxides by 83 percent and nitrogen oxides by 70 percent. Those emissions are precursors to the formation of ozone. To achieve these reductions, utilities in your state invested \$8 billion in air pollution controls paid by Kentucky's ratepayers. Despite the dramatic reduction in emissions from sources in Kentucky, certain states in the Northeast claim these sources still significantly contribute to their ozone issues.
  - a. My understanding is that despite Kentucky's significant reductions in ozone precursors, ozone issues in the Northeast have not been fully resolved. Doesn't that suggest that the primary cause of nonattainment issues in the Northeast is not upwind states like Kentucky?

**Response:**

Ambient air monitoring data, along with the continuous emissions monitoring data from electric generating units located in Kentucky, indicate that the primary cause of nonattainment in the Northeast is not emissions from Kentucky.



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- b. Do you believe that there are issues with the current modeling approaches used in setting ozone transport policies?

**Response:**

Yes. As noted during the hearing, the emissions inventories of source categories other than electric generating units are not comprehensive enough to provide accurate source apportionment and determine source contributions through air modeling techniques. During litigation related to Kentucky's interstate transport obligations, EPA recognized the necessity to "Improve Data on Inventory and NOx Control Strategies for Non-EGUs" and stated the following:

*As a first preliminary step, EPA must take steps to improve the quality of its information regarding the current status of existing controls for the non-EGU inventory and data on potential control devices that could be installed on uncontrolled or under-controlled sources. This information is necessary to quantify potential emissions impacts and reductions from non-EGU sources. If EPA does not gather this information with respect to non-EGUs, the results of EPA's subsequent analyses might be inaccurate and might result in either over- or under-control of emissions relative to downwind air quality problems, a scenario that is prohibited by 42 U.S.C. § 7410(a)(2)(D)(i). EME Homer City Generation, 134 S. Ct. at 1604.<sup>1</sup>*

Further, EPA and other modeling experts are aware of inaccuracies with modeled predictions for areas located near ports, harbors, and near large bodies of water.

- c. What are some of your recommendations to EPA about how the Agency should better work with states to resolve ozone transport issues?

**Response:**

First, EPA must enhance the accuracy of the emissions inventories that are used in the air modeling assessments. For instance, EPA must clearly determine sources of increased emissions during high ozone demand days, such as peak-demand electric generators with relatively short stacks.

EPA must also determine and clearly define the significant contributions and the required reductions necessary to appropriately determine the amount of control as dictated by the Supreme Court's *EME Homer City* decision.

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<sup>1</sup> CASE NO. 3:15-cv-04328-JD, "EPA'S OPP. & CROSS-MOTION", filed December 15, 2016, Page 14

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- d. Is there evidence that localized sources within the Northeast are the significant contributors to ozone in that region?

**Response:**

Our preliminary research of high ozone days indicate that local peak-demand electric generators contribute to ozone exceedances. The relatively short stacks increase ground-level concentrations of nitrogen oxides and the formation of ozone.

2. Director Alteri, can you please explain the negative impacts of past EPA “sue and settle” agreements on your Department’s efforts to develop State Implementation Plans?

**Response:**

Sue and settle agreements often lead to uncertainty, which results in wasted time and effort with little to no environmental benefit. Although Kentucky’s and all downwind monitors achieve the 1997 Ozone and 1997 PM<sub>2.5</sub> National Ambient Air Quality Standards, EPA has disapproved Kentucky’s infrastructure State Implementation Plans (SIPs) as it relates to interstate transport obligations due to sue-and-settle outcomes. Currently, Kentucky is required to administratively address these perceived deficiencies that will result in no environmental benefit.

To promote “cooperative federalism” on these issues, EPA should include states’ experts who are responsible for ultimately implementing any decisions resulting from the litigation.

3. Director Alteri, do you believe it is appropriate for EPA to second-guess New Source Review permitting decisions made by state and local officials? Can you explain the practical impacts when EPA overrides or second-guesses decisions?

**Response:**

No, it is not appropriate for EPA to “second-guess” or override complicated, technical determinations without substantial evidence demonstrating an error in judgment. Without clearly stating objections to engineering estimates, the permitting authority will be forced to significantly delay the issuance of important environmental permits that also provide for economic development opportunities.

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4. Director Alteri, could EPA do a better job at more clearly defining how and when a source is to be aggregated for purposes of a New Source Review permit?

**Response:**

Yes. State and local air pollution control agencies would greatly benefit EPA clearly defining what constitutes "common control" in determining aggregation of projects under the New Source Review permitting program. To enhance regulatory certainty, EPA's determinations must be codified into regulation and not issued as non-binding to guidance memoranda.

5. Director Alteri, what are some specific actions that EPA can take under its existing authority to make New Source Review permitting more efficient?

**Response:**

The most difficult aspect of permitting a major emitting facility under the New Source Review program is air dispersion modeling, which is utilized to determine whether a project will cause or contribute to a violation of the National Ambient Air Quality Standards. The direct relationship of using the New Source Review program to achieve and maintain the National Ambient Air Quality Standards exemplifies the necessity to consider and include implementation requirements when EPA revises a National Ambient Air Quality Standard. Specifically, the air dispersion modeling requirements necessary to evaluate the consequences of any decision to permit increased air pollution in an area must be promulgated at the same time EPA revises a National Ambient Air Quality Standard.

**Ranking Member Carper:**

Please provide a response to each question, *including each sub-part*.

6. In the President's EPA budget for fiscal year 2019, there are deep cuts to EPA programs, especially for funds that help assist state air programs<sup>2</sup>. What would these budget cuts mean for your state if Congress adopted the President's budget for fiscal year 2019?

**Response:**

Currently, the Division for Air Quality receives approximately \$2,400,475 to assist in administering and meeting obligations and requirements under the Clean Air Act. Any reduction in budgeted amounts would reduce the grants and funds allocated to the Commonwealth for the purposes of carrying out Clean Air Act obligations.

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<sup>2</sup> <https://www.epa.gov/plansandbudget/2019>

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7. As I mentioned in the hearing, Senator Udall and I sent a letter<sup>3</sup> to EPA regarding concerns about a proposal that would allow some of the dirtiest heavy-duty diesel trucks, called glider trucks, to circumvent clean air cleanups. Glider trucks look like new trucks outside, but are equipped with old, high-polluting diesel engines on the inside. As we state in the letter, according to internal agency research - not released until after EPA published this proposal - a new 2017 glider truck can emit up to 450 times the particulate matter (PM) pollution, and up to 43 times the nitrous oxide (NOx) pollution, of model year 2014 and 2015 trucks. Other EPA analyses concluded that, if left unregulated, glider vehicle emissions could prematurely kill thousands of people, and increase instances of lung cancer, chronic lung disease, heart disease, and severe asthma attacks. This is additional pollution that will be emitted in my state, in your state and states across the country. I fear that if this proposal went final, it could further burden states already struggling to meet ambient air health standards.

- a. Comments on the glider proposal submitted by the Diesel Emissions Reduction Act (DERA) Coalition, which is a broad coalition of environmental, public health, industry and state groups who support clean diesel, included the following statement:

“We are concerned that EPA’s decision to encourage the continued proliferation of older engines through the glider industry would increase emissions from medium and heavy-duty vehicles and undermines the work of the Coalition and cooperative federalism with the EPA and states.”<sup>4</sup>

Do you share the DERA Coalition’s concerns? If not, why not?

**Response:**

As an air quality regulator, I support the reduction of emissions and their impacts on public health and the environment. Directly related to the quoted comment above, I am not certain that EPA’s decision is to encourage the proliferation of older engines and increase emissions, but rather my understanding is that EPA’s decision is dependent upon whether it has the legal authority to consider the existing engines as “new.” Regardless, a proper cost and benefit analysis is necessary to determine appropriate EPA action related to “Glider Trucks.”

- b. Removing gliders from the definition of a new motor vehicle will also mean that California will not need a Section 209 waiver to enforce its own glider standards, which are currently set as the same as federal standards, but could get tighter over time. At the same time, all other states would be free to set their own standards, also without first needing to request a waiver from EPA, setting up a patchwork

<sup>3</sup> <https://www.epa.gov/senate/public/index.cfm/2018/3/carper-udall-question-epa-decision-to-repeal-air-emissions-standards-for-high-polluting-glider-trucks>

<sup>4</sup> <http://www.lung.org/assets/documents/advocacy-archives/dera-coalition-comments-rc.pdf>

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of state standards for gliders. Would it be better to retain the federal standard or finalize the glider proposal that will create regulatory uncertainty and the potential for 50 different state standards for the industry?

**Response:**

It is always best to eliminate regulatory uncertainty and ensure that every state retains the ability to provide for the most cost-effective control strategies for its citizens.

- c. Does your state take advantage of EPA DERA grants and how has the program helped clean the air in Kentucky?

**Response:**

Yes. As a result of past awards, Kentucky school administrators were able to purchase hybrid school buses and reduce the impact of emissions on school children, staff, and parents.

- d. Should the federal government continue to focus on replacing and retrofitting dirty diesel engines, rather than putting dirty diesel engines back on the road? Why or why not?

**Response:**

EPA and the federal government should continue to focus on reducing pollutant emissions that negatively impact public health and the environment.

**Senator Whitehouse:**

8. Do you support the proposed cuts to EPA programs funding state clean air initiatives?

**Response:**

No. State, local, and tribal air quality control agencies require stable and adequate funding to meet obligations under the Clean Air Act.

9. Do you believe that climate change is occurring and that it is caused by human emissions of greenhouse gases?

**Response:**

My understanding is that concentrations of carbon dioxide in the atmosphere are increasing and human activities related to combustion contribute to the increase in carbon dioxide concentrations.

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Again, thank you for the opportunity to participate in the hearing, "Cooperative Federalism Under the Clean Air Act: State Perspectives." If you have further questions or require additional information, please do not hesitate to contact me at your convenience.

Sincerely,

A handwritten signature in black ink, appearing to read "Sean Alteri". The signature is fluid and cursive, with a large initial "S" and a distinct "A".

Sean Alteri, Director  
Kentucky Division for Air Quality

Senator CAPITO. Thank you.  
Commissioner Baker.

**STATEMENT OF TOBY BAKER, COMMISSIONER,  
TEXAS COMMISSION ON ENVIRONMENTAL QUALITY**

Mr. BAKER. Thank you, Chairman Capito, Ranking Member Whitehouse, and members of the Environment and Public Works Subcommittee on Clean Air and Nuclear Safety.

For the record, my name is Toby Baker. I am a Commissioner of the Texas Commission on Environmental Quality, otherwise known as the TCEQ.

The Texas Commission on Environmental Quality is the third largest environmental regulatory agency in the United States behind the EPA and California if you count their air control district model as one agency.

We have close to 3,000 employees across 16 regional offices, with our largest regional office being located in Houston, as you may have guessed. By authority delegated to our agency, we regulate water quality, air quality, and waste in Texas.

I'd like to first highlight a few facts about Texas that I believe were made possible through the tradition of cooperative federalism, which, as you know, was built into the Federal Clean Air Act and a number of other Federal regulatory statutes.

Starting with amendments to the Clean Air Act in the early 1990s, Texas, one of the largest coastal States, turned a corner in environmental regulation and has become one of the leading States in environmental success relative to our environmental challenges.

We currently produce one-third of the Nation's crude oil. Thirty percent of all refining capacity is located within our borders, and a quarter of all U.S. natural gas production comes from Texas.

Balancing this, we also are the largest wind producing State in the U.S. with over 20,000 megawatts of capacity. Solar energy production is ramping up, and if you consider the projects we have in queue, we should have close to 3,500 megawatts of utility scale solar constructed or being built by 2019. To sum up, we produce and consume more energy than any other State.

In addition, the population of Texas is rapidly increasing. Since 2000 it is estimated that our population has grown by over 8 million. It is no secret that Texas is hot, and these 8 million newcomers to the State have no doubt discovered the benefits of air conditioning, which requires a significant amount of power.

It is also no secret that Texans like their cars, and 8 million new Texans, moving primarily to already heavily populated areas, add a number of new vehicles to our transportation system. One could assume an increase in population, coupled with our robust manufacturing sector, would lead to increased emissions, but in reality the opposite has occurred.

Since the late 1990s we have seen a dramatic drop in both NO<sub>x</sub> emissions and ozone emissions. While we have occasional bouts with other criteria pollutants, ozone is our most pressing.

Since 2000 we have been one of the top States in reducing ozone emissions. In fact, in the latest ranking of dirtiest cities by the American Lung Association, Texas does not have a city in the top 10 while having 3 of the top 10 largest cities in the United States.

Given the fact that the Houston area is essentially the kitchen for a good portion of the U.S. and that it has prime ozone making weather, frankly, it is astounding. Our emissions in our major metropolitan areas are currently driven more by mobile sources than any point source.

CO<sub>2</sub> is worth mentioning as well. While Texas produces more CO<sub>2</sub> than any other State, the per capita production, according to EIA, puts us at No. 14 when ranking the States. If we are objective about it, I would argue that we are a model for efficiency.

What has led to our success? I would say a tradition of cooperative federalism that has allowed Texas to tailor its own unique solutions to our own unique problems, a market that has led to maximizing efficiency in the refining and power sectors, cleaner burning vehicles, and finally, incentives.

I would like to address cooperative federalism more specifically. First and foremost, the benefits of cooperative federalism, done correctly, were on full display during our response to the worst natural disaster in recent memory for the State of Texas, Hurricane Harvey.

Before and after Harvey made landfall, both EPA Headquarters and Region 6 coordinated closely with the TCEQ and other State agencies to ensure all necessary fuel waiver requests were processed as expeditiously as possible.

As a result of this cooperation, requests were usually granted in a matter of hours compared to previous hurricanes, where such waivers would be processed over several days because the EPA took more of a wait and see approach.

Similarly, EPA staff rapidly processed TCEQ's request for No Action Assurance letters concerning vapor controls at gasoline terminals, tank tightness of transport trucks, and landing of floating roofs on gasoline storage tanks.

EPA's rapid response and close coordination with TCEQ in approving the fuel waivers and NAA letters helped ensure the flow of gasoline and diesel products throughout Texas and the United States.

To be fair, the previous Administration also worked well with TCEQ in transitioning all of the greenhouse gas permitting under the Tailoring Rule from the EPA to Texas. Recognizing the ability of a particular State to handle the application load under a certain rule is yet another great example of how cooperative federalism should work in a national regulatory scheme.

I notice that I am running out of time, so I will skip forward.

At the same time that we have cooperative federalism where it works, sometimes it does not work. An example is the Clean Power Plan, which would have imposed significant economic and electric reliability strains on the State of Texas to attain emission reduction benchmarks in a very short timeframe that the State has consistently maintained would be met anyway under existing market conditions.

Specifically, Texas is currently on pace to nearly hit the initial emissions reduction benchmark of the Clean Power Plan several years ahead of schedule, and all without the rule being in place.

Finally, I am pleased to see, under this Administration, a return to the historical norm of a SIP oriented approach to Clean Air Act



enforcement and implementation. By diverting from a “FIP first” approach, the EPA has enabled individual States to implement and enforce Federal standards in a manner allowing for greater flexibility and efficiency.

This, in turn, leads to both a greater diversity in problem solving methods that are tailored to each State’s natural environment, as well as more predictability and consistency in enforcement. I have examples of that, but I will leave those for later.

That concludes my testimony. Thank you for having me here today.

[The prepared statement of Mr. Baker follows:]



**Toby Baker**  
**Commissioner**  
**Texas Commission on Environmental Quality**  
**Austin, TX**

In his current role as Commissioner at Texas CEQ, Baker establishes overall agency direction and policy and makes final determinations on contested permitting and enforcement matters. Baker also serves as Governor Abbott's appointee to the Gulf Coast Ecosystem Restoration Council, represents Texas as the chair on the Gulf of Mexico Alliance Management Team, and

serves on the Coastal Land Advisory Board.

Prior to his appointment, Baker was a policy and budget advisor on energy, natural resources and agriculture issues for the Governor's Office, where he was also the liaison between the office and members of the Legislature, constituents, the Railroad Commission of Texas, the TCEQ, the Texas Parks and Wildlife Department, the Texas Department of Agriculture, and the Texas Animal Health Commission. He is a past natural resource policy advisor to Sen. Craig Estes, and the former director and clerk of the Texas Senate Subcommittee on Agriculture, Rural Affairs and Coastal Resources.

Baker received a bachelor's degree from Texas A&M University, where he was a member of the Corps of Cadets, and a Master of Public Service and Administration from the Texas A&M George Bush School of Government and Public Service. He is also a graduate of the National Outdoor Leadership School and the Governor's Executive Development Program at the University of Texas LBJ School of Public Affairs.

**Senate Committee on Environment and Public Works  
Subcommittee on Clean Air and Nuclear Safety  
Hearing on Cooperative Federalism Under the Clean Air Act  
April 10, 2018  
Commissioner Toby Baker, Texas Commission On Environmental Quality**

Thank you Chairman Capito, Ranking Member Whitehouse, and members of the Environment and Public Works Subcommittee on Clean Air and Nuclear Safety. For the record, my name is Toby Baker. I am a commissioner of the Texas Commission on Environmental Quality, otherwise known as the TCEQ, and I am here to give the Texas perspective on cooperative federalism under the Clean Air Act. At the outset I would like to say that after my prepared testimony I am happy to answer any questions you may have, but due to ex parte laws I cannot discuss any ongoing permitting or enforcement matters that have not yet come before the commission. If you have any questions regarding any issue that I cannot discuss, I can have the appropriate member of our staff get back to you.

The Texas Commission on Environmental Quality is the third largest environmental regulatory agency in the United States behind the EPA and California. We have close to 3,000 employees across 16 regional offices, with our largest regional office being located in Houston as you may have guessed. By authority delegated to our agency, we regulate water quality, air quality, and waste in Texas. I'd like to first highlight several facts about Texas that I believe were made possible through the tradition of cooperative federalism, that as you know, was built into the federal clean air act and a number of other federal regulatory statutes.

Starting with the amendments to the clean air act in the early 90s, Texas turned a corner in environmental regulation and has become one of the leading states in environmental success relative to our environmental challenges. We currently produce one-third of the nation's crude oil. Thirty percent of all refining capacity is located within our borders and a quarter of all U.S. natural gas production comes from Texas. Balancing this, we also are the largest wind producing state in the U.S. with over 20,000 megawatts of capacity. Solar energy production is ramping up and, if you consider the projects we have in queue, we should have close to 3500 megawatts of utility scale solar constructed or being built by 2019. To sum up, we produce and consume more energy than any other state.

In addition, the population of Texas is increasing rapidly. Since 2000, it is estimated that our population has grown by over 8 million. It is no secret that Texas is hot, and these 8 million newcomers to the state have no doubt discovered the benefits of air conditioning. It is also no secret that Texans like their cars, and 8 million new Texans, moving primarily to already heavily populated areas, adds a number of new vehicles to our transportation system. One could assume an increase in population coupled with our robust manufacturing sector would lead to increased emissions, but in reality the opposite has occurred.

Since the late 90s, we have seen a dramatic drop in both NOx emissions and Ozone emissions. While we have occasional bouts with other criteria pollutants, ozone is our most pressing. Since 2000 we have been one of the top states in reducing ozone emissions. In fact, in the latest ranking of dirtiest cities by the American Lung Association, Texas does not have a city in the top 10. Given the fact that the Houston area is essentially the kitchen for a good portion of the US, and that it has prime ozone making

weather, it's frankly astounding. Our emissions in our major metropolitan areas are currently driven more by mobile sources than any point source. CO<sub>2</sub> is worth mentioning as well. While Texas produces more CO<sub>2</sub> than any other state, the per capita production, according to EIA, puts us at 14 when ranking the states. If we are objective about it, I would argue that we are a model for efficiency.

So what has led to our success? At a high level, I believe it can be attributed to, among other things, (1) a tradition of cooperative federalism that has allowed Texas to tailor its own unique solutions to our own unique problems, (2) a market that has led to maximizing efficiency in the refining sector, and (3) cleaner burning vehicles.

And since cooperative federalism is the topic of this panel, I believe is a pivotal component of the national environmental regulatory framework. Congress, in enacting many of our major environmental laws including the Clean Air Act, has chosen to delegate the implementation and enforcement of those laws to the states, which have the flexibility and regional expertise necessary to fairly and efficiently put those laws into effect. My agency, the TCEQ, is the delegated agency for the majority of environmental programs in Texas and we have seen over the years how cooperative federalism has worked and how it could be improved.

First and foremost, the benefits of cooperative federalism done correctly were on full display during our response to the worst natural disaster in recent memory for the State of Texas—Hurricane Harvey. Before and after Harvey made landfall both EPA headquarters and Region 6 coordinated closely with the TCEQ and other state agencies to ensure all necessary fuel waiver requests were processed as expeditiously as possible. As a result of this cooperation, requests were usually granted in a matter of hours. Compare that to previous hurricanes, where such waivers would be processed over several days because the EPA took more of a “wait and see” approach. Similarly, EPA staff rapidly processed TCEQ's request for No Action Assurance (NAA) letters concerning vapor controls at gasoline terminals, tank tightness of transport trucks, and landing of floating roofs on gasoline storage tanks. EPA's rapid response and close coordination with TCEQ in approving the fuel waivers and NAA letters helped ensure the flow of gasoline and diesel products throughout Texas and numerous other states.

The previous administration also worked well with TCEQ in transitioning all of the Greenhouse Gas permitting under the Tailoring Rule from the EPA to Texas. Recognizing the ability of a particular state to handle the application load under a certain rule is yet another great example of how cooperative federalism should work in a national regulatory scheme.

While these are some examples of cooperative federalism under the Clean Air Act done correctly, we have also seen the opposite. For example, under the previous administration the EPA often promulgated new National Ambient Air Quality Standards (NAAQS) before plans had been fully implemented for the existing NAAQS. And in the rush to do so, the EPA routinely failed to issue timely guidance to implement the NAAQS. This causes a problem for states that have a multiyear planning and approval process for developing a State Implementation Plan (SIP) because the EPA would then disapprove a SIP that did not follow guidance issued after the SIP process is underway or sometimes even after it is complete. The goal of cooperative federalism is to avoid this absurd and wasteful result.

Another goal of cooperative federalism is to ensure federal Clean Air Act rulemaking is timely. Meaningful cooperation with the states can avoid regulations that are not appropriate to current circumstances in a given state or region. Take, for example, the Clean Power Plan, which would have

imposed significant economic and electric reliability strains on the State of Texas to attain emission reduction benchmarks in a very short time frame that the state has consistently maintained would be met anyway under existing market conditions. Specifically, Texas is currently on pace to nearly hit the initial emissions reduction benchmark of the Clean Power Plan several years ahead of schedule--and all without the rule being in place. This is directly attributable to low cost natural gas and saturation of wind generation into our competitive power market.

Nevertheless, I am pleased to see under this administration a return to the historical norm of a SIP-oriented approach to Clean Air Act enforcement and implementation. By diverting from a "FIP first" approach, the EPA has enabled individual states to implement and enforce federal standards in a manner allowing for greater flexibility and efficiency. This, in turn, leads to both a greater diversity in problem solving methods that are tailored to each state's natural environment, as well as more predictability and consistency in enforcement. Our agency's Texas Emission Reduction Program or TERP, is a perfect example of a state exercising the freedom to solve air pollution issues in its own creative way. That program provides a financial incentive to address emissions from mobile sources through accelerated fleet turnover, and it has reduced roughly 180,000 tons of NOx from mobile sources—which is important because, as referenced earlier, the majority of NOx emissions in Texas comes from mobile sources.

That concludes my testimony. I want to thank you for the opportunity to visit with you today. I am available to answer any questions you may have.

**Senate Committee on Environment and Public Works  
Subcommittee on Clean Air and Nuclear Safety  
Hearing entitled, “Cooperative Federalism Under the Clean Air Act: State Perspectives.”  
April 10, 2018  
Questions for the Record for Commissioner Baker**

**Chairman Barrasso:**

1. Commissioner Baker, many of the issues states face when implementing the Clean Air Act stem from EPA’s consistent inability to meet statutorily mandated deadlines.
  - a. Can you explain how this problem interferes with the planning process on the state level, and leads to wasted resources?
  - b. Should Congress change the deadlines?

Historically, National Ambient Air Quality Standards (NAAQS) revisions and their associated increase in regulatory requirements have often been accompanied by belated or a complete lack of implementation guidance from the United States Environmental Protection Agency (EPA) and/or expedited timelines for review and implementation for states. To reduce uncertainty for states throughout the state implementation plan (SIP) planning process, and to ensure that resources are properly allocated, states must receive thorough guidance from the EPA in a timely manner.

For the 2008 ozone NAAQS, the EPA proposed a SIP requirement rule on June 6, 2013, approximately one year after final designations were made. The EPA did not finalize the rule until March 6, 2015, almost two years following the proposal and only four months prior to the July 20, 2015 submittal deadline for attainment demonstration and reasonable further progress (RFP) SIP revisions for moderate areas. As a result, the Texas Commission on Environmental Quality (TCEQ) had to begin the technical work to develop the SIP revision prior to guidance even being proposed. The SIP revision was proposed for the Dallas-Fort Worth (DFW) nonattainment area in December 2014 and the rule was final in March 2015, creating uncertainty in the planning process.

When the 2008 ozone standard SIP requirements rule was finalized, the attainment year for moderate nonattainment areas was changed from 2018 to 2017 due to a D.C. Circuit Court ruling in late 2014. Due to the timing of the court ruling and the EPA’s final SIP requirements rule, it was not possible to complete all work necessary for the DFW attainment demonstration SIP revision to demonstrate attainment in 2017 prior to the due date for this SIP revision. To meet the July 2015 statutory deadline, the TCEQ had to submit the attainment demonstration for a 2018 attainment year that had already been proposed and had to invest additional time and resources to develop and submit a new attainment demonstration SIP revision the following year for the revised 2017 attainment year.

In addition, the final 2008 ozone standard SIP requirements rule also eliminated the option to transfer creditable volatile organic compounds (VOC) reductions

between county groups for demonstrating RFP. Because the DFW RFP SIP revision that was adopted in 2015 used this option, the TCEQ had to correct the adopted DFW RFP analyses to remove the VOC reduction transfer and develop and submit a technical supplement the following year to address this implementation change.

To ensure efficient and cost-effective implementation of the NAAQS, a presidential memorandum issued on April 12, 2018 directed the EPA Administrator to issue timely implementation rules and guidance when establishing or revising NAAQS, specifying that such rules and guidance be issued concurrently with new or revised standards and that they specify the information that is relevant to the submission and consideration of SIPs.

Also, attached is a TCEQ response to questions from Congressmen Olson and Latta concerning NAAQS review and implementation issues.

2. Commissioner Baker, in *South Coast Air Quality Management District v. EPA*, the U.S. Court of Appeals for the D.C. Circuit invalidated EPA's approach to revoke the 1997 ozone standard and instead implement the more stringent 2008 ozone standard. If ultimately upheld, this decision has significant implications for state regulators such as yourself because you would have to conduct separate modeling and permitting to meet both of these standards until EPA resolves the issue.
  - a. Do you believe this decision will force you to use your limited resources to conduct duplicative and unnecessary modeling and permitting work?
  - b. Will this additional burden result in greater environmental protection?
  - c. What is the practical result of this decision on highway projects, which may require transportation conformity determinations by the state?
  - d. How could this decision affect other Clean Air Act programs, such as New Source Review?
  - e. Is Congressional action needed to address the uncertainty created by the decision?

While the direct result of the decision does not appear to create additional photochemical modeling work for the TCEQ, a significant amount of emissions modeling work is anticipated to be needed to address vacatur of the EPA's anti-backsliding provisions in its implementation rule for the 2008 ozone standard. Part of this work will be duplicative for the TCEQ because redesignation substitutes were submitted to the EPA for the 1997 as well as the one-hour ozone standard for the Houston-Galveston-Brazoria (HGB) and DFW areas. These redesignation substitutes included most of the substantive elements of a formal redesignation request, including full emissions inventory projections for a 10-year period after EPA approval.

The TCEQ submitted, and the EPA approved, three redesignation substitutes, each taking more than 10,000 hours of staff time to complete. These efforts were in addition to the submission of a "termination determination" request made under

previous EPA policy guidance to remove the requirement for collecting FCAA, §185 fees for the HGB area, later determined to be an invalid alternative. If the ruling is upheld and the redesignation substitutes are found to be invalid, the TCEQ would need to resubmit much of the same information, including new emissions inventory projections, in formal redesignation requests to address anti-backsliding requirements for both the DFW and HGB areas for both previously revoked standards. If upheld, the ruling may also require the TCEQ to submit formal redesignation requests for the Beaumont-Port Arthur and El Paso areas. Each of these SIP revisions would take more than 10,000 hours of staff and contractor time to complete for each area. It is unclear what additional environmental benefit will be gained from requiring this effort, given that all of these areas are currently attaining both of these revoked standards.

The requirements of the transportation conformity process, as it currently applies, could result in delays for transportation projects if the court ruling is upheld. While the TCEQ cannot be certain of the practical result of this decision on highway projects, and we would defer to Texas Department of Transportation (TxDOT) for any estimates, the decision could result in affected areas being required to demonstrate transportation conformity for several applicable NAAQS, each with potentially applicable motor vehicle emissions budgets. Each applicable budget being addressed in an area's transportation conformity demonstration requires a budget-year regional emissions inventory for comparison with the applicable motor vehicle emissions budget. Adding budgets to the process from previously revoked standards will require additional emissions inventories for different analysis years, which would result in additional work for the metropolitan planning organizations and state air quality planning entities (such as the TCEQ) subject to conformity requirements, including analysis and documentation.

Depending on EPA's response to the outcome of the appeals of the decision, the South Coast opinion could result in TCEQ Air Permits Division's reevaluation of numerous pending permit applications for federal new source review nonattainment permit applicability. Air quality permitting major source thresholds, significance levels, and emission offset requirements are determined by the designation and classification level that applies in a nonattainment area. Some areas in Texas were classified at more stringent classification levels under the revoked one-hour and 1997 ozone NAAQS than currently applicable for the 2008 ozone NAAQS.

However, at the current time, the TCEQ is waiting for the mandate to be issued by the D. C. Circuit Court of Appeals, and to see what EPA's response will be at that time, such as issuance of guidance or rulemaking. Judgment in the South Coast case will be effective upon issuance of the mandate which is required to be issued seven days after the court denies EPA's petition for rehearing or motion for stay of the mandate, whichever is later. The court can shorten or extend this time. Depending upon the outcome of the case, if a party petitions the U.S. Supreme



Court for further review, they can request that the mandate be stayed, but the D.C. Circuit does not have to grant the request.

**Congressional action to clarify the requirements for states for revoked standards could provide certainty for all interested parties, federal and state governmental entities, regulated industries, and the public.**

3. Commissioner Baker, I understand that conformity requirements have already caused significant delays for highway projects that have cost your state over \$62 million. How can the transportation conformity program be improved to minimize delay and unnecessary project expense without negative environmental impact? In your view, should Congress amend the Clean Air Act to clarify that transportation conformity requirements apply only to the most recent NAAQS for each pollutant to provide long-term certainty to states and project developers? Are other changes needed?

The process of demonstrating compliance with transportation conformity requirements can take an affected area several months, and this can delay transportation projects, as TxDOT found in research it conducted for a 2017 proposal to reform the Federal Clean Air Act (FCAA) transportation conformity requirements. TxDOT's proposal included suggested reforms to both process and applicability.

In addition to TxDOT's 2017 reform proposal, a bill was introduced to the United States Senate on August 3, 2017 that would reform transportation conformity requirements, Senate Bill 1756 – Rebuild America Now Act. The reforms include removing applicability for marginal nonattainment areas and maintenance areas, and removing applicability for any affected area until 180 days after EPA approves the motor vehicle emissions budget applicable for that standard. Transportation conformity requirements currently apply to all areas designated nonattainment, including marginal areas, or maintenance by the EPA. Conformity also currently applies within one year of designation whether an affected area has an approved motor vehicle emissions budget or not. The reforms included in Senate Bill 1756 would also apply transportation conformity requirements only to the most recently issued NAAQS for a pollutant.

Transportation conformity reforms are also included in the *Legislative Outline for Rebuilding Infrastructure in America*, the White House framework for rebuilding infrastructure in America. Specifically, the framework outlines transportation conformity reforms related to establishing motor vehicle emissions budgets before conformity applies in an affected area and applying conformity requirements only to the most recently issued NAAQS for a pollutant.

4. Commissioner Baker, EPA recently issued guidance encouraging more deference to states on enforcement actions. Do you think that guidance is a step in the right direction, and would you suggest other improvements?

**Yes, close coordination with us is always helpful.**

5. Commissioner Baker, can you explain some of the problems with modeling nonattainment designations? Isn't it preferable to use real world data?

**The TCEQ supports the use of ambient air quality monitoring data rather than modeling data for making nonattainment designations and identifying nonattainment and maintenance receptors. The TCEQ does not support the use of modeling as the basis for designations or the sole basis for identifying receptors for transport. Modeling is a useful predictive tool to estimate and evaluate air quality, but have inherent inaccuracies and limitations. Such actions have serious consequences to industry, the economy of an area, its citizens, and the state. Using modeling for these actions could result in major capital expenditures for industry to "fix" something that may not be a real problem. To base these actions on modeling is inconsistent with historical and present EPA policies. For example, the EPA does not redesignate areas to attainment when an area models attainment as part of an attainment demonstration SIP. The EPA uses monitoring data to verify attainment before redesignating.**

**Ranking Member Carper:**

Please provide a response to each question, *including each sub-part*.

6. In the President's EPA budget for fiscal year 2019, there are deep cuts to EPA programs, especially for funds that help assist state air programs<sup>1</sup>. What would these budget cuts mean for your state if Congress adopted the President's budget for fiscal year 2019?

*The following information is not a direct answer to #6, rather it is a summary regarding the funding the TCEQ air programs expect to receive from EPA in FY19.*

**TCEQ receives Section 105 performance partnership grant (PPG) funding that primarily supports national air initiatives associated with air monitoring, modeling, emissions inventories data collection, mobile source activities, compliance inspections, enforcement and complaint response, assessment and planning activities, and five air pollution control programs in non-attainment areas via pass-through grants from TCEQ.**

**Expected FY19 Federal: \$6,900,000**

**The Texas Particulate Matter of 2.5 Microns or Less (PM2.5) Ambient Air Monitoring Program was developed to provide data that may be used to determine compliance with the national ambient air quality standard (NAAQS) as required by the Federal Clean Air Act. PM2.5 special purpose monitors (SPM) are operated to provide additional air quality data for analysis and modeling.**

**Expected FY19 Federal: \$1,686,549 (based on FY18 award)**

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<sup>1</sup> <https://www.epa.gov/planandbudget/fy2019>

7. In your testimony, you mentioned that most of Texas's current air pollution problems stem from transportation.
- a. How important are strong federal standards for light- and heavy duty vehicles for cleaner air in Texas?

From 1999 to 2018, it is estimated that the total vehicle miles traveled (VMT) in Texas has grown by 30% while on-road NO<sub>x</sub>, VOC, and carbon monoxide (CO) have decreased by 79%, 69%, and 70%, respectively, due to the fleet turnover effects and the associated Federal tailpipe emission standards for both light and heavy-duty vehicles. By 2028, VMT is projected to grow from 1999 levels by 51% with on-road NO<sub>x</sub>, VOC, and CO declining by 90%, 82%, and 80%, respectively.

On-road vehicles are the primary source of ozone NO<sub>x</sub> emissions in most metropolitan areas. For example, on-road NO<sub>x</sub> emissions in DFW were roughly 526 tons per day (tpd) in 1999 and estimated at 106 tpd today, which is an 80% decline of 420 tpd due to fleet turnover. For comparison context, this 420 tpd reduction is over five times larger than the 83 tpd of NO<sub>x</sub> emitted by all DFW area electric generating units (EGUs) back in 1999. Ongoing fleet turnover effects are expected to reduce total on-road NO<sub>x</sub> in DFW down to 50 tpd by 2028, which would be a 91% decrease from 1999. See attached graph/slide (Texas On-Road Vehicle Miles Traveled (VMT) and NO<sub>x</sub> Emission Trends from 1999 through 2050). Most of the NO<sub>x</sub> emissions in Texas' two ozone nonattainment areas are associated with mobile emissions – DFW 78% and HGB 67%.

- b. How important are programs like the Diesel Emission Reduction Act (DERA) for cleaner air in Texas?

In Texas, the state-funded Texas Emissions Reduction Plan (TERP), which pre-dates the implementation of the DERA program, has provided over \$1 billion since 2001 to repower, replace, or upgrade heavy-duty on-road vehicles, non-road equipment, marine vessels, locomotives, and certain stationary engines. The TERP is effective in that it targets mobile sources that emit the majority of NO<sub>x</sub> in the state's ozone nonattainment areas. The state does not have direct regulatory control over these sources and a voluntary incentive program such as TERP has been an important tool in efforts to meet the NAAQS for ozone. The DERA program provides voluntary financial incentives for projects similar to the TERP and the TCEQ supports efforts to address mobile sources of emissions that are difficult to regulate at the state level.

- c. Are you concerned about EPA's actions to relax mobile source emission standards? If not, why not?

Greenhouse gas standards are not a consideration in TCEQ's planning for addressing NAAQS compliance.

8. As I mentioned in the hearing, Senator Udall and I sent a letter<sup>2</sup> to EPA regarding concerns about a proposal that would allow some of the dirtiest heavy-duty diesel trucks, called glider trucks, to circumvent clean air cleanups. Glider trucks look like new trucks outside, but are equipped with old, high-polluting diesel engines on the inside. As we state in the letter, according to internal agency research - not released until after EPA published this proposal - a new 2017 glider truck can emit up to 450 times the particulate matter (PM) pollution, and up to 43 times the nitrous oxide (NOx) pollution, of model year 2014 and 2015 trucks. Other EPA analyses concluded that, if left unregulated, glider vehicle emissions could prematurely kill thousands of people, and increase instances of lung cancer, chronic lung disease, heart disease, and severe asthma attacks. This is additional pollution that will be emitted in my state, in your state and states across the country. I fear that if this proposal went final, it could further burden states already struggling to meet ambient air health standards.

- a. Do you support the EPA's November 16, 2017 proposal to repeal air emission standards for glider trucks? If so, why? If not, why not?

**Based on the summary of the proposed EPA action in the November 16, 2017 edition of the *Federal Register* (Vol. 82, No. 220) the EPA is basing its action on an interpretation of the Federal Clean Air Act (FCAA) under which it would not have authority to regulate glider vehicles, glider engines, or glider kits under CAA section 202(a)(1). The TCEQ has not undertaken its own legal analysis of the issue and, therefore, we would not be able to comment on the reasoning behind the EPA's decision to repeal the standards.**

- b. Are you as troubled as I am that this proposal appears to largely benefit a single company? If not, why not?

**The EPA's reasoning for proposing the repeal of the standards appears to be based on its interpretation of its authority under the FCAA. The TCEQ is not providing an opinion regarding the legal basis for that determination or how the decision may benefit particular entities.**

- c. Comments on the glider proposal submitted by the Diesel Emissions Reduction Act (DERA) Coalition, which is a broad coalition of environmental, public health, industry and state groups who support clean diesel, included the following statement:

"We are concerned that EPA's decision to encourage the continued proliferation of older engines through the glider industry would increase emissions from medium and heavy-duty vehicles and undermines the

<sup>2</sup> <https://www.epw.senate.gov/public/index.cfm/2018/3/carpenter-udall-question-epa-decision-to-repeal-air-emissions-standards-for-high-polluting-glider-trucks>

work of the Coalition and cooperative federalism with the EPA and states.”<sup>3</sup>

Do you share the DERA Coalition’s concerns? If not, why not?

**The TCEQ has not analyzed the impacts, if any, of the availability of glider kits in Texas on the air quality in the state.**

- d. Removing gliders from the definition of a new motor vehicle will also mean that California will not need a Section 209 waiver to enforce its own glider standards, which are currently set as the same as federal standards, but could get tighter over time. At the same time, all other states would be free to set their own standards, also without first needing to request a waiver from EPA, setting up a patchwork of state standards for gliders. Would it be better to retain the federal standard or finalize the glider proposal that will create regulatory uncertainty and the potential for 50 different state standards for the industry?

**The TCEQ has not analyzed the impacts, if any, on the ability for states to set their own standards without needing an EPA waiver. However, the difference in NOx emissions from a Glider Kit using a remanufactured 2006 diesel engine and drive train in use over a 10-year period instead of a new 2018 diesel tractor-trailer combination haul truck is the new diesel truck would emit approximately 92% less NOx than the glider kit and engine over a 10-year period. This is based on an assumed annual usage of 60,000 miles per year. This would equate to 4 total tons more NOx in 10 years or 0.4 tons more NOx per year. The TCEQ does not have any estimates on how many glider kits may be purchased in Texas if the EPA rules are changed.**

Glider Kit w/2006 remanufactured engine and drivetrain:

NOx: 2.375 (g/bhp-hr)  
Assumed Usage: 60,000 miles/year  
Period of Use: 10 years

New 2018 Diesel Truck:

NOx: 0.2 (g/bhp-hr)  
Assumed Usage: 60,000 miles/year  
Period of use: 10 years

- e. Should the federal government continue to focus on replacing and retrofitting dirty diesel engines, rather than putting dirty diesel engines back on the road? Why or why not?

**The TCEQ supports efforts to replace, repower or retrofit older diesel engines through programs such as the TERP program, which has funded over \$1 billion in projects since 2001 to replace or upgrade mobile sources of emissions through voluntary incentives. As stated in response to earlier questions, the TCEQ is not**

<sup>3</sup> <http://www.lung.org/assets/documents/advocacy-archive/dera-coalition-comments-re.pdf>

**providing a opinion on the legal basis for EPA's determination that it lacks authority under the FCAA to impose the standards on glider kits.**

**Senator Whitehouse:**

9. You are on the record as stating that "the science is still out" on climate change. Given the unprecedented damage caused by Hurricane Harvey as well as scientific research demonstrating that sea levels along the Texas coast are rising faster than almost anywhere else in the country – up to six times faster than they were 100 years ago – do you still believe that there is no scientific consensus about the nature and causes of climate change?

**Greenhouse gas emissions are regulated by the TCEQ through the Prevention of Significant Deterioration and Title V Operating air permit programs, both required by the Clean Air Act.**

10. Do you support the proposed cuts to EPA programs funding state clean air initiatives?

**I am unaware of the impact of the allocations at this time.**

11. Do you believe that climate change is occurring and that it is caused by human emissions of greenhouse gases?

**Greenhouse gas emissions are regulated by the TCEQ through the Prevention of Significant Deterioration and Title V Operating air permit programs, both required by the Clean Air Act.**

## Responses to Questions in Congressmen Olson and Latta's February 12, 2016 Letter

- 1) What are some aspects of the Clean Air Act that you find especially useful when it comes to implementation of the NAAQS?

As an overall comment, there are parts of the Clean Air Act that could be useful but due to the way the EPA implements the act these aspects are not as useful as they could be.

- The flexibility to use market-based approaches to reduce emissions and comply with certain requirements of the Act.
- The ability to exclude exceptional events from monitor data. However, the EPA has not approved many of these events for Texas and often the EPA is slow in their response so the state has to continue as if there were no exceptional events.
- The ability for states to demonstrate that a nonattainment area would meet the NAAQS but for emissions from areas outside of the United States.

- 2) What provisions or requirements [does] Texas have more difficulty with?

- Required five-year review of the NAAQS: When the EPA revises the NAAQS frequently, as they have done with ozone recently, there are overlapping standards with differing nonattainment requirements and sometimes differing nonattainment counties for each standard. This, coupled with delays in implementation of the NAAQS leads to burdensome and duplicative SIP planning for states and confusion among the regulated community and the public.
- Mandated ozone precursor emissions reduction requirements for rate of progress (ROP) and reasonable further progress (RFP): Currently, Section 182 requires that newly designated ozone nonattainment areas classified as moderate or above must reduce volatile organic compound (VOC) emissions by 15% within 6 years of the area's nonattainment designation. All ozone nonattainment areas classified as moderate or above are required to reduce VOC and/or nitrogen oxide (NO<sub>x</sub>) emissions by an average of 3% per year through the area's attainment deadline. As reductions in emissions continue to occur from state and federal air regulations and as the EPA continues to lower the ozone standard, these required emissions reductions will become more difficult to achieve. Further, the required 15% reduction in VOC emissions does little to improve air quality in Texas since reductions in NO<sub>x</sub> are most effective in reducing ozone in most areas of the state.

- 3) How smoothly can states like yours transition from one NAAQS to another for the same pollutant (i.e. from 75ppb ozone to 70 ppb), and if there are difficulties what might make this transition more achievable?

- Transition from one NAAQS to another is difficult, especially when guidance and rulemaking necessary for states to plan for transitioning to the new NAAQS is not provided in a timely manner.

## Responses to Questions in Congressmen Olson and Latta's February 12, 2016 Letter

There is little direction in the Clean Air Act that addresses how the EPA and states should transition from one NAAQS to another. Provisions for transition from one NAAQS to another and, in particular, a schedule that gives states enough time to plan for a revised standard and requires the EPA to revoke the previous standard in a timely manner would be useful.

- 4) What additional authority or procedural change would be most effective in helping Texas achieve clean air more efficiently?
- Require the EPA to develop implementation regulations and guidance before states are required to begin development of revisions to their SIPs to comply with a new or revised NAAQS.
  - Allow states to demonstrate that an area would meet the NAAQS but for emissions from outside the United States during the designations process so that states aren't required to develop nonattainment plans for an area that would otherwise be meeting the NAAQS.
  - Require the EPA to act on exceptional events requests in a timely manner. The EPA should respond to the requests within six to nine months (see attached response to Representative Olson regarding exceptional events). When disapproving an exceptional event request, the EPA should also be required to provide a level of proof that is reasonable or the equivalent of a preponderance of evidence, rather than what amounts to a burden of proof, that could be considered either beyond reasonable doubt or beyond a shadow of doubt.
  - Change the Act to sync planning and implementation obligations for interstate transport with nonattainment planning and implementation obligations. Interstate transport requirements should be finalized at least a year before attainment demonstrations are due so as to allow state's attainment demonstrations to incorporate this information to avoid local or federal over-control due to these requirements not being synchronized.
  - The current three-year intervals between attainment deadlines for ozone nonattainment areas classified as marginal, moderate, and serious should be changed to six-year intervals. If an area does not meet an attainment date and is bumped up to the next classification, states often have less than 3 years (often 2) to conduct analysis to determine reductions needed, develop a new future case modeling scenario, develop any additional control strategies, have stakeholder meetings, propose and adopt rules and a SIP revision (which often takes a year by itself), and then give industry adequate time to comply (often 6-24 months), and then have the emission reductions show up in a 3-year average of monitoring data. The federal system of reclassification sets states up to fail in bump up situations. States should not be penalized or expected to ask for voluntary double bump ups and bear the associated impacts on permitting and other actions just to compensate for an unwieldy FCAA requirement.



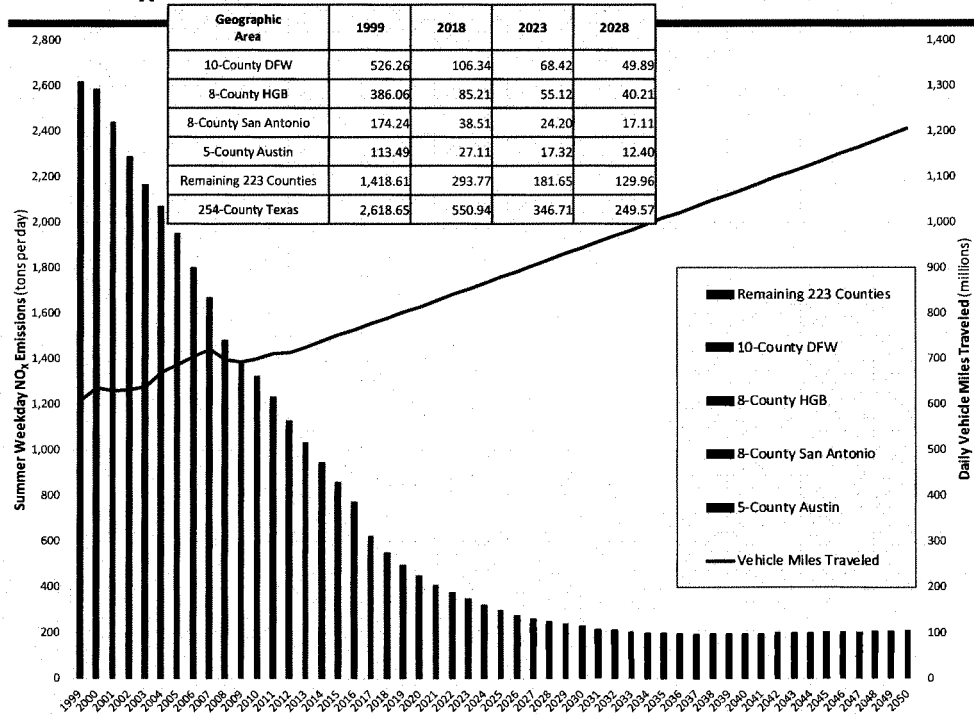
**Responses to Questions in Congressmen Olson and Latta's February 12, 2016 Letter**

- **Change the Act to require the EPA to determine attainment and nonattainment designations only through the use of monitoring data rather than modeling data. The magnitude and impacts of such a decision should require that any nonattainment problem be known rather than predicted.**

Source: Texas Transportation Institute On-Road Trends Study for 1999-2050 with MOVES2014, August 2015, which is available at [http://amdaftp.tceq.texas.gov/El/onroad/mvs14\\_trends/](http://amdaftp.tceq.texas.gov/El/onroad/mvs14_trends/).



## Texas On-Road Vehicle Miles Traveled (VMT) and NO<sub>x</sub> Emission Trends from 1999 through 2050



Senator CAPITO. Thank you.  
Mr. Rodriguez.

**STATEMENT OF MATTHEW RODRIGUEZ, CALIFORNIA SECRETARY FOR ENVIRONMENTAL PROTECTION, CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY**

Mr. RODRIGUEZ. Thank you, Chair Capito, Ranking Member Whitehouse, and other Subcommittee members for inviting me to testify.

I am Matthew Rodriguez, Secretary of the California Environmental Protection Agency. I will describe how the Federal-State partnership created in the Clean Air Act has provided an extraordinarily successful example of cooperative federalism.

Since the Clean Air Act was comprehensively amended in 1970 emissions of the Nation's most common air pollutants have fallen by an average of 70 percent, even as our economy grew by 246 percent. By 2020 the Act's economic benefits will total \$2 trillion.

The Act has spurred the use of clean technologies that drive business opportunity. New refinery equipment reduces waste and improves worker safety and also improves the health of people in nearby neighborhoods.

Idle reduction and electric vehicle technologies for cars, trucks, and school buses have cut fuel costs, engine wear, and greenhouse gas and smog emission.

Cooperative Federal and State efforts have built this record of achievement. The Federal Government provides minimum standards and resources to States. States tailor solutions for their individual communities.

Unfortunately, today this relationship has been put in jeopardy. USEPA, through a series of recent hasty and ill conceived actions, is attempting to weaken landmark safeguards with the result that the States have been forced to spend resources to fill the gap. I will provide several examples and have provided more in my written remarks.

In adopting the Clean Air Act, Congress gave California the option to develop its own emission standards and have other States to adopt them as well because California has technical expertise and experience and could drive innovation.

Using this framework, 13 States—including California—auto-makers, and the Federal Government operated a coordinated national program to set rigorous and fair standards for greenhouse gases and fuel economy for cars and trucks.

USEPA's findings last year show this collaboration has been very successful. It is estimated that we will save roughly 1.2 billion barrels of oil, cut greenhouse gas emissions by over half a billion metric tons and save the average consumer thousands of dollars over a vehicle's life. Moreover, these standards have helped U.S. auto-makers stay competitive in the global market.

It is deeply disappointing that the Administration recently announced its intention, without meaningfully consulting with its partner States, to weaken and potentially dismantle this program. The result is huge uncertainty for industry and huge risks for the public.

We are prepared to take action as necessary, including legal action, to protect this program and restore the balance to this cooperative relationship.

Similarly, the Clean Air Act gives USEPA the authority, indeed the responsibility, to fight global warming and control greenhouse gases. Using this authority, the agency developed a Clean Power Plan through a transparent process to set attainable greenhouse gas reduction targets by 2030.

The plan offers an array of State planning options to meet these targets. With a plan in place, States were working collectively on implementation strategies. The Trump administration's proposal to repeal the Clean Power Plan threatens to curtail this progress and shirks its responsibility under the Act.

Many States—including California—are stepping in with their own programs to reduce greenhouse gas emissions. Without Federal leadership, we lack a national vision to modernize our power sector and respond to climate change.

Federal-State cooperation is also at the core of our national program to make sure our air meets basic standards to protect public health. Ordinarily, USEPA sets science based maximum levels for air pollution. States then develop plans to maintain these thresholds.

These standards are critical because smog can trigger asthma attacks, worsen heart conditions, and damage agricultural production.

The current EPA administration, however, has refused to designate areas in compliance or not in attainment with Federal standards, and instead, announcing an extended delay before even starting this process.

When 15 States and the District of Columbia filed suit over this illegal step, USEPA withdrew this formal delay, but still did not do anything. We had to go to court again to require USEPA to do its job.

States rely on our Federal partners to ensure that factories and power plants have strong pollution controls. However, just a few months ago the USEPA revoked the once-in, always-in policy that ensures that major sources of toxic air pollution are all subject to strict controls. These toxic air pollutants include lead, mercury, and arsenic, which can cause cancer and damage the nervous system.

Under the new policy, these pollution sources can drop out of the program and increase their emissions again. States again will have to do their best to develop programs to clean and protect the air. It means diverting resources that could address other public health threats.

Achieving the goal of clean air is about protecting our communities. We achieve this goal most effectively in partnerships with the public, with industry, and with the Federal administration.

The key to success is a strong and vigorous EPA. This is why we appreciate Congress' resistance to proposed budget cuts to the agency and its core programs, including its grant programs. It is why we also appreciate the Federal workers who have stayed with the program through this period of uncertainty.

This will not be enough if USEPA continues to walk away from its responsibilities. If they do, the States will do what they must

to protect the health of our people, our economies, and our environments.

We will use all our available tools to ensure that the USEPA is again there to work with us and not against us.

Thank you very much.

[The prepared statement of Mr. Rodriguez follows:]



**Matthew Rodriguez**  
**California Secretary for Environmental Protection**  
**California Environmental Protection Agency**  
**Sacramento, CA**

Matthew Rodriguez was appointed Secretary for Environmental Protection by Governor Edmund G. Brown Jr. in July 2011. As Secretary, Matt oversees six boards, departments and offices within CalEPA, and advises the Governor on environmental policy. Matt comes to CalEPA with over 25 years of environmental experience with the California Department of Justice. Matt formerly served as a Deputy Attorney General, specializing in land use and environmental law, Chief Assistant Attorney General for the Public Rights Division in 2009, and prior to his role as Secretary, Acting Chief Deputy Attorney General for Attorney General Kamala D. Harris. Matt graduated from UC Berkeley, and received his JD from UC Hastings College of the Law.

**Testimony of Matthew Rodriguez,  
Secretary, California Environmental Protection Agency  
Before the Senate EPW Subcommittee on Clean Air and Nuclear Safety  
“Cooperative Federalism Under the Clean Air Act: State Perspectives”**

I am Matthew Rodriguez, Secretary of the California Environmental Protection Agency. Thank you Chairman Capito, Ranking Member Whitehouse, and other Subcommittee Members for inviting me to testify. I will describe how the federal-state partnership created in the Clean Air Act has provided an extraordinarily successful example of cooperative federalism. It has enhanced the protection of public health for nearly 50 years, while spurring innovations that have benefitted businesses and communities. My testimony will also discuss recent hasty and ill-considered actions that threaten to weaken or eliminate these protections, while undercutting our ability to care for our people and our economy.

Current efforts to undo clean air safeguards threaten to end years of exceptional results for people in California and across our country. Since the Clean Air Act was comprehensively amended in 1970, emissions of the nation's most common air pollutants have fallen by an average of 70 percent, even as our economy grew by 246 percent.<sup>i</sup> By 2020, the Act's economic benefits will total \$2 trillion, and exceed costs by 30 to 1.<sup>ii</sup>

The Act has spurred the use of clean technologies that drive business opportunity. New refinery equipment reduces waste and improves worker safety and the health of people in nearby neighborhoods. Idle-reduction technologies for cars, trucks, and school buses cut fuel costs, engine wear, and pollution. Gas-electric hybrids and electric vehicles curtail greenhouse gas and smog emissions. The federal EPA should not hurriedly turn its back on this record of success, and leave businesses, workers and the public behind.<sup>iii</sup>

Joint federal and state efforts have built this record of achievement. The federal government provides minimum standards and resources to states, and states tailor solutions for their communities.<sup>iv</sup> Today, that leadership is in jeopardy as U.S. EPA attempts to weaken landmark safeguards, and states are forced to spend resources to fill the gap. Here are several examples of where we must get back on track.

### **Working to Dismantle Shared, Rigorous, Vehicle Air Pollution Standards**

Thirteen states, including California, automakers, and the federal government operate a coordinated national program to set rigorous and fair standards for greenhouse gases and fuel economy for cars and trucks.<sup>v</sup> U.S. EPA's findings last year show the program will save roughly 1.2 billion barrels of oil, cut greenhouse gas emissions by over half a billion metric tons, and save the average consumer more than a thousand dollars over a vehicle's life.<sup>vi</sup>

After years of collaborative work between U.S. EPA, the National Highway Traffic Safety Administration, and the California Air Resources Board (CARB), it has been demonstrated that the standards are achievable – maybe even conservative – and helping U.S. automakers stay competitive in the global market.<sup>vii</sup> So, it is deeply disappointing that the Trump Administration recently announced its intention to weaken and potentially dismantle the program – without meaningfully consulting with California, and despite overwhelming public opposition.

As we prepare to withstand this rollback, it is important to remember that the partnership now under attack is a long-standing and successful one.<sup>viii</sup> Ever since California scientists and engineers led the way to start cleaning up Los Angeles's smog in the 1960s, Congress has recognized the special role states can serve to help drive innovation in this sector. That's why from the very beginning, Congress gave California the ability not to dictate national standards, but to adopt its own emissions standards given its recognized technical expertise and its unique experience with automobile pollution. And, subject to receiving a waiver from U.S. EPA, other states are allowed to adopt California's standards.<sup>ix</sup> Through the years, U.S. EPA has granted dozens of waivers to support our program,<sup>x</sup> and many states have chosen to adopt California's standards.

Now that this collaboration has been challenged, we are prepared to take action, including legal action, to protect our program if necessary. It is time to restore our cooperative relationship in order to promote the public's interest and protect public health.

### **Keeping Old and Polluting Trucks on Our Roads and in Our Communities**

Our relationship is also strained by the dirty and dangerous trucks called "gliders" – which are essentially old polluting truck engines placed in new truck bodies, and sold as new. Gliders can emit 50 to 450 times as much deadly particle pollution as modern



vehicles, and up to 40 times as much smog-forming NO<sub>x</sub>, as U.S. EPA's own testing shows.<sup>xi</sup> Until recently, U.S. EPA was using its legal authority to ensure the glider loophole was closed and these heavily polluting trucks were out of our communities and off our roads.

But last year, in a surprise move, U.S. EPA reversed its legal position and proposed to let these trucks onto highways across the country.<sup>xii</sup> This is unfair to law-abiding truck manufacturers, and will put highly polluting vehicles in our cities, towns and transportation corridors. There is no good reason for this move. The federal Clean Air Act supports glider truck controls, and the public, the states, and the truck industry oppose the reversal.<sup>xiii</sup> California is stepping up and spending state resources to create our own safeguards, but enforcement is far more difficult than it would be with the federal standards in place.<sup>xiv</sup> Moreover, other states may not be able to put rules in place. The result – unless U.S. EPA reverses course – will be to create a huge polluting loophole in our nation's trucking programs that can harm neighborhoods throughout the country.

#### **Failing to Fight Climate Change**

As the U.S. Supreme Court has reinforced three times now, the federal Clean Air Act gives U.S. EPA the authority and the responsibility to fight global warming and control greenhouse gases.<sup>xv</sup> Although many states are taking action, we need the federal government to demonstrate leadership and provide strong policies and investments to combat the existential threat of climate change. Instead, the Trump Administration is proposing to abandon its legal responsibilities under federal law and its obligations to current and future generations.

The Administration's proposal to repeal the Clean Power Plan – which reinforces the power sector's move away from high-emitting sources – is the best example.<sup>xvi</sup> The Clean Power Plan was built on cooperative federalism: through a well-publicized and transparent process, it set highly attainable targets to reduce greenhouse gas emissions by 2030, and offered a wide array of state planning possibilities and flexibilities to meet these targets.<sup>xvii</sup> With the Plan in place, states across the country were working together and exploring their options. In fact, California was able to determine it could comply ten years early, and submitted a compliance plan.<sup>xviii</sup> Other states have continued to make progress, too, because moving away from dirty and expensive fossil power just makes economic and

environmental policy sense.<sup>xix</sup> But without federal leadership, we lack a national vision or plan to modernize our power sector.

There are many other examples. For instance, U.S. EPA was reprimanded by the federal courts for illegally delaying its commonsense methane standards for the oil and gas sector,<sup>xx</sup> but U.S. EPA continues to attempt to weaken these protections. It has flatly refused to enforce methane standards for landfills, even though it is required to do so. A multi-state coalition has put it on notice that we will go to court if necessary to protect the standards.<sup>xxi</sup>

The list goes on: We had to go to court to insist that the Trump Administration comply with Congress's direction to ensure fuel economy penalties keep up with inflation,<sup>xxii</sup> and to maintain greenhouse gas planning targets for highway investments.<sup>xxiii</sup> We had to go to court to maintain federal rules limiting wasted, polluting, gas from federal oil and gas leases from spewing into the air.<sup>xxiv</sup> And when U.S. EPA refused to continue to defend critical limits on global warming super-pollutants, we wrote state rules to control these pollutants in place of the federal program.<sup>xxv</sup>

The bottom line is that, in the face of the most pressing environmental crisis of our time, the federal partners we need are instead proposing to rescind, withdraw and ignore the programs and plans we need to protect our people, economy and environment. This forces states to spend their limited resources trying to hold onto progress, and to step into the gaps rollbacks create. We should be aligning our efforts to confront these threats, rather than being left to fill in the void.

#### **Slow Walking the Clean Up of Smog**

Federal-state cooperation is also at the core of our national program to make sure our air meets basic standards to protect public health. Ordinarily, U.S. EPA sets science-based maximum levels for air pollution; the states then develop plans to meet and maintain these thresholds.<sup>xxvi</sup> The nation's standards for smog, a potent health threat, are critical. It can trigger asthma attacks, worsens heart conditions, keeps kids and the elderly indoors, and can even damage our agricultural crops.

U.S. EPA has not done its job on helping to reduce smog pollution. It refused to designate areas in compliance or not in attainment with federal standards, instead

announcing an extended delay before even starting the process.<sup>xxvii</sup> When 15 states and the District of Columbia filed suit over this illegal step,<sup>xxviii</sup> U.S. EPA withdrew the formal delay – but still did nothing. Months passed. We had to go to court again to get a court order to force U.S. EPA to do its job.<sup>xxix</sup> There is no reasonable explanation for why our federal partners have delayed the implementation of these critical public health safeguards.

#### **Failing to Protect Communities From Dirty Smokestacks**

States rely on our federal partners to ensure that factories and power plants have strong pollution controls. However, just a few months ago, U.S. EPA revoked the “Once-In, Always-In” policy that ensures these major sources of toxic air pollution are always subject to strict controls.<sup>xxx</sup> These toxic air pollutants include lead, mercury and arsenic, which can cause cancer and damage the nervous system, including to the most vulnerable in society, children and developing fetuses.

Under the new policy, these pollution sources can drop out of the program and increase their emissions again – a move that independent experts predict could steeply increase toxic emissions at many sites.<sup>xxxi</sup>

This is not the only rollback on smokestack pollution. The Administration has repeatedly issued new policies weakening the rigor of the federal pollution control programs – including policies that make it easier for huge sources of air pollution to avoid using feasible controls to reduce emissions.<sup>xxxii</sup>

People live next door to smokestacks all across this country, and it is often the communities with the fewest resources that bear the greatest pollution impacts. They deserve protection. States will do their best to provide it, but that means diverting resources needed to address other public health threats. States should not have to spend limited resources to protect their people because U.S. EPA is weakening existing protections.

#### **Proposing Inadequate Resources**

We need a strong and vigorous U.S. EPA. That is why we so appreciate that this Congress resisted the damaging proposed budget cuts to the agency, and is maintaining core federal programs, including grant programs. Protecting public health is our greatest responsibility and an investment in our future. We need to keep supporting the states, and federal workers, who protect us all.

## Conclusion

Achieving the goal of clean air is about protecting our communities. We achieve that goal most effectively when we work together in partnership – with the public, with industry, and with the federal administration. That is the structure Congress wisely established many years ago, and it has proven successful. U.S. EPA should not walk away from this decades-old success story. If it does, states will do what they must to protect the health of our people and use all of our available tools to ensure that U.S. EPA is there to work with us, not against us.

<sup>i</sup> See U.S. EPA, *Progress Cleaning the Air and Improving People's Health*, available at: <https://www.epa.gov/clean-air-act-overview/progress-cleaning-air-and-improving-peoples-health>.

<sup>ii</sup> See U.S. EPA, *The Benefits and Costs of the Clean Air Act from 1990 to 2020* (March 2011), available at: <https://www.epa.gov/sites/production/files/2015-07/documents/summaryreport.pdf>.

<sup>iii</sup> California Air Resources Board, *California's Advanced Clean Cars Midterm Review* (January 2017), available at: [https://www.arb.ca.gov/msprog/acc/mtr/acc\\_mtr\\_finalreport\\_full.pdf](https://www.arb.ca.gov/msprog/acc/mtr/acc_mtr_finalreport_full.pdf).

<sup>iv</sup> See, e.g., 42 U.S.C. § 7416 (protecting state authority to develop rules more stringent than federal baseline standards); 42 U.S.C. § 7410 (state planning process to meet federal standards); 42 U.S.C. §§ 7411 & 7412 (federal criteria and toxic pollution programs, developed to be implemented with the states); 42 U.S.C. §§ 7507 & 7543 (recognition of state vehicle pollution standards).

<sup>v</sup> See California Air Resources Board, *Advanced Clean Cars Program*, available at: <https://www.arb.ca.gov/msprog/acc/acc.htm>.

<sup>vi</sup> U.S. EPA, *Final Determination on the Appropriateness of the Model Year 2022-2025 Light-Duty Vehicle Greenhouse Gas Emissions Standards under the Midterm Evaluation* (January 2017), available at: <https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P100QQ91.pdf>. See also California Air Resources Board, *California's Advanced Clean Cars Midterm Review* (Jan. 2017).

<sup>vii</sup> See *id.*; see also California Air Resources Board, *California's Advanced Clean Cars Midterm Review* (Mar. 2017), available at: [https://www.arb.ca.gov/msprog/acc/mtr/acc\\_mtr\\_finalreport\\_full.pdf](https://www.arb.ca.gov/msprog/acc/mtr/acc_mtr_finalreport_full.pdf).

<sup>viii</sup> See Ann Carlson, *Iterative Federalism and Climate Change*, *Journal of the UCLA School of Law* (2008), available at: <https://escholarship.org/content/qt7pc2n5qc/qt7pc2n5qc.pdf>.

<sup>ix</sup> 42 U.S.C. §§ 7543 & 7505.

<sup>x</sup> See U.S. EPA, *Vehicle Emissions: California Waivers and Authorizations*, available at: <https://www.epa.gov/state-and-local-transportation/vehicle-emissions-california-waivers-and-authorizations>.

<sup>xi</sup> Chassis Dynamometer Testing of Two Recent Model Year Heavy-Duty On-Highway Diesel Glider Vehicles, November 20, 2017, Docket No.: EPA-HQ-OAR-2014-0827-2417.

<sup>xii</sup> See 82 Fed. Reg. 53,442 (Nov. 16, 2017).

<sup>xiii</sup> See, e.g., Testimony of Dr. Steve Cliff, Deputy Executive Officer, California Air Resources Board (Dec. 4, 2017), available at: <https://www2.arb.ca.gov/testimony-opposing-epas-proposed-repeal-emission-requirements-glider-vehicles-glider-engines-and>.

<sup>xiv</sup> See Sacramento Bee, "California's pollution cops might crack down on big rigs" (Feb. 27, 2018), available at: <http://www.sacbee.com/news/local/environment/article201578939.html>.

<sup>xv</sup> See *Massachusetts v. EPA*, 549 U.S. 497 (2007); *American Electric Power Co. v. Connecticut*, 131 S.Ct. 2527 (2011); *Utility Air Regulatory Group v. U.S. EPA*, 134 S.Ct. 2427 (2014).

<sup>xvi</sup> 82 Fed. Reg. 48,035 (Oct. 16, 2017).

<sup>xvii</sup> See 80 Fed. Reg. 64,662 (Oct. 23, 2015).

<sup>xviii</sup> See California Air Resource Board, *California's Compliance Plan for the Federal Clean Power Plan* (July 27, 2017), available at: <https://www.arb.ca.gov/cc/powerplants/meetings/07272017/final-proposed-plan.pdf>.

<sup>xix</sup> See, EDF, "Climate and clean energy progress continues in spite of Clean Power Plan repeal rumors" (Oct. 6, 2017), available at: <http://blogs.edf.org/energyexchange/2017/10/06/climate-and-clean-energy-progress-continues-in-spite-of-clean-power-plan-repeal-rumors/>.

<sup>xx</sup> See *Clean Air Council v. Pruitt*, 862 F.3d 1 (2017).

<sup>xxi</sup> See The Hill, "States threaten to sue Trump EPA for delay in enforcing landfill pollution rule", available at: <http://thehill.com/policy/energy-environment/380008-states-threaten-to-sue-trump-epa-for-delay-in-enforcing-landfill>.

<sup>xxii</sup> See *States of New York, California, Vermont, and Maryland, and the Commonwealth of Pennsylvania v. National Highway Traffic Safety Administration*, United States Court of Appeals for the Second Circuit (Case Nos. 17-2780 & 17-2806).

<sup>xxiii</sup> See *California et al. v. U.S. Department of Transportation et al.*, United States District Court for the Northern District of California (Case No. 4:17-cv-05439); see also Streetsblog, "FHWA Reinstates Clean Air Rule for Transportation" (Sept. 25, 2017), available at: <https://cal.streetsblog.org/2017/09/25/fhwa-reinstates-clean-air-rule-for-transportation/>.

<sup>xxiv</sup> See *State of California et al. v. U.S. Bureau of Land Management*, United States District Court for the Northern District of California (Case No. 3:17-cv-07186-WHO).

<sup>xxv</sup> See *Mexichem Fluor, Inc. v. U.S. EPA*, United States Court of Appeals for the District of Columbia Circuit (Case Nos. 15-1328 and 15-1329); see also InsideClimateNews, "California Bans Climate-Warming HFCs in New Air Conditioning and Refrigeration" (Mar. 30, 2018), available at: <https://insideclimatenews.org/news/30032018/california-hfc-ban-short-lived-climate-pollutants-global-warming-refrigerators-air-conditioners>.

<sup>xxvi</sup> See generally 42 U.S.C. §§ 7408-7410.

<sup>xxvii</sup> See 82 Fed. Reg. 29,246 (June 28, 2017).

<sup>xxviii</sup> See *State of New York et al. v. U.S. EPA*, United States Court of Appeals for the District of Columbia Circuit, Case No. 17-1185 (filed Aug. 1, 2017).

<sup>xxix</sup> *In re Ozone Litigation*, - F. Supp. 3d -, 2018 WL 1258209 (Mar. 12, 2018).

<sup>xxx</sup> See U.S. EPA, *Reclassification of Major Sources as Area Sources Under Section 112 of the Clean Air Act*, available at: [https://www.epa.gov/sites/production/files/2018-01/documents/reclassification\\_of\\_major\\_sources\\_as\\_area\\_sources\\_under\\_section\\_112\\_of\\_the\\_clean\\_air\\_act.pdf](https://www.epa.gov/sites/production/files/2018-01/documents/reclassification_of_major_sources_as_area_sources_under_section_112_of_the_clean_air_act.pdf).

<sup>xxxi</sup> See, e.g., Environmental Integrity Project, *Toxic Shell Game: EPA Reversal Opens Door to More Hazardous Air Pollution* (March 26, 2018), available at: <http://www.environmentalintegrity.org/wp-content/uploads/2017/02/Toxic-Shell-Game.pdf>.

<sup>xxxii</sup> See, e.g., E&E Daily, "Pruitt backs off enforcement of power plant program" (Dec. 8, 2017), available at: <https://www.eenews.net/stories/1060068533>; Bloomberg News, "EPA Clears the Air for Polluters With U.S. Factor Emissions Rules" (Mar. 13, 2018), available at: <https://www.bloomberg.com/news/articles/2018-03-13/epa-clears-the-air-for-polluters-on-u-s-factor-emissions-rules>.

**Senate Committee on Environment and Public Works**  
**Subcommittee on Clean Air and Nuclear Safety**  
**Hearing entitled, “Cooperative Federalism Under the Clean Air Act: State Perspectives.”**  
**April 10, 2018**  
**Questions for the Record for Secretary Rodriguez**

**Ranking Member Carper:**

Please provide a response to each question, *including each sub-part*.

1. Under this EPA, what are the biggest air challenges that you are facing in California and what support do you need from the Federal government to tackle those challenges?

California has long faced unique and pressing air quality challenges. Although we have made very substantial progress,<sup>i</sup> because of the state’s topography and climate far too many Californians live in areas that do not yet comply with state and federal ambient air quality standards.<sup>ii</sup> Conditions we expect due to climate change, including hotter days that may generate more ozone smog, will make it even more difficult to ensure Californians are breathing healthy air.<sup>iii</sup> Climate change is also threatening California in many other ways. Thus, we need ongoing federal support in setting rigorous public health standards for air quality, in ensuring that planning can proceed as expeditiously as possible to meet these standards, and in taking strong federal action to control climate change-causing greenhouse gas emissions. We are concerned, as my testimony indicates, that we have had to take U.S. EPA to court to help ensure it continues to provide this critical support.

2. What are the economic implications for California if the state does not have a strong federal partner to address these air pollution challenges?

U.S. EPA’s own analysis has shown that achieving the 70 parts per billion ozone NAAQS would provide up to \$4.5 billion in benefits nationwide, and an additional \$1.3 billion in benefits in California.<sup>iv</sup> To meet this ozone standard, California needs U.S. EPA to take strong action to reduce emissions from interstate trucks, new locomotives, and other sources that U.S. EPA has primary responsibility to regulate. Without a strong federal partner, California will suffer the economic cost of continued pollution. Federal inaction may also place some California businesses at an economic disadvantage compared to other states’ businesses that would not be subject to the same emissions controls as California businesses.

3. In 1995, EPA established a “once-in, always-in” policy under the Section 112 Clean Air Act air toxic program. This policy prevented major sources of air toxic pollution – such as lead, arsenic and mercury - from backsliding on their Clean Air Act air toxic requirements. In January 2018, Administrator Pruitt’s EPA withdrew this policy without any public comment or public health analysis. EPA claimed at the time the change would encourage facilities to implement voluntary pollution abatement and prevention efforts. However, we know from history and experience that voluntary actions by industry do not, alone, reduce air toxic pollution.

- a. Secretary Rodriguez, how do you think the “once in, always in” policy change effect your state?

California has a rigorous air toxics program, but we generally depend on federal standards where they exist. This policy change will weaken federal protections, meaning we will see increased toxic emissions in California unless we create additional state regulatory safeguards. Thus, U.S. EPA’s action creates a dangerous and costly problem where none formerly existed. We are now in the untenable position of either accepting increased levels of toxic air pollution or spending limited state resources to address the problem U.S. EPA chose to create. Accordingly, we are in court with U.S. EPA to insist that they restore the once-in, always-in policy because it is a critical tool for protecting Californians from toxic air pollution.<sup>v</sup>

- b. Could withdrawing the “once in, always in” policy increase air toxic emissions and threaten communities across the nation?

Yes. Credible reports by third-parties suggest that very substantial toxic increases are possible.<sup>vi</sup> Removing federal legal requirements to control toxic air pollution may result in sources choosing to increase their emissions.

- c. Do you believe major sources will voluntarily abate emissions lower than current emissions? If not, why not

Although some sources may choose to do the right thing and continue to reduce emissions, there is no assurance this would always occur. Some emissions sources may unreasonably decide to avoid or delay the costs of applying pollution control technologies. The federal air toxics program has been successful because it ensures that all major sources play by the same rigorous rules. Reducing emissions controls on these sources risks increasing their pollution levels, which may endanger public health.

4. In an internal 2005 EPA document, EPA regional staff cautioned that withdrawing the “once in, always in” policy would mean “many sources would take limits less stringent than MACT requirements” and the policy change would be “detrimental to the environment and undermine the MACT program.”<sup>vii</sup> The regional EPA staff explained that the policy change would mean major air toxic sources “could virtually avoid regulation and greatly complicate any enforcement against them” and “the cost of the increased [hazardous air pollutant] emissions would be borne by the communities surrounding the sources.”<sup>viii</sup> The regional EPA staff were so concerned about revoking the “once in, always in” policy, they stated EPA should not make the policy change without looking “closely at this issue to determine whether the likely benefits would be greater than the potential environmental costs.”<sup>ix</sup> Do you agree with these statements and does it concern you EPA has withdrawn the “once in, always in” policy without any public health modeling or analysis?

I agree that the risks posed by this policy change are very serious. Certainly, no change should be made without a full and transparent public process, including a thorough analysis of the potential

public health effects. Such a sweeping reversal in the control of dangerous air toxics should have been made only after consulting the public, states, and U.S. EPA expert staff.

5. The Clean Air Act's National Ambient Air Quality Standards, or NAAQS, program establishes a federal-state partnership for reducing common air pollutants that endanger human health, including ozone – also known as smog. Under the Clean Air Act, EPA is required to designate which areas of the country have unhealthy ozone areas and/or contribute to downwind air quality problems. This process is vital for states to effectively plan, and reduce pollution crossing state borders. Instead of following the law, U.S. EPA Administrator Pruitt has so far failed to do his job and refused to designate who is living in areas with unhealthy ozone. States frustrated with the delay had to sue U.S. EPA. A court last month ordered U.S. EPA to follow the law and issue air quality designations.

- a. In your view, does cooperative federalism mean states have to file lawsuits in order to force EPA to uphold its responsibility?

No. U.S. EPA has a legal responsibility to make these designations in a timely fashion. Diverting state resources to repeatedly litigate this issue is costly and inefficient; the resulting delays also defer the attainment planning process.<sup>x</sup> The result is that members of the public suffer longer from unhealthy air. These delays are contrary to the basic structure of the Clean Air Act, which depends upon a strong state and federal planning partnership.

- b. When EPA ignores its Clean Air Act responsibilities, does that ultimately hurt states – and industry - because of the ongoing uncertainty?

Yes. U.S. EPA's own economic studies demonstrate that clean air planning provides substantial economic benefits by keeping people healthy and providing incentives for clean technology development.<sup>xi</sup> Delays, like the ones that U.S. EPA has unfortunately created, make it harder to establish planning frameworks to continue this progress.

6. During EPA Air Director Bill Wehrum's previous tenure as Acting EPA Air Director under President George W. Bush, he attempted to insert political leadership early in the science-based NAAQS-setting process. Do you support this idea? If not, why not?

The Clean Air Act directs U.S. EPA to establish ambient air quality standards solely based on science; indeed, the Act requires a scientific review committee to independently review the standards to ensure that they are scientifically rigorous.<sup>xii</sup> It would be entirely inappropriate for political considerations to influence this process. Medical science – not political expediency – must determine whether the air is healthy to breathe.

7. EPA Air Director Bill Wehrum is said to be looking at speeding up the NAAQS review process, possibly shortening the scientific review process. Do you support this idea? If not, why not?



In the absence of a specific proposal all I can say is that in general people charged with protecting public health must not let a desire for speed trump the need for science. Much of the Clean Air Act's success has come from the thorough grounding of air quality standards in data, and the existing process has provided immense public health and other benefits to people in California and in other states.

8. How does EPA's actions relaxing federal standards such as New Source Review, light-duty and heavy-duty vehicle standards and air toxic rules hurt California's ability to meet and maintain NAAQS standards and achieve clean air?

U.S. EPA's actions are unhelpful and harmful. California's State Implementation Plan depends substantially on continuing reductions from both mobile and stationary sources. Although California's state laws are in some areas more rigorous than the federal standards,<sup>xiii</sup> federal efforts to roll back controls within federal areas of responsibility ultimately require us to spend additional state resources to fill gaps or resist unwarranted rollbacks. The result is unnecessary expenses for California and, potentially, increased pollutant exposures if we cannot fully address U.S. EPA's actions. It would be preferable for U.S. EPA to be a good partner as we work to attain air quality standards. Please also see my response to questions three and four with regard to the air toxics rules.

9. In October 2017, EPA issued a proposal to repeal the Clean Power Plan, which addresses carbon dioxide pollution from our nation's largest industrial sources of carbon pollution, existing power plants.

- a. Do you agree that repealing the Clean Power Plan only provides greater uncertainty for the power industry and puts communities at further risk to the impacts of climate change?

As California's formal comments on the proposed repeal of the Clean Power Plan (CPP) state,<sup>xiv</sup> power sector emissions reductions are critical to addressing climate change and can be achieved cost-effectively. Indeed, California's compliance plan for the CPP<sup>xv</sup> demonstrates that California's long-standing efforts to deploy energy efficiency, renewable power, and cleaner energy technology have positioned California to comply approximately a decade early. Measures like those California employed are broadly in use throughout the country and many states and utilities were poised to comply with the CPP. Delaying, weakening, or repealing the CPP impedes the development of a regulatory framework that assists companies and communities in consistently deploying these measures. The result is increased and undue uncertainty, and greater climate risk.

- b. As someone from a coastal state, what is EPA's obligation when it comes to climate change? Is this a clear example of cooperative federalism?

Sea-level rise is among the threats to public health and welfare that U.S. EPA recognized in its formal Endangerment Finding for greenhouse gases, and that threat continues to be serious. California faces ongoing sea-level rise resulting from climate change. It is an immediate and real threat to lives, livelihoods, transportation infrastructure, economic activity, and the environment

in California.<sup>xvi</sup> As the courts have confirmed, the Clean Air Act's cooperative federalism structure requires U.S. EPA to act to address these issues.

- c. Please explain how the Clean Power Plan allowed states the flexibility to meet emission goals and continue current state actions that address climate change?

The CPP provided a broad range of flexibilities. States may comply with the CPP via their own state measures, may adopt federal framework plans, and may use rate or mass-based compliance frameworks. This extensive flexibility, coupled with clear federal standards for emissions reductions, is consistent with U.S. EPA's successful, decades-long approach to controlling emissions under the Clean Air Act.

- d. California has already acted on climate change, has the state seen any co-benefits from reducing carbon pollution? What other benefits have the state seen from carbon-reduction programs?

Climate change adversely affects various aspects of environmental quality and will result in direct and indirect negative impacts on human health. Cutting greenhouse gases helps to avoid or reduce these harmful impacts. California has seen reductions in premature mortality, hospitalizations, and emergency room visits as a result of reductions in localized air pollution required by policies and regulations targeting carbon pollution. CARB estimates that implementing measures to achieve California's 2030 GHG target will result in avoided health impacts valued from \$1.2 to \$1.8 billion, and approximately 3,300 avoided premature deaths in 2030.<sup>xvii</sup>

Moreover, as California has made environmental progress, our economy has continued to expand. We are already the fifth-largest economy in the world, and we expect continued growth at approximately 2.2% annually, resulting in a state Gross Domestic Product (GDP) of approximately \$3.4 trillion in 2030, even as we slash emissions by 40% from 1990 levels.<sup>xviii</sup> Job growth continues; in 2015, for instance, California added 20,000 jobs in the solar sector alone – half of all solar jobs nationally.<sup>xix</sup> We expect our continued efforts to build a clean economy to come with employment opportunities for all Californians.

In addition, greenhouse gas reduction programs can lead to avoided environmental damages, the value of which can be estimated using the social cost of carbon, which is a tool for monetizing the value of the net impacts from global climate change. The social cost of carbon dioxide emissions includes damages related to changes in agricultural productivity, energy use, human health, property damage from floods. It also includes nonmarket damages like the services that natural ecosystems provide to society.<sup>xx</sup> Using the social cost of carbon, California estimates that achieving the 2030 GHG target will result in avoided environmental damages ranging from \$1.9 to \$11.2 billion.

10. EPA is considering replacing the Clean Power Plan with regulations that will have very little, if any, carbon emission reductions from the power sector and will likely increase electricity costs and traditional air pollution emissions, such as sulfur dioxide. Harvard's School of Public Health recently reported that if the agency focused solely on an "inside

the fenceline” approach as proposed in the 2017 Advanced Notice of Proposed Rulemaking (ANPRM), there would be an estimated increase in sulfur dioxide emissions by 3% and could result in premature lives lost.<sup>xxi</sup> At the same time, a majority of the carbon dioxide emission reductions and all the energy efficiency measures in the Clean Power Plan are not included in the ANPRM. It is difficult to even compare the ANPRM with the Clean Power Plan, which will save an estimated 3,500 lives and reduce electricity bills by \$85 a year. Do you have concerns with the EPA’s ANPRM? If so, please explain.

California is concerned that the ANPRM indicates U.S. EPA is not considering all effective options for greenhouse gas control from the power sector. States have demonstrated that cost-effective systems are available to reduce these emissions. U.S. EPA should help implement these systems. Instead, the ANPRM revives discredited arguments that U.S. EPA long ago discarded, and appears to steer towards illegally weak pollution reductions. As California’s officials have testified to U.S. EPA,<sup>xxii</sup> this is unwarranted. CARB’s extensive technical comments in the formal ANPRM docket demonstrate, in detail, that stronger controls are possible and required.<sup>xxiii</sup>

11. As I mentioned in the hearing, Senator Udall and I sent a letter<sup>xxiv</sup> to EPA regarding concerns about a proposal that would allow some of the dirtiest heavy-duty diesel trucks, called glider trucks, to circumvent clean air cleanups. Glider trucks look like new trucks outside, but are equipped with old, high-polluting diesel engines on the inside. As we state in the letter, according to internal agency research - not released until after EPA published this proposal - a new 2017 glider truck can emit up to 450 times the particulate matter (PM) pollution, and up to 43 times the nitrous oxide (NOx) pollution, of model year 2014 and 2015 trucks. Other EPA analyses concluded that, if left unregulated, glider vehicle emissions could prematurely kill thousands of people, and increase instances of lung cancer, chronic lung disease, heart disease, and severe asthma attacks. This is additional pollution that will be emitted in my state, in your state and states across the country. I fear that if this proposal went final, it could further burden states already struggling to meet ambient air health standards.

- a. Do you support the EPA’s November 16, 2017 proposal to repeal air emission standards for glider trucks? If so, why? If not, why not?

CalEPA does not support U.S. EPA’s proposal to repeal common sense and fair air emission reduction standards for glider trucks. As Dr. Steve Cliff, CARB’s Deputy Executive Officer testified at a U.S. EPA hearing, the proposed rule would expose the public to dangerous pollution if finalized.<sup>xxv</sup> Modern trucks can comply with lower pollution standards, and the Clean Air Act requires that U.S. EPA apply these standards fairly, without exempting “glider” vehicles. The proposed repeal rule is legally unfounded, and technically unnecessary. CARB’s extensive comments on this proposal address these matters in detail, as do comments filed by California Attorney General Becerra.<sup>xxvi</sup>

- b. Are you as troubled as I am that this proposal appears to largely benefit a single company? If not, why not?

Yes. U.S. EPA's rules should be based on the science and the law and protect the public as a whole. As Dr. Cliff's testimony explains:

"[T]he proposed repeal would legitimize the actions of the glider industry, which... has been blatantly circumventing emission control requirements and undermining the vast majority of businesses that play by the rules and clean up their trucks. It has been a major undertaking on the part of US manufacturers to integrate complex emission controls into their heavy-duty diesel engines. They have done so successfully over the last decade, making today's diesel trucks the cleanest ever, but this has come at a high price, literally. To comply with current emission standards, heavy-duty engine manufacturers have made significant financial investments and have structured their future product plans taking these investments and emission control commitments into account. ...[I]f EPA continues to shirk its duty to protect the public's health and welfare and our nation's air quality, by manufacturing a loophole that exempts glider vehicles from new vehicle requirements, and by inappropriately defining glider vehicles as not new vehicles and allowing unbridled glider production, it would put engine manufacturers that have invested significant resources to comply with current emission standards at a competitive disadvantage and perhaps even force them to initiate dirty glider vehicle production as well."

- c. Comments on the glider proposal submitted by the Diesel Emissions Reduction Act (DERA) Coalition, which is a broad coalition of environmental, public health, industry and state groups who support clean diesel, included the following statement:

"We are concerned that EPA's decision to encourage the continued proliferation of older engines through the glider industry would increase emissions from medium and heavy-duty vehicles and undermines the work of the Coalition and cooperative federalism with the EPA and states."<sup>xxvii</sup>

Do you share the DERA Coalition's concerns? If not, why not?

I share these concerns. U.S. EPA's proposal undercuts cooperative federalism and needed protection for clean air. As Dr. Cliff discussed:

"The proposed glider repeal would have a profoundly harmful impact on public health, and would put at risk states' efforts to meet federal ambient air quality standards and State Implementation Plan commitments. The repeal would effectively place thousands of outdated heavy-duty engines that do not meet the modern emission standards that have been in effect during the last decade on our highways. In short, a repeal puts our most disadvantaged communities at risk by walking away from the commitment to reduce their exposure to smog forming and toxic pollutants that impact public health leading to hospitalizations, asthma cases, lost work and school days, and premature deaths."

- d. Should the federal government continue to focus on replacing and retrofitting dirty diesel engines, rather than putting dirty diesel engines back on the road? Why or why not?

Yes. By any measure, U.S. EPA should continue focusing on replacing and retrofitting dirty diesel engines. Diesel particulate emissions are known to cause cancer. Federal efforts should protect the public from this pollution, rather than enabling the use of dirty trucks. U.S. EPA should abandon its efforts to repeal the glider rule.

**Senator Markey:**

12. On April 12, 2018, President Trump issued a memorandum on the National Ambient Air Quality Standards (NAAQS). In this memorandum, President Trump ordered the Environmental Protection Agency (EPA) to speed up its reviews and processing of permits and plans under the Clean Air Act, including processing State Implementation Plans (SIPs) within 18 months and preconstruction permit applications within one year.

- a. Can you describe for me the process for California to create SIPs for regulations under the Clean Power Plan? Please include detail on how much time and public engagement is required to create a comprehensive SIP

Development and adoption of a California SIP is typically a two-year process. The first half of the process is focused on developing the scientific and technical foundation for the SIP. Most critically, this phase includes working closely with any affected industries to ensure we are using the latest and most accurate data, and are in agreement with industry on the pollution they emit and their contribution to dangerous levels of air pollution. The second half of the process is the development of pollution reduction measures in the SIP through an extensive public process including outreach to industry, government officials and the public. California's experience in developing many SIPs demonstrates that general consensus among the public and industry stakeholders can occur on effective actions to reduce dangerous levels of pollution.

- b. Do you think an unfunded mandate to speed up processing will result in better review of SIPs?

No. SIPs are complicated, technical documents necessary to protect the public interest and public health. Haste in the review process is not appropriate and will not result in better decision making. Careful and thorough consideration of SIPs is critical to ensuring they achieve the Clean Air Act's mandates and protect the public.

- c. What might the public health consequences be of a federal mandate that requires a shorter process for creating SIPs in states like California?

SIPs deliver public health benefits because they are carefully designed and scientifically grounded. Although we must act as quickly as possible on air pollution challenges, we must also act effectively. Artificial deadlines that unnecessarily cut the existing process short may leave

important technical questions partially addressed and jeopardize public health. We have an obligation to be thorough: some regions of California face some of the worst air quality in the country, with corresponding elevated asthma, lung disease, and heart disease risks. These risks apply with particular force to children, the elderly, and people who are already ill. We should not increase risk to these populations by rushing through our planning.

- d. In your opinion, what could EPA or Congress do to improve the SIP review process while still maintaining a strong emphasis on accurate science and air quality protection?

California relies on U.S. EPA to do a strong science-based review of our SIPs. It is important for Congress to provide U.S. EPA with the fiscal and staff resources needed to complete its review in a timely fashion and, more importantly, with accurate science. Using the best available science is the foundation of health-protective SIPs, and the federal budget should not be used as a tool to constrain this needed science.

- 13. On April 24, 2018, EPA Administrator Scott Pruitt announced a proposed rule that would ban EPA from considering studies that include non-public data when developing regulations.

- a. How would this rule impact regulations that EPA establishes in order to carry out its mission of protecting public health, including regulations on clean air?

CalEPA opposes this unnecessary proposal to reduce the use of the best available science in creating needed and legally required protections for public health and the environment. The head of the American Association for the Advancement of Science issued a statement criticizing the rule that appropriately summarizes some of the main concerns with the proposal:

“The [U.S. EPA’s] latest attempt to reject valid scientific evidence fundamentally mischaracterizes the way science is conducted and made available for decision-making. If put into practice, EPA could prohibit, or make it incredibly costly, for the agency to use a wide swath of high-quality scientific research. Despite the political rhetoric, there are existing federal guidelines that require access to the scientific information used for federal policies and regulations. This proposal appears to be an attempt to remove valid and relevant scientific evidence from the rule-making process.”

It is important to note that the Clean Air Act already requires U.S. EPA to carefully consider the science. Certain kinds of studies, including epidemiological studies on individual health outcomes or those that involve confidential business information, may contain information critical to good regulatory design but inappropriate for broad public release. U.S. EPA should not arbitrarily blind itself to these useful and important sources of information.

Neither should the agency adopt a rule that would sow confusion, increase costs and cause delays in state agencies that rely on U.S. EPA to help develop and approve state standards to protect public health and the environment under federally delegated programs.

- b. What might the consequences of this proposed rule be in California, including for the health of citizens?

We rely upon and expect U.S. EPA to use the best available science when it is setting standards or taking other actions to protect the public. If U.S. EPA declines to review or analyze relevant, scientifically critical data simply because not all of it can be shared with every member of the public, U.S. EPA may move more slowly, make uninformed decisions or fail to approve sufficiently protective standards. This would come at considerable cost to public health, the environment and limited state budgets.

14. On January 25, 2018, EPA Assistant Administrator Bill Wehrum issued a guidance memorandum that rolled back the “once in, always in” policy that required major sources of hazardous air pollutants to install the maximum achievable control technology. This policy works to cut down emissions of 187 dangerous toxic pollutants like arsenic, mercury, benzene, and PCBs.

- a. Would the withdrawal of the “once in, always in” policy increase air pollution in your state?

Yes, it has the potential to do so. Please see my answers to questions three and four above.

- b. If so, do you have an estimate of how much or which pollutions may increase in your state?

We do not yet have a firm estimate because the precise impact of the rollback will depend upon the choices of individual facilities. That said, independent analyses of other facilities, discussed above, suggest the potential for significant emissions increases if states do not act to address this rollback.

- c. How many facilities in your state could take advantage of this new guidance?

A review of U.S. EPA databases, including its “ECHO” database suggests over a hundred facilities in California may be in a position to take advantage of this rollback. Because these databases are periodically updated, these figures are not final.

- d. Have any facilities contacted you about taking advantage of this new guidance?

Not yet, although we are carefully monitoring the situation.

**Senator Whitehouse:**

15. Administrator Pruitt has suggested he may attempt to revoke California’s waiver under the Clean Air Act in order to prevent you from maintaining the CAFE standards which the automakers themselves agreed to in 2012. In your view, would a revocation of California’s waiver under the Clean Air Act be consistent with the principle of cooperative federalism?

Although California does not set CAFE standards -- they are set by the National Highway Traffic Safety Administration -- California does set emissions standards under waivers authorized by the Clean Air Act. Revoking California's emissions waivers would be unprecedented and inappropriate. California has regulated mobile source emissions since before U.S. EPA was created. Our standards are responsible for significant improvements in air quality and public health. Unfortunately, even with this improvement California continues to suffer from serious risks caused by mobile source pollution. Weakening California's ability to regulate these sources would be contrary to the Clean Air Act and its long, successful history of cooperative federalism.

16. California has enacted ambitious policies to reduce carbon emissions, but EPA is going in the opposite direction as it attempts to repeal the Clean Power Plan. How does EPA's apparent position that climate change is not real affect California's climate efforts?

Climate change is real and a serious threat to California and, as the Federal Administration's most recent scientific report further confirms, to other states, as well.<sup>xxviii</sup> States, the federal government, and the international community must work together to address climate change. California will continue to implement its climate change programs and work with its partners in the United States and the international community, however, federal rollbacks will weaken our partnerships and distract from our efforts to develop, spread, and implement necessary policies.

17. Do you support the proposed cuts to EPA programs funding state clean air initiatives?

CalEPA opposes cuts to U.S. EPA programs to help fund state clean air protections. These cuts are unhelpful and impede an array of state initiatives that support improved air quality.

18. Do you believe that climate change is occurring and that it is caused by human emissions of greenhouse gases?

Climate change is real, it is occurring, and it is caused by human emissions of greenhouse gases. This is not a matter of belief but rather one of well-established scientific consensus. Climate change is primarily caused by greenhouse gases emitted by human activities. It imperils public health and welfare and is a particularly serious threat to the most vulnerable members of our society. We have a legal and moral obligation to address climate change.

<sup>i</sup> See CARB, *Fifty Year Air Quality Trends and Health Benefits* (Feb. 2018), available at: [https://www.arb.ca.gov/board/books/2018/020818/18-1-2pres.pdf?utm\\_medium=email&utm\\_source=govdelivery](https://www.arb.ca.gov/board/books/2018/020818/18-1-2pres.pdf?utm_medium=email&utm_source=govdelivery).

<sup>ii</sup> See, e.g., CARB, *Air Quality Standards and Area Designations*, available at: <https://www.arb.ca.gov/desig/desig.htm>.

<sup>iii</sup> See, e.g., Los Angeles Times, *Climate Change Threatens California's Air Quality, Report Says*, available at: <http://www.latimes.com/science/sciencenow/la-sci-sn-climate-change-california-air-pollution-officers-20140423-story.html> (Apr. 23, 2014).

<sup>iv</sup> See U.S. EPA, *Regulatory Impact Analysis of the Final Revisions to the National Ambient Air Quality Standards for Ground-Level Ozone* (2015), available at: <https://www.epa.gov/sites/production/files/2016-02/documents/20151001ria.pdf>.

<sup>v</sup> See *California Air Resources Board v. United States Environmental Protection Agency*, United States Court of Appeals, District of Columbia Circuit, Case No. 18-1085.



<sup>vi</sup> See, e.g., Environmental Integrity Project, *New Report Shows Rollback of Federal Air Pollution Control Rule Will Multiply Toxic Emissions* (Mar. 26, 2018), available at: <https://www.environmentalintegrity.org/news/toxic-emissions-rollback-report/>.

<sup>vii</sup> [https://www.npr.org/documents/2006/apr/epa/epa\\_internal\\_letter.pdf](https://www.npr.org/documents/2006/apr/epa/epa_internal_letter.pdf)

<sup>viii</sup> [https://www.npr.org/documents/2006/apr/epa/epa\\_internal\\_letter.pdf](https://www.npr.org/documents/2006/apr/epa/epa_internal_letter.pdf)

<sup>ix</sup> [https://www.npr.org/documents/2006/apr/epa/epa\\_internal\\_letter.pdf](https://www.npr.org/documents/2006/apr/epa/epa_internal_letter.pdf)

<sup>x</sup> See *State of New York, et al. v. United States Environmental Protection Agency et al.*, United States Court of Appeals, District of Columbia Circuit, Case No. 17-1185 and *State of California, et al. v. Scott Pruitt, and the U.S. EPA*; United States District Court for the Northern District of California, Oakland Division; Case No. 4:17-cv-6936-HSG

<sup>xi</sup> See, e.g., U.S. EPA, *The Clean Air Act and the Economy*, available at: <https://www.epa.gov/clean-air-act-overview/clean-air-act-and-economy>.

<sup>xii</sup> See 42 U.S.C. § 7409.

<sup>xiii</sup> See, e.g., California Health & Safety Code § 42500 *et seq.* (barring certain changes to new source review provisions).

<sup>xiv</sup> See CARB Comments on CPP Repeal (2018), available at: <https://www.regulations.gov/document?D=EPA-HQ-OAR-2017-0355-19929>.

<sup>xv</sup> See CARB, *California's Compliance Plan for the Federal Clean Power Plan* (2017), available at: <https://www.arb.ca.gov/cc/powerplants/meetings/07272017/final-proposed-plan.pdf>.

<sup>xvi</sup> See Ocean Protection Council, *State of California: Sea Level Rise Guidance* (2018), available at:

[http://www.opc.ca.gov/webmaster/ftp/pdf/agenda\\_items/20180314/Item3\\_Exhibit-A\\_OPC\\_SLR\\_Guidance-rd3.pdf](http://www.opc.ca.gov/webmaster/ftp/pdf/agenda_items/20180314/Item3_Exhibit-A_OPC_SLR_Guidance-rd3.pdf).

<sup>xvii</sup> [https://www.arb.ca.gov/cc/scopingplan/scoping\\_plan\\_2017.pdf](https://www.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf)

<sup>xviii</sup> See, CARB, *California's 2017 Climate Change Scoping Plan* (2017), available at: [https://www.arb.ca.gov/cc/scopingplan/scoping\\_plan\\_2017.pdf](https://www.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf).

<sup>xix</sup> See *id.* at 13.

<sup>xx</sup> <http://www.nap.edu/2465>

<sup>xxi</sup> <https://chge.hsph.harvard.edu/replacing-clean-power-plan-%E2%80%99Cinside-fence-line%E2%80%99D-alternative-would-do-more-harm-doing-nothing>

<sup>xxii</sup> See *California Testimony on the Proposed Repeal of the Clean Power Plan* (2018), available at: <https://calepa.ca.gov/wp-content/uploads/sites/62/2018/02/Clean-Power-Plan-CA-Testimony-at-U.S.-EPA-02.28.18.pdf>

<sup>xxiii</sup> See CARB Comments on CPP ANPRM (2018), available at: <https://www.regulations.gov/document?D=EPA-HQ-OAR-2017-0545-0393>.

<sup>xxiv</sup> <https://www.epw.senate.gov/public/index.cfm/2018/3/carper-udall-question-epa-decision-to-repeal-air-emissions-standards-for-high-polluting-glider-trucks>

<sup>xxv</sup> See CARB, *Testimony Opposing EPA's Proposed Repeal of Emission Requirements for Glider Vehicles, Glider Engines, and Glider Kits* (2017), available at: <https://ww2.arb.ca.gov/testimony-opposing-epas-proposed-repeal-emission-requirements-glider-vehicles-glider-engines-and>.

<sup>xxvi</sup> See, CARB Comments on the Glider Rule Repeal, available at: <https://www.regulations.gov/document?D=EPA-HQ-OAR-2014-0827-4831> and Comments of Attorney General Becerra *et al.* (2018), available at: <https://www.regulations.gov/document?D=EPA-HQ-OAR-2014-0827-4829>.

<sup>xxvii</sup> <http://www.lung.org/assets/documents/advocacy-archive/dera-coalition-comments-re.pdf>

<sup>xxviii</sup> See U.S. Global Change Research Program, *Climate Science Special Report* (2017), available at: <https://science2017.globalchange.gov/chapter/executive-summary/>.

Senator CAPITO. Thank you, Mr. Rodriguez.  
Mr. Garvin.

**STATEMENT OF SHAWN GARVIN, SECRETARY, DELAWARE DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL**

Mr. GARVIN. Chairman Capito, Ranking Member Whitehouse, Senator Carper, and members of the Subcommittee, my name is Shawn Garvin. I serve as Delaware Secretary of the Department of Natural Resources and Environmental Control.

I would like to thank you for the opportunity to testify on Cooperative Federalism Under the Clean Air Act: State Perspectives. In May 2017 I had the opportunity to testify in front of this Subcommittee on the importance and effectiveness of the Clean Air Act in protecting public health and welfare, preventing premature deaths, and protecting the environment.

I am pleased to be here today to once again address you on my State's perspective of the Clean Air Act and some of the serious challenges downwind States face in meeting attainment standards for air quality.

Ozone forming pollutants are well controlled in Delaware due to the State proactively requiring cost effective controls on a wide range of sources, including power plants, refineries, manufacturing plants, on road vehicles, consumer products, paints and coatings, gas stations, and open burning activities, to name a few.

Despite these efforts, Delaware continues to be challenged in ensuring healthy air to our citizens because we are a downwind State and subject to air pollution transport from facilities in other parts of the country. In fact, over 90 percent of the pollution that contributes to ozone in Delaware is transported from out of State sources.

The answer to solving our ozone problem lies outside of our borders, and we need the Federal Government to recognize the inequity that exists between upwind and downwind States.

EPA has maintained that cooperative federalism is key to maintaining clean air. I would agree that cooperative federalism is invaluable, when it works well, by empowering States to act under Federal law and allowing communities to enjoy the benefits of State innovation.

Positive outcomes can occur when the Federal Government works alongside States to determine best methods to continue progress toward clean air, provides the resources that the States need to enforce their regulations, and steps in when a State fails to meet its obligations.

Progress in downwind States, such as Delaware, require that the Federal Government continue to provide the States with the tools and resources needed to enforce the Clean Air Act. Yet there have been proposed massive cuts in the past two EPA budgets.

Progress also requires that the EPA maintain oversight and step in to ensure that upwind States continue to comply with the good neighbor provision. However, the EPA seems to be pulling back and turning decisions over to the States.

We are also seeing the attempt to reduce regulations at the Federal level, such as repeal and replace of the Clean Power Plan,

weakening of fuel efficiency standards, revocation of the California waiver, and the rollback of the glider truck rule.

In addition, the EPA has also failed to act on Section 126 Petitions, which is one of the ways a State can address problems that lie outside of its borders and seek reductions in emissions contributing to its nonattainment.

All of these actions—or non-actions—will have serious consequences for downwind States such as Delaware. The inequity that Delaware faces is compounded by the fact that we are both a downwind and the lowest lying coastal State, and in fact, the lowest lying State.

We are disproportionately economically affected by both the healthcare cost borne by the State due to the health effects of poor air quality, and by industry locating elsewhere due to more lax controls and regulations in upwind locations.

As the lowest lying State, we will be further impacted by the pollution of inland States that are contributing to sea level rise and the increased frequency of storms and coastal erosion.

My concern with the way the EPA is approaching cooperative federalism under the Clean Air Act is they are only focused on providing flexibility to the decisions we make inside our States.

The problem is that air pollution knows no boundaries, and I have no authority to ensure other States are addressing pollution that impacts my citizens. I count on the EPA to use their authority to hold all of us accountable to the law, regulations, and science to ensure we are all being good neighbors.

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

[The prepared statement of Mr. Garvin follows:]



**The Honorable Shawn Garvin**  
**State of Delaware**  
**Department of Natural Resources**  
**Dover, DE**

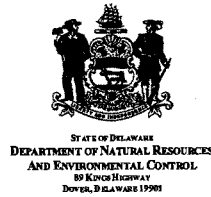
Shawn M. Garvin joined Governor John Carney's cabinet in March 2017 as Secretary of the Department of Natural Resources and Environmental Control, leading the agency tasked with protecting and managing Delaware's natural resources, protecting public health, providing outdoor recreational opportunities and educating

Delawareans about the environment.

Secretary Garvin's career in intergovernmental affairs spans more than 25 years at the federal, state, and local levels. In November 2009, he was appointed by President Barack Obama to serve as Administrator of Region 3 for the U.S. Environmental Protection Agency (EPA), overseeing the agency's work in the Mid-Atlantic, which includes Delaware, Maryland, Pennsylvania, Virginia and West Virginia, as well as the District of Columbia.

Before he was named regional administrator, Secretary Garvin served as the senior state and congressional liaison for EPA Region 3, providing counsel to agency leadership on complex public health and environmental matters. Prior to his service with the EPA, he served as an aide to then-U.S. Senator Joe Biden, and also was executive assistant to former New Castle County Executive Dennis Greenhouse.

Secretary Garvin is a Delaware native and graduate of the University of Delaware.



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TESTIMONY OF SHAWN M. GARVIN BEFORE THE  
SENATE COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS  
SUBCOMMITTEE ON CLEAN AIR AND NUCLEAR SAFETY  
ON COOPERATIVE FEDERALISM UNDER THE  
CLEAN AIR ACT: STATE PERSPECTIVES

APRIL 10, 2018

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Ozone-forming pollutants are well controlled in Delaware due to the State proactively requiring cost effective controls on a wide range of sources, including power plants, refineries, manufacturing plants, on-road vehicles, consumer products, paints and coatings, gas stations, and open burning activities to name a few. Despite these efforts, Delaware continues to be challenged in ensuring healthy air to our citizens because we are a downwind state and subject to air pollution transport from facilities in other parts of the country. In fact, over 90% of the pollution that contributes to ozone in Delaware is transported from out-of-state sources. The answer to solving our ozone problem lies outside of our borders and we need the federal government to recognize the inequity that exists between upwind and downwind states.

EPA has maintained that cooperative federalism is key to maintaining clean air. I would agree that cooperative federalism is invaluable, when it works well, by empowering states to act under federal law and allowing communities to enjoy the benefits of state innovation. Positive outcomes can occur when the federal government works alongside states to determine best methods to continue progress toward clean air, provides the resources that the states need to enforce their regulations, and steps in when a state fails to meet its obligations.

Progress in downwind states, such as Delaware, require that the federal government continue to provide the states with the tools and resources needed to enforce the Clean Air Act. Yet, there have been massive cuts in the past two EPA budgets. Progress also requires that the EPA maintain oversight and step in to ensure that upwind states continue to comply with the good neighbor provision. However, the EPA seems to be pulling back and turning decisions over to the states. We are also seeing the attempt to reduce regulations at the federal level, such as the

repeal and replace of the Clean Power Plan, weakening of fuel efficiency standards, revocation of the California waiver, and the rollback of the glider truck rule. In addition, the EPA has also failed to act on Section 126 Petitions, which is one of the ways a state can address problems that lie outside of its borders and seek reductions in emissions contributing to its nonattainment. All of these actions, or non-actions, will have serious consequences for downwind states such as Delaware.

The inequity that Delaware faces is compounded by the fact that we are both a downwind and the lowest lying coastal state. We are disproportionately economically affected by both the healthcare cost borne by the State due to the health effects of poor air quality, and by industry locating elsewhere due to more lax controls and regulations in upwind locations. As the lowest lying state, we will be further impacted by the pollution of inland states that are contributing to sea level rise and the increased frequency of storms and coastal erosion.

My concern with the way the EPA is approaching cooperative federalism under the Clean Air Act is they are only focused on providing flexibility to the decisions we make inside our states. The problem is that air pollution knows no boundaries, and I have no authority to ensure other states are addressing pollution that impacts my citizens. I count on the EPA to use their authority to hold all of us accountable to the law, regulations, and science to ensure we are all being good neighbors.

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

**Senate Committee on Environment and Public Works  
Subcommittee on Clean Air and Nuclear Safety  
Hearing entitled, “Cooperative Federalism Under the Clean Air Act: State Perspectives.”  
April 10, 2018  
Questions for the Record for Secretary Garvin**

**Ranking Member Carper:**

Please provide a response to each question, *including each sub-part*.

- 1. Under this EPA, what are the biggest air pollution challenges that you are facing in Delaware and what support do you need from the Federal government to tackle those challenges?**

**Transport of emissions from upwind states** – Over 90% of the pollution that contributes to Delaware’s ozone problem comes from upwind sources. Delaware seeks EPA’s support through enforcement of the Clean Air Act Good Neighbor provisions and ensure upwind states meet their Clean Air Act (CAA) obligations.

**Transportation emissions** – Delaware has implemented tight emission controls on stationary sources over the years to reduce its contribution to the ozone problem. As a result, emissions from on-road and off-road mobile sources now make up two-thirds of all emissions from sources in Delaware. Since Delaware cannot regulate these sources on its own, Delaware seeks EPA’s leadership in ensuring light duty and heavy duty vehicles become cleaner and more efficient in the future, as well as to maintain Delaware’s ability to adopt California vehicle standards in the future.

**Impacts of climate change** – As a low-lying coastal state Delaware has faced and continues to face impacts from climate change. Delaware urges EPA to recognize the environmental and economic impacts of climate change and provide federal solutions to the causes and impacts of climate change.

- 2. What are the economic implications for Delaware if the state does not have a strong federal partner to address these air pollution challenges?**

Without decisive and timely action by EPA regarding transported emissions, Delaware will suffer economically because Delaware businesses are now required to install emission controls to expand their operations or to locate in Delaware and are required to obtain scarce emission offset credits. A lack of a strong federal partner will doubly impact Delaware as facilities choose to locate and expand in upwind states without required emission controls, placing even more burden on Delaware due to the health costs associated with elevated ozone.

- 3. As I mentioned in the hearing, I continue to believe that a ‘win-win’ solution between the automakers and the State of California is within reach regarding light duty vehicle standards. There’s a way to provide regulatory certainty for automakers, while also ensuring that advanced technology is incorporated into the**



**car and SUV fleet and continues to benefit the environment and consumers. Now, Administrator Pruitt is fond of saying that California shouldn't be allowed to "dictate to the rest of the country" on vehicle standards. Secretary Garvin, Administrator Pruitt seems to think this is a California vs EPA issue, but that's not true. Can you provide information to the Committee on why these vehicle standards are also important for Delaware and other states across the nation?**

Delaware and other CAA 177 states have taken advantage of California's leadership by adopting California vehicle standards. The adoption of these standards has been critically important to Delaware in reducing ozone-forming pollutants. These light duty vehicle emission standards in conjunction with fuel economy standards mean more fuel savings for drivers, a healthier environment, reduced dependence on imported oil, and a greater selection of vehicle technologies to choose from. In addition to more fuel efficient vehicles, more electric vehicles have been developed as a result of these standards, which further help to reduce emissions from the transportation sector. The reduction of ozone-forming emissions in Delaware from the transportation sector is essential to provide healthful air to its citizens. Vehicle emissions are detrimental to the public's health and quality of life, especially to vulnerable populations such as children and the elderly.

In Delaware, the reduction of greenhouse gas emissions from the transportation sector has become an important strategy for the state to mitigate the effects of climate change. Since Delaware is such a low lying state, the effects of climate change and sea level rise will affect the tourism industry and Delaware's economy. The rest of the world has committed to reducing greenhouse gas emissions and several countries have announced that within the next few decades, gasoline vehicles will no longer be sold. American car companies, the economy and the citizens of Delaware will benefit by transportation innovation, and this is why I agree that vehicle standards are a win-win for all.

4. **In 1995, EPA established a "once-in, always-in" policy under the Section 112 Clean Air Act air toxic program. This policy prevented major sources of air toxic pollution – such as lead, arsenic and mercury - from backsliding on their Clean Air Act air toxic requirements. In January 2018, Administrator Pruitt's EPA withdrew this policy without any public comment or public health analysis. EPA claimed at the time the change would encourage facilities to implement voluntary pollution abatement and prevention efforts. However, we know from history and experience that voluntary actions by industry do not, alone, reduce air toxic pollution. I, along with Senators Markey, Whitehouse and fourteen of our other colleagues, have asked EPA for information to help us better understand the rationale and health impacts of this decision, but have so far we have received no answers from the agency.**
  - a. **Secretary Garvin, how do you think the "once in, always in" policy change effects your state?**

The State of Delaware has several facilities that have the potential to lose major source status by the change in EPA policy. However, the existing Synthetic Minor and Natural Minor permitting programs in our state will

ensure there are no emission increases due to the federally-enforceable permit conditions requiring that the facilities operate their control devices. So while we believe the withdrawing of the “once in, always in” policy will not result in increased air toxic emissions in Delaware, we are concerned that the policy revision may result in increased emissions in other states. Delaware is impacted by the transport of emissions from upwind areas, and should a MACT source in a neighboring state revert to minor source status, air toxic emissions may increase concentrations in Delaware. Also, since air toxics are often organic compounds, any emission increases in volatile organic compounds (VOCs) could worsen Delaware’s ozone problem.

**b. Could withdrawing the “once in, always in” policy increase air toxic emissions and threaten communities across the nation?**

The elimination of the “once in, always in” policy has the potential to cause an increase of air toxic emissions as applicable major source requirements no longer apply. EPA itself expressed concerns that a change in this policy would have the potential for increased emissions, per a 1995 letter from John Seitz (then Director of EPA OAQPS), recognizing that a facility's potential emissions could fall below the major source thresholds upon achieving compliance with the applicable standard. This is because the standard often requires installation of a control device and the control device would re-define the potential-to-emit (PTE) of the hazardous air pollutant (HAP). For example, if the PTE of the facility to emit a single HAP was 100 tons/year, and they installed a control device with 99% destruction efficiency, the new PTE would be 1 ton/year. No longer being a major source, the facility would not be required to have a major source permit. If the state does not require or implement a federally enforceable permit condition that requires operation of the control device, the facility could conceivably only operate their device some of the time, as long as they ensure they do not emit over 10 tons/year (the major source threshold for a HAP.) This scenario illustrates the possibility of increased emissions from rescinding the “once in, always in” policy.

**c. Do you believe major sources will voluntarily abate emissions lower than current emissions? If not, why not?**

Operating controls on emission units has a cost associated with its operation due to energy costs or a reduction in process output. If a change in the “once in, always in” policy takes place, facilities may choose to run their controls only to the extent to remain at minor source levels.

**d. In other instances, has the state of Delaware been affected by neighboring state sources not operating air control technology and what, if anything, has this Administration done to address these problems?**

As it relates to the “once in, always in” policy, Delaware is not aware of such an instance regarding a HAP. However, Delaware is significantly impacted by ozone precursor emissions from upwind sources (mostly power plants) that do not always run their controls. The NOx budget program requires facilities to operate under an emissions budget during the ozone season (May – Sept). However, facilities choose to not run their controls on high electricity demand days to maximize their electricity output. The program allows for this as long as a facility does not exceed its ozone season budget but does not account for the impact on downwind states due to high daily emissions on days when controls are not used. To date, EPA has not implemented a remedy to address this program shortcoming.

5. In an internal 2005 EPA document, EPA regional staff cautioned that withdrawing the “once in, always in” policy would mean “many sources would take limits less stringent than MACT requirements” and the policy change would be “detrimental to the environment and undermine the MACT program.”<sup>1</sup> The regional EPA staff explained that the policy change would mean major air toxic sources “could virtually avoid regulation and greatly complicate any enforcement against them” and “the cost of the increased [hazardous air pollutant] emissions would be borne by the communities surrounding the sources.”<sup>2</sup> The regional EPA staff were so concerned about revoking the “once in, always in” policy, they stated EPA should not make the policy change without looking “closely at this issue to determine whether the likely benefits would be greater than the potential environmental costs.”<sup>3</sup> As a former EPA Regional Administrator, do you agree with these statements and does it concern you EPA has withdrawn the “once in, always in” policy without any public health modeling or analysis?

I believe EPA is ill-advised to withdraw the “once in, always in” policy and I am particularly concerned with the way EPA did so without any modeling, analysis, or state and public comment.

6. The Clean Air Act’s National Ambient Air Quality Standards, or NAAQS, program establishes a federal-state partnership for reducing common air pollutants that endanger human health, including ozone – also known as smog. Ozone chokes and inflames peoples’ airways, and is particularly dangerous for children, the elderly, and people with lung diseases like asthma. Under the Clean Air Act, EPA is required to designate which areas of the country have unhealthy ozone areas and/or contribute to downwind air quality problems. This process is vital for states to effectively plan, and reduce pollution crossing state borders. Instead of following the law, EPA Administrator Pruitt has so far failed to do his job and refused to designate who is living in areas with unhealthy ozone. States frustrated with the delay had to sue EPA. A court last month ordered EPA to follow the law and issue air quality designations.

<sup>1</sup> [https://www.npr.org/documents/2006/apr/epa/epa\\_internal\\_letter.pdf](https://www.npr.org/documents/2006/apr/epa/epa_internal_letter.pdf)

<sup>2</sup> [https://www.npr.org/documents/2006/apr/epa/epa\\_internal\\_letter.pdf](https://www.npr.org/documents/2006/apr/epa/epa_internal_letter.pdf)

<sup>3</sup> [https://www.npr.org/documents/2006/apr/epa/epa\\_internal\\_letter.pdf](https://www.npr.org/documents/2006/apr/epa/epa_internal_letter.pdf)

**a. In your view, does cooperative federalism mean states have to file lawsuits in order to force EPA to uphold its responsibility?**

Cooperative federalism should mean a shared responsibility between EPA and the state, whereby EPA supports the needs of the state to meet its obligations under the CAA to provide healthful air to its citizens, and for its part the state has the freedom to choose the types of programs that it finds most effective to meet its obligations. Cooperative federalism should include EPA holding states accountable to their impacts on other states. Resorting to lawsuits is the antithesis of the spirit of cooperative federalism.

Within the confines of cooperative federalism is a recognition that federal standards must be maintained as a backstop for the citizens of a state that is not meeting its CAA obligations. States must be at least as stringent as the federal rules but may choose to be more stringent. In cases where a state chooses or is bound by state law to be only as stringent as the federal rules, if EPA relaxes policy, or establishes rules that are less stringent, businesses will pressure local elected officials to follow the federal trend. Less stringent federal rules will result in even more transported pollution finding its way to Delaware. This is a concern for Delaware in light of the recent New Source Performance Standards memos that EPA has issued. Cooperative federalism does not mean to me an EPA that ignores the Clean Air Act.

**b. When EPA ignores its Clean Air Act responsibilities, does that ultimately hurt states – and industry - because of the ongoing uncertainty?**

Both the citizens of the state and its industries suffer from EPA ignoring its CAA responsibilities. The citizens of Delaware continue to suffer unhealthy air when EPA does not implement its remedies in seeing that upwind states meet their Good Neighbor obligations “as expeditiously as practicable.” Delaware industries are harmed by the on-going disadvantage of operating in an ozone nonattainment area largely contributed by industries in upwind states.

**7. How does EPA’s actions relaxing federal standards such as New Source Review, light-duty and heavy-duty vehicle standards, and climate rules hurt Delaware’s ability to achieve clean air?**

Over 90% of Delaware’s pollution is from sources beyond its jurisdiction. Without strong federal oversight Delaware is vulnerable to the impacts of additional air pollution that takes place in upwind states that follow relaxed federal standards. Loosening vehicle standards would not only result in increased emissions from upwind states, but also increase in-state emissions since Delaware cannot address vehicles standards on its own. As for proposed changes in climate rules, the potential loss of co-benefit emission reductions will further exacerbate Delaware’s situation.

- 8. During EPA Air Director Bill Wehrum's previous tenure as Acting EPA Air Director under President George W. Bush, he attempted to insert political leadership early in the science-based NAAQS-setting process. Do you support this idea? If not, why not?**

Sound and rigorous science are the backbone of our ability to protect human health and the environment. Policy decisions need to be based on the rule of law and sound science, it should not dictate either.

- 9. EPA Air Director Bill Wehrum is said to be looking at speeding up the NAAQS review process, possibly shortening the scientific review process. Do you support this idea? If not, why not?**

While there may be an ability to find efficiency opportunities in some aspects of the NAAQS review process, the research and science included in the review process is imperative to the successful outcome of setting a NAAQS that provides for the protection of public health and welfare.

- 10. Many in Congress would like the change the NAAQS review process from a five year to a ten-year process. Do you support this idea? If not, why not?**

With the continued evolution of science, it is important to ensure that standards reflect the best available information. It is Delaware's perspective that every five years is a reasonable timeframe for repeating that analysis.

- 11. What is EPA's role in ensuring states upwind of Delaware are good neighbors? Is EPA currently filling that role?**

It is EPA's responsibility to ensure all states address transported emissions through enforcement of the Good Neighbor SIPs that each state is obligated to submit to EPA three years after a new NAAQS is finalized. EPA is responsible for identifying each state's obligation to downwind states and to verify that submissions are adequate for addressing transport. This is not currently being done.

- 12. Please explain how critical Delaware's section 126 petitions are for Delaware to attain and maintain the ozone NAAQS.**

Delaware petitioned the EPA under Section 126 of the CAA four times in 2016 identifying four different upwind power plants (three in Pennsylvania and one in West Virginia) that significantly contribute to Delaware's nonattainment of the ozone standards. Delaware has complied with the Good Neighbor requirements of the CAA by adopting state control measures for the prevention of emissions that would significantly contribute to nonattainment, or interference with maintenance, of the ozone NAAQS in a downwind area.

However, Delaware's ability to achieve and maintain the health-based air quality standards for its own residents is severely impacted by sources beyond Delaware's borders. This is due to the fact that more than 90% of the ozone levels in Delaware are created by the transport of air pollutants from upwind areas. Attainment and maintenance of the ozone NAAQS is possible only through additional emission reductions in the upwind states, and for this reason EPA's action in favor of these four 126 petitions is critical to Delaware's ability to attain the ozone NAAQS.

Delaware is working collaboratively with other OTC states to ensure that existing NOx emission controls on combustion units at large power plants in upwind states be operated throughout the ozone season.

**13. In October 2017, EPA issued a proposal to repeal the Clean Power Plan, which addresses carbon dioxide pollution from our nation's largest industrial sources of carbon pollution, existing power plants.**

- a. Do you agree that repealing the Clean Power Plan only provides greater uncertainty for the power industry and puts communities at further risk to the impacts of climate change?**

Because climate change is currently impacting Delaware's people, natural resources, infrastructure and industries, Delaware believes that strong actions to mitigate greenhouse gases are necessary to ensure a high quality of life and economic vitality for generations to come.

Delaware conducted a "listening session" on January 8, 2018 to gain Delaware stakeholder input on the federal proposal to repeal the existing Clean Power Plan. Over 100 stakeholders participated in the dialogue or submitted comments to us. The overwhelming majority of responses from our stakeholders are in agreement that climate change is impacting Delaware, and they were in support of retaining the current EPA Clean Power Plan and strongly opposed EPA's proposed repeal. However, we did not need public comments to tell us that, the science has shown that Delaware is experiencing increased average temperatures, beach erosion, more frequent and damaging coastal flooding, loss of tidal wetlands, flooding from extremely heavy rain events, and heat waves. Delaware's infrastructure, agriculture, fisheries and ecosystems will be increasingly compromised.

- b. As someone from a coastal state, what is EPA's obligation when it comes to climate change? Is this a clear example of cooperative federalism?**

The very definition of cooperative federalism is the concept that all levels of government – national, state, and local interact cooperatively and collectively to solve common problems, rather than making policies separately. Addressing the impacts of climate change requires everyone to work together

- not only Delaware, but all 50 states, tribes and territories. The United States also needs to show global leadership.

Delaware has stepped up along with the other eight RGGI participating states to reduce greenhouse gas emissions from the power sector by over 45% since the program was announced in 2005. With the announcement of our 2016 Program Review, we continue to achieve further reductions of an additional 30% by 2030. We remain encouraged as two states – Virginian and New Jersey are working toward participating with RGGI beginning in 2020.

**c. Please explain how the Clean Power Plan allowed states the flexibility to meet emission goals and continue current state actions that address climate change.**

Delaware was pleased by the commitment of EPA to tackle head-on the challenge of reducing carbon emissions from existing power plants, which comprise the nation's largest source of greenhouse gas emissions, while respecting the needs of each state.

Given the dramatic success of Delaware in lowering carbon emissions from power plants while at the same time growing our economy, we believe the Clean Power Plan provides sufficiently flexible, yet protective, federal guidelines that empower states to continue to develop and implement market-based greenhouse gas (GHG) emission reduction programs designed to work for Delaware and our region. Our experience with RGGI clearly demonstrates that regional cooperation can achieve the most cost-effective emission reductions, enable a transition to a lower-emitting and more efficient power sector and create economic benefits and jobs across the United States.

**d. Delaware has already acted on climate change, has the state seen any co-benefits from reducing carbon pollution? What other benefits have the state seen from carbon-reduction programs?**

While addressing climate change and regulating CO<sub>2</sub> emissions, Delaware has seen a significant reduction in harmful co-pollutants (NO<sub>x</sub> and SO<sub>2</sub>). These co-pollutants have serious effects on public health in Delaware and across the region.

**14. EPA is considering replacing the Clean Power Plan with regulations that will have very little, if any, carbon emission reductions from the power sector and will likely increase electricity costs and traditional air pollution emissions, such as sulfur dioxide. Harvard's School of Public Health recently reported that if the agency focused solely on an "inside the fenceline" approach as proposed in the 2017 Advanced Notice of Proposed Rulemaking (ANPRM), there would be an estimated**

increase in sulfur dioxide emissions by 3% and could result in premature lives lost.<sup>4</sup> At the same time, a majority of the carbon dioxide emission reductions and all the energy efficiency measures in the Clean Power Plan are not included in the ANPRM. It is difficult to even compare the ANPRM with the Clean Power Plan, which will save an estimated 3,500 lives and reduce electricity bills by \$85 a year. Do you have concerns with the EPA's ANPRM? If so, please explain.

Climate change is impacting Delaware's people, natural resources, infrastructure and industries, and Delaware believes that strong actions to mitigate greenhouse gases are necessary to ensure a high quality of life and economic vitality for generations to come. Delaware conducted a "listening session" on January 8, 2018 to gain Delaware stakeholder input on the federal proposal to repeal the existing Clean Power Plan. Over 100 stakeholders participated in the dialogue or submitted comments to us. The vast majority of responses from our stakeholders are in agreement that climate change is impacting Delaware, and they are in support of retaining the current EPA Clean Power Plan and strongly opposed EPA's proposed repeal. However, we did not need public comments to tell us that, the science has shown that Delaware is experiencing increased average temperatures, beach erosion, more frequent and damaging coastal flooding, loss of tidal wetlands, flooding from extremely heavy rain events, and heat waves.

15. As I mentioned in the hearing, Senator Udall and I sent a letter<sup>5</sup> to EPA regarding concerns about a proposal that would allow some of the dirtiest heavy-duty diesel trucks, called glider trucks, to circumvent clean air cleanups. Glider trucks look like new trucks outside, but are equipped with old, high-polluting diesel engines on the inside. As we state in the letter, according to internal agency research - not released until after EPA published this proposal - a new 2017 glider truck can emit up to 450 times the particulate matter (PM) pollution, and up to 43 times the nitrous oxide (NOx) pollution, of model year 2014 and 2015 trucks. Other EPA analyses concluded that, if left unregulated, glider vehicle emissions could prematurely kill thousands of people, and increase instances of lung cancer, chronic lung disease, heart disease, and severe asthma attacks. This is additional pollution that will be emitted in my state, in your state and states across the country. I fear that if this proposal went final, it could further burden states already struggling to meet ambient air health standards.

a. Do you support the EPA's November 16, 2017 proposal to repeal air emission standards for glider trucks? If so, why? If not, why not?

Delaware does not support EPA's proposed repeal of emission standards for glider trucks. Those emission standards and other requirements applicable to heavy-duty gliders included in the final Phase 2 truck rule close a "loophole" for glider vehicles and glider kits beginning in January 2018. This loophole

<sup>4</sup> <https://chge.hsph.harvard.edu/replacing-clean-power-plan-%E2%80%9Cinside-fence-line%E2%80%9D-alternative-would-do-more-harm-doing-nothing>

<sup>5</sup> <https://www.epw.senate.gov/public/index.cfm/2018/3/carper-udall-question-epa-decision-to-repeal-air-emissions-standards-for-high-polluting-glider-trucks>



allows used diesel engines, with no limit on age, to be installed into new glider kits without meeting the current engine standards. Closing this loophole will prevent hundreds of thousands of tons of nitrogen oxides (NOx) and diesel particulate matter (PM) from being emitted into the air each year nationwide. NOx is an ozone precursor and EPA has recognized PM as a toxic air contaminant. The proposed rule would allow that loophole to remain open and result in increased air pollution in every part of the country.

Reducing emissions from mobile sources – particularly those, like gliders, that are uncontrolled or under-controlled – offers the most cost-effective opportunities for NOx and PM reductions. The glider requirements promulgated in the Phase 2 rule would not only eliminate substantial emissions of NOx and PM, they would do so very cost effectively. If these requirements are repealed or amended, it will be difficult for Delaware to seek reductions and to cost-effectively compensate for the magnitude of the emissions that will occur. The proposed repeal could potentially mean more regulation and higher costs for stationary sources, possibly power plants, manufacturing facilities and small businesses, among others.

- b. Are you as troubled as I am that this proposal appears to largely benefit a single company? If not, why not?**

We are deeply concerned that EPA used data and drew inappropriate conclusions based on testing data that lacked the rigor of testing expected for purposes of certification and that did not comport with valid heavy-duty diesel emissions testing.

- c. Comments on the glider proposal submitted by the Diesel Emissions Reduction Act (DERA) Coalition, which is a broad coalition of environmental, public health, industry and state groups who support clean diesel, included the following statement:**

**“We are concerned that EPA’s decision to encourage the continued proliferation of older engines through the glider industry would increase emissions from medium and heavy-duty vehicles and undermines the work of the Coalition and cooperative federalism with the EPA and states.”<sup>6</sup>**

**Do you share the DERA Coalition’s concerns? If not, why not?**

Yes, Delaware is very concerned that this repeal will result in undoing the emission reductions we have achieved by investing in the Diesel Emissions Reduction Act (DERA).

- d. Should the federal government continue to focus on replacing and retrofitting dirty diesel engines, rather than putting dirty diesel engines**

<sup>6</sup> <http://www.lung.org/assets/documents/advocacy-archive/dera-coalition-comments-re.pdf>

**back on the road? Why or why not?**

Yes, it is important to continue to retrofit and replace dirty diesel engines. Over the past decade, the U.S. Congress has appropriated hundreds of millions of dollars under DERA to fund projects to reduce diesel exhaust from older engines. Further, Delaware has put its own funds toward DERA projects under a voluntary matching program. EPA has estimated that the DERA program is responsible for total lifetime emission reductions of 335,200 tons of NOx and 14,700 tons of PM. A repeal of the glider requirements would result in NOx and PM emissions that would eclipse the reductions achieved to date under the DERA program and undo millions of dollars of protections that come from federal and state investments.

**Senator Markey:**

**16. On April 12, 2018, President Trump issued a memorandum on the National Ambient Air Quality Standards (NAAQS). In this memorandum, President Trump ordered the Environmental Protection Agency (EPA) to speed up its reviews and processing of permits and plans under the Clean Air Act, including processing State Implementation Plans (SIPs) within 18 months and preconstruction permit applications within one year.**

- a. Can you describe for me the process for Delaware to create SIPs for regulations under the Clean Power Plan? Please include detail on how much time and public engagement is required to create a comprehensive SIP.**

The development of new or revised regulations requires the adherence to a process that includes numerous administrative steps to ensure the proposed changes are reviewed for technical accuracy and that public input is solicited through public workshops, a public meeting, and allowing the submission of comments for the record. All comments received are addressed through the development of a response to comments document that is including in the hearing officer's report.

The subsequent development of a SIP, such as required by various CAA provisions (infrastructure SIPs, attainment demonstrations, and the adoption of Delaware regulations into the SIP for federal enforceability, to name a few) to convey required documents to EPA for inclusion in Delaware's SIP must also adhere to a public notice and hearing process. The development of major SIPs can take up to two years to complete.

- b. Do you think an unfunded mandate to speed up processing will result in better review of SIPs?**

In the past EPA has delayed reviews of Delaware's submitted SIPs which have led to uncertainty with Delaware's development of long-range plans. When EPA

has not promptly acted on SIPs submitted by other states, specifically on Good Neighbor portions of the Infrastructure SIP required within three years of a newly revised NAAQS, this leads to inaction by states in meeting their CAA obligations and has prolonged the impact of upwind emissions on Delaware's air quality.

As such, I support EPA's decision to complete reviews of SIPs in the timeframes established by the CAA. I do not support an expedited review at the expense of the thoroughness of those reviews, or in short-cutting the public comment processes that ensure that differing views have been vetted.

**c. What might the public health consequences be of a federal mandate that requires a shorter process for creating SIPs in states like Delaware?**

I do not believe EPA is recommending a shorter process for creating SIPs at this time, but if EPA were to make such a recommendation, the thoroughness and quality of SIP submissions from Delaware and other states could be compromised.

**d. In your opinion, what could EPA or Congress do to improve the SIP review process while still maintaining a strong emphasis on accurate science and air quality protection?**

A state and their regional office should work more closely in the development of a SIP. In this way, the regional office will be more prepared when it comes to the review of the formal submission and the state will have a better understanding of EPA's expectations. The review efforts by a regional office must ensure that the submitted SIP is accurate and technically sound, and that EPA holds accountable the state in meeting its CAA obligations through the SIP submission. This is occurring between Delaware and EPA Region III, but it should happen across the country.

**17. On April 24, 2018, EPA Administrator Scott Pruitt announced a proposed rule that would ban EPA from considering studies that include non-public data when developing regulations.**

**a. How would this rule impact regulations that EPA establishes in order to carry out its mission of protecting public health, including regulations on clean air?**

An incredible amount of data is relied on to establish the basis for developing regulations or to revise a NAAQS. In order to obtain a complete picture of the need for a regulation or a revision of a NAAQS, all credible studies and information should be available to those tasked with providing an informed recommendation. Limiting data and studies to only publicly available information may lead to an inappropriate recommendation. Epidemiological studies used to determine if there is a need to revise a NAAQS is crucial, and the potential lack of

consideration of some studies may result in a regulation or a NAAQS that does not provide the level of air quality protection warranted.

**b. What might the consequences of this proposed rule be in Delaware, including for the health of citizens?**

Using ozone as an example regarding a NAAQS review, if a subset of studies that are publicly available leads EPA to maintain the standard rather than strengthening it, but non-publicly available, yet peer-reviewed and credible, studies show a need for a lower standard based on health outcomes, then the public would be impacted by not lowering the standard.

**18. On January 25, 2018, EPA Assistant Administrator Bill Wehrum issued a guidance memorandum that rolled back the “once in, always in” policy that required major sources of hazardous air pollutants to install the maximum achievable control technology. This policy works to cut down emissions of 187 dangerous toxic pollutants like arsenic, mercury, benzene, and PCBs.**

**a. Would the withdrawal of the “once in, always in” policy increase air pollution in your state?**

The State of Delaware has several facilities that have the potential to lose major source status by the change in EPA policy. However, the existing Synthetic Minor and Natural Minor permitting programs in our state will ensure there are no emission increases due to the federally-enforceable permit conditions requiring that the facilities operate their control devices. So while we believe the withdrawing of the “once in, always in” policy will not result in increased air toxic emissions in Delaware, we are concerned that the policy revision may result in increased emissions in other states. Delaware is impacted by the transport of emissions from upwind areas, and should a MACT source in a neighboring state revert to minor source status, air toxic emissions may increase concentrations in Delaware. Also, since air toxics are often organic compounds, any emission increases in volatile organic compounds (VOCs) could worsen Delaware’s ozone problem.

**b. If so, do you have an estimate of how much or which pollutions may increase in your state?**

No

**c. How many facilities in your state could take advantage of this new guidance?**

Three

**d. Have any facilities contacted you about taking advantage of this new guidance?**

We have contacted one of the facilities and they are not interested in taking advantage of the new guidance at this time. We have not discussed this with the other facilities.

**Senator Whitehouse:**

- 19. Like my home state of Rhode Island, Delaware is a downwind state. Unfortunately, due to prevailing wind patterns and the mobility of air pollutants, states in the Northeast suffer as the “tailpipe of the nation.” Can Northeastern states combat air pollution alone, and if not, what should EPA be doing to help us?**

Several years ago, Delaware performed what is called “zero-out” modeling, whereby photochemical regional modeling runs are conducted using emissions from the eastern third of the country, except that emissions from Delaware are reduced to zero. Even with no Delaware emissions, the modeling indicated nonattainment levels of ozone in Delaware based on typical summertime weather. Clearly, Delaware cannot meet the ozone standard without EPA requiring upwind states to reduce transported emissions.

- 20. Like my home state of Rhode Island, Delaware is a coastal state with a long coastline vulnerable to the rising seas caused by climate change. While states, municipalities, businesses, universities, and other groups can and are taking steps to reduce their carbon emissions, are state and local efforts sufficient or do we also need federal policies such as the Clean Power Plan?**

Delaware cannot on its own address the impacts of climate change. Strong federal leadership will insure that not only is the United States working toward a larger global goal to avoid the damaging impacts of a rising sea level but can do so by harnessing our country’s technological talents and creativity.

- 21. Statistics indicate that EPA has dramatically reduced its enforcement efforts under Administrator Pruitt. With respect to air pollution, what impact do you expect reduced EPA enforcement to have on air quality in Delaware?**

EPA enforcement staff is undergoing a change in structure that will remove enforcement staff from the media they are associated with (air) and co-locate them with other enforcement staff. This change is being made nationwide so that all regional offices are structured similarly with respect to enforcement. It is unclear how this may affect enforcement going forward. It is critical for states to receive support from EPA, in resources, scientific and technical assistance, and when appropriate with direct enforcement actions.

- 22. Do you support the proposed cuts to EPA programs funding state clean air initiatives?**

No, Delaware relies on federal grants to provide the current high level of service to sources in Delaware and to maintain programs that work to reduce emissions and improve air quality.

**23. Do you believe that climate change is occurring and that it is caused by human emissions of greenhouse gases?**

Yes.

Thank you for the opportunity to provide these comments.

Senator CAPITO. Thank you all.

I will begin with my 5 minutes of questions.

Mr. Alteri, you recently served as the President of the Association of Air Pollution Control Agencies representing State clean air regulators from around the country. In that capacity, you sent a letter to me and Ranking Member Whitehouse last year outlining the AAPCA's priorities for improving the Clean Air Act, to improve coordination between the EPA and State regulators.

Thank you for the letter, and I would seek unanimous consent to submit that letter for the record.

Without objection, we will do that.

[The referenced information follows:]



May 22, 2017

The Honorable Shelley Moore Capito  
Chair, U.S. Senate Committee on Environment  
and Public Works Subcommittee on Clean Air  
and Nuclear Safety  
410 Dirksen Senate Office Building  
Washington, DC 20510

The Honorable Sheldon Whitehouse  
Ranking Member, U.S. Senate Committee on  
Environment and Public Works Subcommittee  
on Clean Air and Nuclear Safety  
456 Dirksen Senate Office Building  
Washington, DC 20510

Subject: Clean Air Act Modernization Principles

Dear Chair Capito and Ranking Member Whitehouse:

Members of the Association of Air Pollution Control Agencies (AAPCA)<sup>1</sup> are responsible for protecting and improving air quality in our states and local areas, which include more than 140 million Americans and over 60 percent of total energy production in the United States. We are also responsible for implementing many parts of the federal Clean Air Act.

We are firmly committed to ensuring that our citizens enjoy the benefits of clean air, and we recognize that the Clean Air Act has been a remarkable success. Its model of cooperative federalism, which requires that state and local governments and the U.S. Environmental Protection Agency (EPA) work together to protect the air we breathe, has been responsible for dramatic improvements in air quality since 1970.

We do note, however, that the Clean Air Act has remained essentially unchanged since 1990. Since that time, we have learned a great deal about the science of air pollution and the most effective ways of controlling emissions. We believe it is time for Congress to seek targeted approaches to modernizing the Act in order to take advantage of the many lessons we have learned over the last two and a half decades.

Although there is disagreement about many Clean Air Act issues, we all support commonsense modernizations to the Act that would simplify the process for state implementation plans, harmonize regulatory deadlines, and streamline programs that have become unnecessarily burdensome. These improvements would also clarify the roles and responsibilities of state and local governments and strengthen the model of cooperative federalism that is at the heart of the Clean Air Act. The principles outlined below reflect the consensus feedback of AAPCA members, but they do not imply endorsement from all individual state and local agencies.

<sup>1</sup> AAPCA is a national, non-profit, consensus-driven organization focused on assisting state and local air quality agencies and personnel with implementation and technical issues associated with the federal Clean Air Act. AAPCA represents more than 40 state and local air agencies, and senior officials from 20 state environmental agencies currently sit on the AAPCA Board of Directors. AAPCA is housed in Lexington, Kentucky as an affiliate of The Council of State Governments. You can find more information about AAPCA at: <http://www.cleanairact.org>. In addition, more information on AAPCA agencies can be found in the recently released report, *The Greatest Story Seidom Told: Profiles and Success Stories in Air Pollution Control*.





ASSOCIATION OF AIR POLLUTION CONTROL AGENCIES

We would be very pleased to work with you and your colleagues to see that these principles are incorporated into any effort to update the Act:

**National Ambient Air Quality Standards Reviews & State Implementation Plans**

- Maintain health-based national ambient air quality standards (NAAQS), but harmonize planning and attainment deadlines to allow states to develop multi-pollutant State Implementation Plans (SIPs) for attaining and maintaining all NAAQS. As is the case today, there might be different attainment deadlines for different NAAQS, but deadlines must take feasibility into account.
- Consider a more realistic review cycle that reflects the rigor and time required to meaningfully evaluate and, if necessary, revise a NAAQS.
- Maintain EPA responsibility for reviewing and approving SIPs but require EPA to meet deadlines for approval or disapproval. Preserve state primacy by allowing EPA to disapprove SIPs only for clear and significant deficiencies that would have a meaningful impact on air quality, and provide that SIPs are deemed approved unless EPA disapproves them by the current statutory deadlines.
- Maintain the current procedure for designating nonattainment areas, but clarify that such designations must be made based on data from approved air quality monitors.

**Ability of State and Local Agencies to Participate in Clean Air Act Suits and Settlements**

- Maintain current provisions for citizen suits but ensure that, in any such suit, states, local governments, and affected businesses are provided the opportunity to participate as parties.
- Require any settlement agreement, consent decree or court order arising from such cases to consider resource constraints and the views of all parties.

**Permitting**

- Maintain permitting requirements but allow facilities to be built or expanded in any area of the country as long as: (1) state or local environmental officials determine that the facility will not have a meaningful adverse impact on human health or the environment; and (2) they employ the best available technology to control their emissions.
- Maintain state and local agency discretion in permitting decisions and clarify that permits may be challenged only for clear and significant deficiencies that would have a meaningful impact on air quality.
- Provide for a limited exemption from Prevention of Significant Deterioration/New Source Review permitting for projects determined to be environmentally beneficial based upon a cumulative impacts analysis.

Thank you for your consideration of these comments and principles. If you have any questions, please contact [cwoods@csg.org](mailto:cwoods@csg.org) or (859) 244-8040.

Sincerely,

Sean Alteri  
Director, Kentucky Division for Air Quality  
President, AAPCA

Senator CAPITO. A bit over a year into the Administration, what do you perceive has changed with regard to the EPA's coordination with the States, and has it been more collaborative, in your opinion?

Mr. ALTERI. We have always had a strong working relationship with the EPA, but this Administration has been coming to States for that technical information as opposed to just imposing its will through the Federal implementation plan. We have seen more technical, thorough discussion directly with our State.

Senator CAPITO. Ms. Vehr, would you have a comment on that? Have you seen a difference in the last year in working with the different Administration on the EPA's coordination between the Federal and States?

Ms. VEHR. Yes, we have. Echoing Mr. Alteri, we had a prior working relationship with EPA, but under this new Administration, we have found that working relationship has improved. EPA is listening to the States' concerns and is interested in developing flexible solutions that fit Wyoming's unique characteristics.

I would say anecdotally, in my State, with the previous Administration for 8 years, we really asked the EPA to come to our State to have a listening session which we were never able to get.

The EPA did come several months ago and had a very vigorous listening session in Charleston, West Virginia, obviously mostly around coal. We had all sides of the argument heard in the public sector. It was very much welcomed.

Partly, I see cooperative federalism as the ability to listen. That is what you said as well.

Senator CAPITO. Commissioner Baker, you are from an energy State. You mentioned the Clean Power Plan, which was mentioned in some of the other testimony, and that without the Clean Power Plan we are not going to move forward with the desired capturing of carbon and cleaning the environment.

Could you again comment on that and what Texas is doing? You said they are the biggest producer of carbon in the country.

Mr. BAKER. Inside the Clean Power Plan, there were glide paths laid out that States had to meet to comply with the plan itself. I believe our first year was early in the 2020s. We will be within 5 percent of that number by 2019. That is without any plan currently in place.

Senator CAPITO. To what do you attribute that?

Mr. BAKER. Honestly, Chairman, a number of things. I think efficiency with our industrial sector, but I also would say, honestly, cheap natural gas has had a direct impact. We have had 12 coal fired ETUs that will be retiring, have retired, or are retiring soon.

The market itself, I think, is driving us to do what the Clean Power Plan set out to do, and on top of that, massive wind saturation into our power supply.

Senator CAPITO. I would like to ask a simple question of everyone. Senator Whitehouse, in his opening statement, got me thinking about this. He mentioned that States would want to walk away from the core mission of less pollution.

Ms. Vehr, is that the desire, to walk away from the core mission of the Clean Air Act and a mission of less pollution; yes or no?

Ms. VEHR. Absolutely not.

Senator CAPITO. Mr. Alteri.

Mr. ALTERI. No.

Senator CAPITO. Mr. Baker.

Mr. BAKER. No.

Senator CAPITO. Mr. Rodriguez.

Mr. RODRIGUEZ. No.

Senator CAPITO. Mr. Garvin.

Mr. GARVIN. Being downwind, I hope not.

Senator CAPITO. I wondered if somebody was going to take more than just a yes or no. Thank you, Mr. Garvin, for having faith and adding a few extra words.

Mr. Alteri mentioned the sue and settle issue. Could you explain to me how that works in terms of the ground level ozone provisions?

Mr. ALTERI. I think they have outcomes that are not consistent with the Clean Air Act. Currently our utilities are being forced to add additional controls at extreme cost, whereas those areas that maintain the standard on the East Coast do not have to provide any additional controls.

I think it is a negative outcome for our State and really unnecessary.

Senator CAPITO. Does anyone else wish to comment on the sue and settle?

Mr. BAKER. I would like to make one comment.

One of the more egregious sue and settle complaints I think we would have goes back to 2010 to 2011, which came out of a case over timing reviews for NSPS. Through that consent decree and that decision, EPA decided new source performance standards were now going to be applicable to all oil and gas wells, whereas we have years and years and years of legal interpretation that said NSPS did not apply.

With that one decision, essentially overnight, we had to regulate hundreds of thousands of new sources. The problem with that is obviously the cost to do that, since we are a delegated State, falls on my agency, and trying to figure out how to do that through a simple reinterpretation of the way the Clean Air Act had been interpreted since the amendments of the early 1990s.

Senator CAPITO. Thank you.

Senator Whitehouse.

Senator WHITEHOUSE. Thank you, Madam Chair.

Thank you again to all the witnesses for being here.

I would like to open my questioning by reading a quotation from Freddie Mac, the U.S. mortgage backer. This relates to harm to coastal housing and property markets: "The economic losses and social disruption may happen gradually, but they are likely to be greater in total than those experienced in the housing crisis and Great Recession."

Those of us from coastal States take warnings like that from our Federal mortgage providers pretty damned seriously, as I think you would expect we should. Could you tell me, Ms. Vehr, what is the relationship between carbon dioxide emissions and sea level rise, cause and effect?

Ms. VEHR. Cause and effect? I know there are changes occurring in our environment currently that people are studying. I am not an

expert in that area, so I would have to defer to the studies others are doing in that area.

Senator WHITEHOUSE. Mr. Alteri, can you do any better than that?

Mr. ALTERI. No. I am not certain of the direct relationship between the CO<sub>2</sub> emissions and sea level rise.

Senator WHITEHOUSE. You have a coast, Commissioner Baker. Maybe you can do better. What do you know about this?

Mr. BAKER. In certain areas, I think there is a direct correlation.

Senator WHITEHOUSE. What do you mean in certain areas?

Mr. BAKER. For example, in Texas, the relative sea level rise that we are experiencing comes from man-made things like subsidence and man-made structures that extend into the Gulf of Mexico.

Senator WHITEHOUSE. I guess my question is what is the role of carbon dioxide emissions in contributing to that sea level rise, if any? What is your understanding of that?

Mr. BAKER. In Texas, I do not know what the science says specifically about that regarding our coast.

Senator WHITEHOUSE. How about generally if not specifically? What is the science generally on the correlation between carbon dioxide emissions and sea level rise?

Mr. BAKER. I think I answered that it is correlated.

Senator WHITEHOUSE. OK. That is a start.

Mr. Rodriguez, California is coastal.

Mr. RODRIGUEZ. I will just say I work with scientists all the time. It is sometimes hard to get them to agree with certainty on anything. In this particular area, the overwhelming consensus is, and I have no doubt, there is a direct correlation between the CO<sub>2</sub> emissions and changes in the weather, including sea level rise.

Senator WHITEHOUSE. Do you have coastal communities actually having to plan for that?

Mr. RODRIGUEZ. Absolutely. We just agreed to a new set of guidelines for development along our coast just recently at our Ocean Protection Council. We are preparing for sea level rise. We are already seeing it along our coasts.

Senator WHITEHOUSE. Mr. Garvin, you are like me. You are coastal, and you are downwind. Your friend, Mr. Rodriguez, is downwind of China. We are downwind of the coal plants in West Virginia, Ohio, Pennsylvania, Kentucky, and so forth.

For a long time we have been on the receiving end of their pollution and do not much appreciate the high smoke stacks that have been built to make sure that pollution goes out of their States and lands on ours.

Take a stab at what sea level rise means for Delaware and whether it connects to the carbon emissions from these plants.

Mr. GARVIN. I want to touch on two things. I completely agree with my colleague from California.

When we look at this issue in Delaware, our two largest economic generators are tourism and agriculture. When you talk about climate change, part of it is sea level rise issues, and part of it is creating more frequency of storms, more severe storms, higher droughts, and more flooding across the board.

That has direct impact on our two largest economic engines in the State of Delaware. We are seeing those impacts particularly along our coastline now and have been.

Senator WHITEHOUSE. What do coastal communities in Delaware have to start doing now, given the sea level rise that is anticipated as a result of climate change and carbon emissions?

Mr. GARVIN. There are three things going on right now. One is we continue to work on renourishment of our coastline to try to protect our coastline as much as possible. Our local communities are looking at land use decisions, existing structures, and how they need to raise and address any new construction.

Senator WHITEHOUSE. Treatment plants, ports, harbors, all those need to be reconsidered?

Mr. GARVIN. Our wastewater treatment plants and our power plants. In addition, as we speak, our Department of Transportation is raising Route 1, which connects our coastline along the Atlantic coast, by several inches to try not to address the big storms but just address the regular storms and the impacts we are having on transportation, which also becomes a public safety issue for our communities along the coast.

Senator WHITEHOUSE. Thank you, Chairman. My time has expired. I appreciate that.

Senator CAPITO. Senator Markey.

Senator MARKEY. Thank you very much.

Mr. Rodriguez, welcome.

Scott Pruitt is now attacking the fuel economy standards which were reached in agreement with California and all the waiver States along with the EPA and NHTSA in 2010–2011.

That would reduce our imports of oil by 3.5 million barrels of oil a day, roughly equivalent right now to what we import from OPEC on a daily basis. It seems like a pretty important thing to do, to keep on the books.

It also is still the largest single reduction that any country has ever put on the books to reduce greenhouse gases, that one decision. It is huge. I take a great deal of pride in it because I was the House author of that legislation in the same way Senator Feinstein and Senator Stevens were the Senate authors of that bill, the 2007 bill relied upon by DOT.

What do you think about Scott Pruitt's statement that the standards are too hard to meet, that it is just an unfair imposition on the auto industry? Do you agree with that?

Mr. RODRIGUEZ. No. We did a very, very thorough technical assessment of the standards and the progress the auto industry has made in complying with those standards.

Back in 2016 and 2017 our Air Resources Board found there was no reason to deviate from those standards, that progress was being made. In fact, our experience has been if you set the right targets, industry will find a way to get there. That seems to be the case here.

We see no reason to deviate from those standards agreed to previously with the Federal administration.

Senator MARKEY. What do you think about General Motors, Toyota, and the other companies now saying they cannot meet the standards? What would be your message to them?

Mr. RODRIGUEZ. We will continue to work with them and talk with them about how we meet these standards. We are always interested in hearing from industry.

Frankly, they are not quite as dramatic as that. We hear that they are interested in talking about some tweaks to the system, but I am not hearing anyone say they want to see a wholesale revision of the standards. As I said, I think we are making very good progress in meeting those standards.

Senator MARKEY. I appreciate what you are saying, but the American Automotive Association speaks for someone. They are not out there just talking as though they have a view. That association is just Pinocchio to Gepetto; above them are the CEOs of the companies that want the changes. They do not make these decisions without that kind of instruction that is coming down to them.

The CEO of Ford Motor Company has made it quite clear that he does not agree with it, but the others, not so much. From my perspective, I think that is at the core of the problem we have right now.

What would this represent as an attack on the clean air standards of California and the other 13 States who would see their standards compromised?

Mr. RODRIGUEZ. Transportation, obviously, is a very, very significant part of the air pollution puzzle. We have made tremendous progress through the years, but we need to continue to clean up the air.

Frankly, our goal is to move to electric and fuel cell vehicles and zero emission vehicles because that is the only way we can meet our greenhouse gas emission standards. We are fully committed to continuing to work to enforce these standards and continuing to work with the auto industry to bring about this change in technology that will change us over to zero emission vehicles.

Senator MARKEY. Scott Pruitt talks about cooperative federalism as the way in which he wants to operate. In your opinion, would this be a direct attack on cooperative federalism given the agreement that was reached 6 years ago to increase the standards?

Mr. RODRIGUEZ. We look forward to a dialogue with EPA. We really have not had it yet on the technology. We had worked with the previous EPA administration on the technology and agreed with them and their assessment of the standards and success in meeting those standards.

In answer to your question, no, we have not seen that sort of cooperative federalism exhibited by this administration.

Senator MARKEY. You are not saying you have not yet had a conversation with them? Is that what you are saying?

Mr. RODRIGUEZ. There have been some general conversations but certainly nothing on the technical level that you need to do if you are going to look at standards.

Senator MARKEY. Do you think that makes sense, that Scott Pruitt says he is going to recommend revocation of those rules without even having had conversations with the other party to the negotiation to determine whether or not the technical standards can be met? Do you think that is cooperative federalism?

Mr. RODRIGUEZ. No.

Senator MARKEY. No. OK. I thank you.

Thank you, Madam Chair.

Senator CAPITO. Senator Barrasso.

Senator BARRASSO. Thank you very much, Madam Chair.

Ms. Vehr, I would like to ask you a couple of things.

Your testimony demonstrates the importance of cooperative federalism because many of the issues we face in Wyoming are unique to the State of Wyoming, given our size, location, high elevation, topography, and economy, which are all quite unique.

What can the EPA do to work with Wyoming to address these unique characteristics and how they affect issues such as background ozone, exceptional events, and things like wildfires?

Ms. VEHR. First, start by listening to what Wyoming has to say. Second would be to timely act when Wyoming makes a request. Third would be to provide some of the technical tools. States like Wyoming consume a lot of resources to develop modeling and the like.

Senator BARRASSO. We talk about and look at the fact we have been so successful in balancing the economic benefits from using our natural resources for energy production in Wyoming while ensuring views in our national parks are not impacted by issues related to air pollution.

This is why striking that proper balance, you discuss, between State and Federal decisionmaking in the implementation of say the Regional Haze Program is critical. Is EPA addressing your concerns about the role Federal land managers play in State plans as it relates to regional haze?

Ms. VEHR. I think they are starting to. It is critically important that States work with EPA, but it is also equally critically important that all the Federal land managers in EPA have a working relationship.

Wyoming does participate in these discussions so that we have other Federal land managers, EPA, and the State at the table so all of our voices are heard and we can achieve improved air quality.

Senator BARRASSO. Director Alteri, one of the greatest concerns about the Obama administration's EPA, for me at least, was the agency's use of a tactic known as sue and settle. This allowed the EPA to make decisions that had a major impact on States without including States in the decisionmaking process at all.

How will the recent directive issued by Administrator Pruitt on sue and settle be helpful to States?

Mr. ALTERI. As it relates to our State implementation plan, the directive from Administrator Pruitt mandates that States have a voice at the table and a seat at the table. I think that will give us an opportunity to explain the technical limitations or technical abilities to achieve these standards.

Senator BARRASSO. Ms. Vehr, the prior Administration issued some rules that imposed, I thought, really burdensome requirements on States because the EPA charged States, like ours, affected air quality in other States.

Can you talk a bit about your perspectives on these air transport issues? Should we also think about international effects on our air quality?

Ms. VEHR. Definitely, the international effects. This is still an evolving area of science, both on ozone and visibility. The modeling

Wyoming and other western States did for the first round of regional haze showed visibility in the west was impacted by international transport of pollutants.

The ozone modeling EPA conducted for the Cross State Air Pollution Rule Update looked at pollution. As we dove into that modeling, we realized there is still an area that needs to be examined with international transport. It does affect.

Last week at our AAPCA meeting we heard a speaker who talked about reduction in international pollution, which may help solve the ozone issues other States are experiencing. Yes, international transport is important.

Senator BARRASSO. Director Alteri, I would ask if you would like to weigh in a bit or if there is anything you would like to add to what Administrator Vehr had to say. Can you talk a bit about how the State of Kentucky has been affected by some of these EPA regulations about emissions from one State to another?

Mr. ALTERI. Ms. Vehr mentioned models. The models are limited. Former Assistant Administrator McCabe mentioned that EPA has not fully evaluated all of the other stationary sources beyond EGUs. Those limitations have imposed greater reductions for us than they would in the maintenance areas in Maryland and other places.

Also, there was a statement as well that if emissions from Kentucky were reduced in total, it still would not affect and bring the areas in the Northeast into compliance.

Senator BARRASSO. To zero?

Mr. ALTERI. To zero.

Senator BARRASSO. If emissions went to zero, it still would not help the others?

Mr. ALTERI. It still would not bring their areas into compliance.

Senator BARRASSO. Thank you.

Thank you, Madam Chairman. That was very interesting.

Senator CAPITO. Thank you.

Senator Carper.

Senator CARPER. Mr. Alteri, my mother lived in Kentucky the last 2 or 3 years of her life in a place called Ashland. I had a chance to go there a lot. My sister lives in Winchester. I had a chance to go see her and her family. I have a good deal of love going to Kentucky, a beautiful State.

Mr. ALTERI. Thank you, Senator.

Senator CARPER. I applaud the reduction in emissions that you talked about in your testimony.

When Frank Garvin, our Secretary, spoke, I think he mentioned that something like 90 percent.

Frank, repeat what you said; 90 percent?

Mr. GARVIN. Over 90 percent of ozone comes from outside our borders.

Senator CARPER. That is not good. That is not good.

Earlier in my life I was privileged to serve as Governor of Delaware. I remember having a conversation with folks from Maryland, folks who made their living harvesting creatures that live in the Chesapeake Bay. They had the big dead spots in the Chesapeake Bay, and the sea grass stopped growing, and their ability to make a living was diminished.



They said to us, we needed to do something about it. We said, why? They said because the Nanticoke River that flows through Delaware into Maryland and into the Chesapeake Bay was carrying a lot of nutrients from when we clean out chicken and poultry houses in Delaware, our farmers were, in some cases, just back stacking it up on their farm fields. In other cases, they spread it across their farm fields for the value of the nitrogen and phosphorous.

We were doing it without a lot of thought. It would rain and the nutrients would wash into ditches, creeks, rivers, and the Chesapeake and degrade the quality of their water. It was not just our water, but Pennsylvania, Virginia, and other places.

The folks from Maryland said, how would you like to be making your living by harvesting God's creatures who live in the Chesapeake Bay, how would you like to be trying to make your living, and your neighbors were all polluting the place where you are trying to make a living?

We said, you know, you have a pretty good point there. I think they even pointed out that was not really consistent with the Golden Rule, treat other people the way we want to be treated.

We put together a farmer led initiative called the Nutrient Management Commission that ultimately worked with environmental groups as well as with the Department of Natural Resources, including Christophe Tulou's successor, Nick DiPasquale, and came up with a way to dramatically reduce those kinds of runoff and emissions and the damage we were doing to our neighbors.

We have been on both sides of this equation. We have been the neighbor who degraded the water quality of our neighbor, Maryland. We are the neighbor who receives emissions from my native West Virginia, from western Pennsylvania, from Kentucky where my sister now lives, from Indiana, Tennessee, and Virginia, all kinds of States.

My colleagues are sick of hearing me say this, but when I was Governor of Delaware, the kind of emissions our Secretary talked about, we could have shut down our State, cut off the road, and basically shut down the economy. We still have been out of compliance. That is just not fair.

There is a need here for a Federal role. Other States, upwind States, those of us who live at the end of America's tailpipe—whether it is Delaware, Rhode Island, New Jersey, Maryland, all of us—this ain't right.

There is a need for the Federal Government—when States will not do enough to help us out—to make sure that you do more. I am going to ask Secretary Garvin to comment on that, if you would, because you have to live with this.

Mr. GARVIN. I appreciate that. If you look at the State of Delaware, the two biggest things we are talking about here is our transport that we are receiving which is over 90 percent, and the second piece is transportation. Those are really the two biggest pieces that we have when looking at emissions. Both of those we really need cooperation and partnership with both our fellow States, as well as leadership from our Federal Government.

We have been the ones who have taken advantage of all the work that California has done because we could never have done it on

our own. When you look at the Mid-Atlantic and the Northeast and the amount of vehicle traffic we have, for us to address air issues, we are going to need to continue to work on the transportation side.

We are continuing to look inside the State on how we build a much better electric infrastructure for vehicles, but we are really going to rely on cooperative federalism and cooperation with our fellow States on both the transport issue and the transportation issue.

Senator CARPER. Thank you.

Madam Chair, if we have a chance to ask another question, I would like to come back and maybe use 2 minutes to ask one last question.

Senator CAPITO. Yes. I will go to Senator Inhofe.

I did not know what your time constraints might be.

Senator INHOFE. I would like to hear his question.

Senator CAPITO. OK. Go ahead.

Senator CARPER. Over a number of years, we have made real progress going back to when I think Jerry Ford was President and more recently since 2007, we have made real progress in reducing emissions, to which Secretary Garvin alluded, to combat cars, trucks, and vans.

One of the things Senator Inhofe and I worked on together was to reduce diesel emissions. That was actually pioneered by George Voinovich, a former colleague.

We have the opportunity to continue to make progress and do so with a win-win situation where we provide the automakers some flexibility in the near term, maybe 2021–2025, in return for making clear what the out year targets could or should be particularly for light trucks, SUVs, and so forth.

The auto industry needs certainty. They do not want to have to build one model for California and a different model car, the same vehicle for 49 other States, or even 40 other States.

I think there is a real opportunity here to make clear the endangerment finding and the Clean Air Act are compatible with one another, that there is a way to give the auto industry some flexibility in the near term, 2021–2025, in return for some greater rigor in standards say after 2030 in a way that is respectful of California's leadership role in this and for the rest of us.

Is that a pipe dream? Is that reality? Can you give me a reality check on that idea?

Mr. RODRIGUEZ. As I said, we believe the standards, we previously agreed to, are attainable, but certainly we are willing to sit down with the auto industry, talk about the technology, and look out to 2030. We want to work toward a solution that will keep us moving forward.

No, it is not a pipe dream. We will talk to the industry and work with others to come up with a solution.

Senator CARPER. I would just say to my colleagues, one of the things I try to do every year in January is go to the Detroit Auto Show. You all have probably been there as well. I have been doing it for years.

I met with representatives from 10 different auto companies, both foreign and domestic, all who basically said give us some addi-

tional flexibility in the near term and terms for greater certainty but greater rigor in the out years out to 2030. I really do think there is a win-win here. I hope we will take advantage of it.

Senator CAPITO. Thank you.

Senator Inhofe.

Senator INHOFE. Thank you, Madam Chair. Thank you and the Ranking Member for having this hearing today.

I just got here, so I do not know what has been asked. I have been chairing the Senate Armed Services Committee. We sometimes have that problem.

Our States should be seen as a partner. I think that is what is going on that is different now than it was during the last Administration and not looking at them as opposition. The current EPA Administrator, Scott Pruitt, has made that his mission and is delivering on that promise.

In the first year as Administrator he has met with 34 Governors from both parties, visited 30 States and U.S. territories. Under his leadership, EPA has acted on 322 State implementation plans—SIPs—and has averaged turning one Federal FIP into a SIP each month.

In comparison, the Obama administration imposed more than 50 FIPs on our State partners.

I understand some people think what our Administrator has been doing is a step backward, but they are the ones who think somehow the Federal Government or other States should be dictating what we do in our State. I know that is not the feeling of our Administrator now.

I read the testimony today, and I would say that many States are seeing positive results from this Administration.

I have a question for Mr. Alteri. Senator Barrasso already brought up the sue and settle problems we have had. I had the privilege of chairing this Committee for a number of years. I watched that happen.

In the case of Oklahoma, we were a victim of the sue and settle that was taking place. We were sued in northern California courts and forced to comply with a settlement that we were not a party to regarding the Regional Haze Plan, a decision Congress specifically delegated to the States.

The Federal plan will cost ratepayers an estimated \$282 million, and Oklahoma Gas and Electric said the EPA's rule would "trigger the largest customer rate increase in OG&E's history while the resulting impact on regional haze would be practically imperceptible."

Mr. Alteri, does this sound like a reasonable expectation from the result of a court case like this? Are you familiar with this? Are there other comparable problems?

Mr. ALTERI. I am. Specific to regional haze, all of the States are achieving their glide path or their status update. All of the States are achieving those.

I think when EPA issues Federal implementation plans, it gives a negative connotation to the fact we are doing our job. The Federal implementation plans kind of allude that States are not stepping up to the table and doing their job.

Senator INHOFE. But we are. For a number of years—this is the same thing you always get, those who are the more liberal individuals think that someone else can set an example in the case of the Federal Government, that somehow they know how to do things we do not know how to do.

It is kind of rewarding actually, as during the last Administration, when we had a partnership program take place with Fish and Wildlife, they found the States actually were doing a better job.

I have a question for Mr. Baker. One of the misconceptions following Hurricane Harvey was that the EPA was missing in action in response to the environmental concerns that Texas was potentially facing.

Your testimony suggested this was not the case at all. Can you elaborate on how the EPA was a partner with the State in facing the effects of this natural disaster?

Mr. BAKER. They were with us every step of the way as Hurricane Harvey was coming and in the response. They were actually part of a group we call NDOW, the Natural Disaster Operational Workgroup made up of our agency, the EPA and the Coast Guard.

We had table topped hurricanes coming in multiple times. At the staff level, they were already prepared. The big difference here as opposed to previous administrations was after the hurricane hit, and we needed fuel waivers, they acted almost immediately.

I went through Katrina, Ike, Frieda all in the government. This one, by far, was the one where they were the most reactive and moved with the most efficiency. We could not have done the things we did without them being at the table with us. They actually had people in our office with us and in the State Operations Center on a daily basis.

Senator INHOFE. In Texas, you know more about that, you have more of them. In Oklahoma, we have tornadoes, not hurricanes, but it is the same thing. We have experienced it and know how to react to them. I think that needs to be talked about.

Last, Ms. Vehr, in your testimony you highlight the fact that cooperative federalism is not just implementing Federal decisions but being a part of the decisionmaking process itself. You mentioned the fact that Administrator Pruitt announced new policies for the EPA's Board of Scientific Counselors, including ensuring a diverse composition.

Why do you think it is important for these boards to be regionally diverse?

Ms. VEHR. So that all State voices can be heard and the unique circumstances in all States are brought to the table to be considered in decisionmaking so there can be flexibility and appropriate decisionmaking to lead to better and improved air quality at lower cost.

Senator INHOFE. Thank you very much.

Thank you, Madam Chair.

Senator CAPITO. Thank you, Senator.

I would like to recognize the Ranking Member, who wanted to make a quick statement before we close out the hearing.

Senator WHITEHOUSE. I just wanted to point out that one dimension of the role of the EPA has to do with assuring fairness between separate States. Both Senator Carper and I, as downwind

States, have lived the world in which, from a State regulator's perspective, the solution, for instance, to air pollution was to build taller smokestacks so that the pollution went up higher into the atmosphere and was carried out of the polluting State and then landed on our State.

It is very hard to ask Ohio, Pennsylvania, or Kentucky to crack down on pollution that is not landing in Ohio, Pennsylvania, or Kentucky. It is a tough expectation to have for them politically.

We could regulate until we are blue in the face in Rhode Island but it does not help if what is coming in is coming in and is deliberately being set up to come in on us from out of State.

It is in that circumstance that the EPA plays an essential and vital role. That role cannot be subject to control by the polluting State because there is another State involved that is the downwind recipient of all of this.

It is that particular situation, I think, where we have to be very careful about how cooperative this federalism gets if you are not dealing with the polluted State as well. I just wanted to be clear on that point.

Senator INHOFE. Madam Chair, may I make a response?

Senator CAPITO. Sure.

Senator INHOFE. I agree with you in this case.

Senator WHITEHOUSE. It is true with the water as well, as you know.

Senator INHOFE. However, it is not the case as we just talked with Commissioner Baker. In that case, it is quite clear they had a lot more knowledge handling their own problems than the Federal Government did.

Obviously, the case you cite is one where there has to be that interference. We understand that.

Senator WHITEHOUSE. We end on a happy note.

Senator CAPITO. Yes. I would just like to reinforce, since we are in the land of final comments, at least from my State, the welcome, open door policy at the EPA, the willingness to talk, the willingness to understand the implications at every State, whether it is a downwind State or a heavy energy producing State.

I think if the part of cooperative federalism is going to work, cooperative has got to work. I am encouraged by what we see.

Senator CARPER. Madam Chair.

Senator CAPITO. In the land of final comments, you can say one last thing.

Senator CARPER. Thank you.

First of all, thank you for getting me in and out so I could be in the Census hearing as well.

I want to say again Senator Whitehouse really nailed it for those of us who are at the end of America's tailpipe. I would just ask you to put yourselves in our shoes, and we will try to do the same with respect to other States.

I would ask unanimous consent to submit for the record the four petitions from the State of Delaware to the EPA that ask the agency to require upwind power plants to install or consistently operate already installed pollution controls.

These actions need to occur to help downwind States like Delaware address nonattainment concerns for ozone.

I have a second UC request, if I could, dealing with glider trucks. I would ask unanimous consent to submit for the record a letter that Senator Udall and I sent to EPA regarding concerns about a proposal that would allow some of the dirtiest, heavy duty diesel trucks called glider trucks to circumvent clean air cleanups.

They look like new trucks on the outside, but they are equipped with old, high polluting diesel engines that can emit up to 450 times the particulate matter pollution and up to 43 times the nitrous oxide pollution of the model 2014 and 2015 trucks.

Those would be my two UC requests, Madam Chair.

Senator CAPITO. Without objection.

[The referenced information follows:]



STATE OF DELAWARE  
DEPARTMENT OF NATURAL RESOURCES  
AND ENVIRONMENTAL CONTROL

OFFICE OF THE  
SECRETARY

89 KINGS HIGHWAY  
DOVER, DELAWARE 19901

PHONE: (302) 739-9000  
FAX: (302) 739-6242

July 7, 2016

Gina McCarthy  
Administrator  
United States Environmental Protection Agency  
Ariel Rios Building  
1200 Pennsylvania Avenue, N.W.  
Mail Code: 1101A  
Washington, DC 20460

Dear Administrator McCarthy:

By this letter, the State of Delaware hereby petitions the Administrator of the Environmental Protection Agency (EPA) under §126(b) of the Clean Air Act (CAA) to find that the Brunner Island facility's electric generating units (EGUs), located near York, Pennsylvania, are emitting air pollutants in violation of the provisions of Section 110(a)(2)(D)(i) of the CAA with respect to the 2008 0.075 ppm ozone NAAQS and the 2015 8-hour 0.070 ppm ozone NAAQS.

Section 110(a)(2)(D)(i) prohibits any source or other type of emissions activity within a State, "from emitting any air pollutant in amounts which will contribute significantly to nonattainment in, or interfere with maintenance by, any other State with respect to any such national primary or secondary ambient air quality standard." Section 126(b) of the CAA provides that, "[a]ny State or political subdivision may petition the Administrator for a finding that any major source or group of stationary sources emits or would emit any air pollutant in violation of the prohibition of Section 110(a)(2)(D)(ii) or this section."

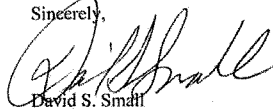
CAA Section 126(b) requires that within 60 days after receipt of any petition and after public hearing, the Administrator shall make such a finding or deny the petition. We look forward to working with you and your staff during this period in which you make your finding regarding this petition and take the required actions to protect the health and welfare of

*Delaware's Good Nature depends on you!*

Gina McCarthy  
Page Two

Delaware's citizens. Please do not hesitate to contact me if you have any questions or need additional information regarding this petition.

Sincerely,



David S. Small  
Secretary

CC: Jack Markell, Governor,  
State of Delaware

Ali Mirzakhali, Director  
Department of Natural Resources and Environmental Control

Administrator Shawn M. Garvin  
US EPA Region III Office

Joyce E. Epps, Air Director  
Pennsylvania Department of Environmental Protection



## Attachment 1

## Delaware CAA 126 Petition

The state of Delaware submits this petition for a finding under §126(b) of the Clean Air Act that the Brunner Island facility's electric generating units (EGUs), located near York, Pennsylvania, significantly contribute to Delaware's non-attainment of the 2008 8-hour ozone national ambient air quality standard (NAAQS) of 0.075 ppm and the latest 8-hour ozone NAAQS of 0.070 ppm adopted by the United States Environmental Protection Agency (EPA) on October 26, 2015. (1)

Delaware has complied with the requirements of §110(a)(2)(D)(i)(I) of the CAA by adopting in-state control measures for the prevention of emissions that would significantly contribute to non-attainment, or interfere with maintenance, of the ozone National Ambient Air Quality Standard (NAAQS) in a downwind area. (2) However, Delaware's ability to achieve and maintain health-based air quality standards for its own residents is severely impacted by sources outside of the state of Delaware. This is due to the fact that more than 94% of the ozone levels in Delaware are created by the transport of air pollutants from upwind areas. Attainment and maintenance of the 2008 and 2015 8-hour ozone NAAQSs in Delaware is possible only through additional emission reductions in the upwind states that significantly contribute to non-attainment and maintenance in Delaware.

Section 126(b) of the CAA provides that, "[a]ny State or political subdivision may petition the Administrator for a finding that any major source or group of stationary sources emits or would emit any air pollutant in violation of the prohibition of Section 110(a)(2)(D)(i) or this section." In accordance with §126(b) of the Clean Air Act, the state of Delaware petitions the Administrator of the EPA establish a timely schedule for the above-referenced Brunner Island electric generating facility and the state of Pennsylvania to put those entities in compliance with §110(a)(2)(D)(i) of the Clean Air Act with respect to the 2008 8-hour 0.075 ppm ozone NAAQS and 2015 8-hour 0.070 ppm ozone NAAQS. (3)

**Background**

The EPA began to address air quality issues related to ambient ozone through establishment of a related National Ambient Air Quality Standard in 1971. In 1997 the EPA first established the 8-hour ozone NAAQS to protect human health and welfare at a level of 0.08 ppm. The EPA subsequently lowered the 8-hour ozone NAAQS to 0.075 ppm in 2008. After further evaluation, the EPA further lowered the 8-hour ozone standard to 0.070 ppm on October 26, 2015. (1)

The establishment of the short term ozone standard (8-hour NAAQS) was necessary to address the potential health impact of short term exposure to high levels of ozone. Short term exposure to ozone can cause rapid, shallow breathing and related airway irritation, coughing, wheezing, shortness of breath, and exacerbation of asthma, particularly in sensitive individuals and asthmatic children. Short term exposure also suppresses the immune system, decreasing the effectiveness of bodily defenses against bacterial infections. Research studies indicate that markers of cell damage increase with ozone exposure. Some studies suggest that there is a link between ozone exposure and premature death of adults and infant death. Other studies indicate a link between ozone and premature birth and adverse birth outcome, cardiovascular defects, and adverse changes in lung structure development in children. Children, the elderly, those with chronic lung disease, and asthmatics are especially susceptible to the pulmonary effects of ozone exposure. Additionally, studies have shown that ozone can adversely affects trees and vegetation, can cause reduced crop yields, and can contribute to nitrification of bodies of water.

Atmospheric ground level ozone that is harmful to human health and welfare is formed primarily by the chemical reaction of nitrogen oxides (NO<sub>x</sub>) with volatile organic compounds (VOC's) in the presence of heat and sunlight. Dry, hot, sunny days are most conducive to the formation of ozone. Because ground level ozone concentrations are highest when sunlight is the most intense, in the eastern United States the warm summer months (May 1 through September 30) are referred to as the ozone season. Weather also affects ozone concentrations and how quickly it is transported and dispersed. Periods of light winds allow ozone and ozone precursor pollutants to build up in any particular area leading to greater concentrations. However, the wind can also be responsible for transporting the ozone and ozone precursors over long distances downwind. This downwind pollutant transport can then combine with more local emissions to contribute to exceeding the ozone NAAQS in any particular location.

Delaware has experienced a number of exceedances of the health based 8-hr ozone NAAQS. (4) The following table identifies the number of 8-hour ozone NAAQS exceedances experienced in Delaware during the ozone seasons for the years 2000 through 2015:

**Table 1**  
**Actual Delaware Ozone Exceedances – 8-Hour NAAQS**

	New Castle County - No. of Days of Exceedance	Kent County - No. of Days of Exceedance	Sussex County - No. of Days of Exceedance	Total No. of Days of Exceedance
2015 Ozone Season*	2	0	0	2
2014 Ozone Season*	3	0	0	3
2013 Ozone Season*	1	0	1	2
2012 Ozone Season*	13	14	12	19
2011 Ozone Season*	11	3	6	15
2010 Ozone Season*	14	5	9	18
2009 Ozone Season*	3	0	0	3
2008 Ozone Season*	9	8	8	14
2007 Ozone Season**	5	0	0	5
2006 Ozone Season**	2	4	3	6
2005 Ozone Season**	8	2	8	16
2004 Ozone Season**	3	0	2	5
2003 Ozone Season**	5	3	5	7
2002 Ozone Season**	18	10	16	26
2001 Ozone Season**	18	8	10	21
2000 Ozone Season**	8	5	7	11

\*= 0.075 ppm Standard    \*\*= 0.08 ppm Standard

On October 1, 2015, the EPA strengthened the 8-hour ozone NAAQS to 70 ppb based upon scientific evidence of ground level ozone's negative effect on public health and welfare. Relative to the 2008 8-hour ozone standard, the updated 8-hour ozone NAAQS is expected to further improve public health protection, particularly for at-risk groups, and also improve the health of trees, plants, and ecosystem. If the 2015 8-hour ozone standard of 70 ppb had been in effect for the past several years, based upon monitoring data, it is estimated that Delaware would have experienced a higher number of 8-hour ozone exceedances compared to the actual exceedances of the 2008 8-hour ozone standard of 75 ppb. The following table provides a comparison of the actual 8-hour ozone NAAQS exceedances and the estimated exceedance that would have occurred if the 70 ppb standard had been in effect:

Table 2  
Comparison of Actual vs Estimated Days of Ozone Exceedance  
2008 8-hour Ozone NAAQS vs 2015 8-hour Ozone NAAQS

Ozone Season	Actual Number of Days of 75 ppb Ozone Standard Exceedance	Actual Number of Monitor-Days of 75 ppb Ozone Standard Exceedance	Estimated Number of Days of Ozone Standard Exceedance Assuming 70 ppb Standard	Estimated Number of Monitor-Days of Ozone Standard Exceedance Assuming 70 ppb Standard
2010	18	28	36	91
2011	15	20	25	73
2012	19	39	28	107
2013	2	2	6	7
2014	3	3	8	17
2015	2	2	10	16

It can be seen in the above table that if the more stringent 2015 8-hour ozone NAAQS of 70 ppb were in effect during the 2010 through 2015 ozone seasons that Delaware would have exceeded that standard at a much higher rate than it experienced under the 2008 8-hour ozone NAAQS of 75 ppb. As shown in the above table, for the 2010 through 2015 ozone season, the number of 8-hour ozone NAAQS exceedance day would increase from 59 days under the 2008 NAAQS to 113 days under the 2015 NAAQS.

As discussed earlier, NO<sub>x</sub> is a precursor pollutant to the formation of atmospheric ozone. NO<sub>x</sub> is a generic term for a group of reactive gasses that are composed of nitrogen and various amounts of oxygen (including nitrogen oxide and nitrogen dioxide). NO<sub>x</sub> is formed in the combustion process as a result of high temperature chemical reactions of the nitrogen contained in the fuel and the nitrogen contained in the ambient combustion air along with oxygen in the combustion air. Fossil fuel-fired electric generating units are some of the largest emitters of NO<sub>x</sub>, with EGUs powered by coal-fired steam generators without NO<sub>x</sub> emissions controls exhibiting some of the highest NO<sub>x</sub> emission rates (in terms of lb/MMBTU).

Uncontrolled, higher nitrogen content fuels, such as coal and residual fuel oil, tend to result in higher NO<sub>x</sub> emissions than lower nitrogen content fuels (such as natural gas). Various combustion configurations tend to result in varying NO<sub>x</sub> emission rates (in terms of pounds of NO<sub>x</sub> emitted per million BTU of fuel heat input (lb/MMBTU)) due to amounts of excess air required for combustion, rate of fuel combustion, combustor geometry, peak combustion temperatures, and duration of combustion gasses at peak temperatures, etc. Combustion controls, such as low NO<sub>x</sub> burners and overfire air, are commercially available NO<sub>x</sub> reduction technologies adaptable and applicable to most EGU combustion systems. Post combustion NO<sub>x</sub> controls, such as selective non-catalytic reduction (SNCR) and selective catalytic reduction (SCR), are commercially available highly effective NO<sub>x</sub> reduction technologies that are applicable to most EGU exhaust gas streams. These NO<sub>x</sub> controls are generally available for

both new EGU installations and for retrofit on existing EGUs. Utilization of combustion controls and post combustion controls, singly or layered together for a single EGU, can result in significant reductions in the EGUs NOx emissions rate, greater than 90% reduction from uncontrolled levels for some EGUs.

To address the NOx emissions from EGU sources located in the state of Delaware, Delaware has promulgated a number of rules and regulations that effectively control the NOx emissions from these EGUs which also fulfills Delaware's obligation under §110(a)(2)(D)(i)(I) of the Clean Air Act. These rules and regulations have been previously submitted to the EPA in Delaware's June 2007 and subsequent state implementation plan (SIP) revisions, including the June 2012 revision.

(5) The referenced rules and regulations include the following:

- 7 DE Admin Code 1112, Control of Nitrogen Oxide Emissions, which set RACT-based NOx emission rate standards for major stationary sources, including EGUs. (6)
- 7 DE Admin Code 1146, Electric Generating Unit (EGU) Multi-Pollutant Regulation, which included short term NOx emission rate limits (lb/MMBTU on rolling 24-hour average) and annual NOx mass emissions caps for coal-fired and residual oil-fired EGUs. (7)
- 7 DE Admin Code 1148, Control of Stationary Combustion Turbine Electric Generating Unit Emissions, which set NOx emission rate limits or approved NOx control technology requirements (such as water injection) for combustion turbines with a nameplate rating of 1 MW or greater that had not previously controlled their NOx emissions rate in accordance with the NOx RACT requirements of 7 DE Admin Code 1112. (8)

In addition to the NOx control regulations noted above, Delaware has participated in regional and federal initiatives, where applicable, that were designed to limit the NOx emissions from EGU sources whose NOx emissions may impact compliance with ozone standards in downwind states. These regional and federal initiatives include the following:

- The Ozone Transport Commission (OTC) NOx Budget Program. (9) In 1990, the OTC was created by amendments to the Clean Air Act. The OTC consisted of northeast and mid-Atlantic states with persistent summertime ozone problems. These OTC states include Connecticut, Delaware, the District of Columbia, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont, and portions of Virginia. The OTC was tasked with advising the EPA on ozone transport issues and for helping to develop and implement regional solutions to ozone problem experienced by the member states. Recognizing that the interstate transport of pollutants to downwind states contributed to summertime ozone problems in those downwind states, the OTC created and implemented its NOx Budget Program. The NOx Budget Program was a cap-and-trade program to limit the total regional emission of NOx from fossil-fueled electric generating units and large boilers located in OTC states, and became effective in 1999. Cap and trade

programs effectively reduce the total amount of emissions, usually for a geographic area, by placing a cap on the total emissions occurring in that geographic area without setting unit by unit limits. For the OTC NOx Budget Program, affected states were allocated a NOx emissions cap for the subject NOx emitting sources in the respective state, and the subject units were required to hold and surrender a NOx allowance for each ton of NOx emitted in order to comply with program requirements. This program did not include any unit specific NOx emissions rate requirements. The OTC NOx Budget Program effectively ended when the EPA began administering the EPA's NOx Budget Trading Program.

- The EPA NOx State Implementation Plan (SIP) Rule. (10) In 2003 the EPA implemented its NOx State Implementation Plan (SIP) Rule utilizing the NOx Budget Trading Program, a NOx emissions cap and trade program similar to that used for the OTC NOx Budget Program. Relative to the OTC NOx Budget Program, the EPA's NOx Budget Trading Program was expanded to include additional states (for a total of 20 states and also the District of Columbia) and established more stringent NOx emissions allowance allocations. The EPA's NOx State Implementation Plan (SIP) Rule was intended to reduce the regional transport of ozone and ozone-forming pollutants in the Eastern United States. The NOx State Implementation Plan (SIP) Rule was in place until 2009, when it was replaced by the EPA's Clean Air Interstate Rule (CAIR).
- The EPA Clean Air Interstate Rule (CAIR). (11) In 2005, the EPA promulgated its CAIR program that required states to reduce the emissions of SO<sub>2</sub> and NOx to help meet health based air quality standards for fine particulate matter and ozone. The EPA indicated in the proposal for the CAIR that NOx and SO<sub>2</sub> emissions in 23 states and the District of Columbia contributed to unhealthy levels of fine particulate matter in downwind states, and that the NOx emissions from 25 states and the District of Columbia contributed to unhealthy levels of 8-hour ozone in downwind states. EPA indicated that the reduction of SO<sub>2</sub> and NOx emissions from EGUs would serve to reduce the interstate transport of pollutants related to these emissions. CAIR established a cap-and-trade program covering EGUs to limit the emissions of SO<sub>2</sub> and NOx from these sources as an option for compliance with the reduction requirements. (All states subject to the CAIR selected this compliance option.) SO<sub>2</sub> and NOx emissions mass caps were established for individual states and allowances were issued by the EPA to cover those allowable emissions from subject sources. The cap-and-trade program was intended by the EPA to provide subject sources flexibility in meeting the mass emissions limitations through the installation of controls, fuel switching, or trading/purchase of excess allowances from other subject sources. The NOx emissions limitations of CAIR became effective in 2009, and the SO<sub>2</sub> emissions limitation of CAIR became effective in 2010. The EPA made a number of changes to the CAIR subsequent to its original proposal, the most notable was the establishment of a process to provide for EPA to establish CAIR Federal Implementation Plans (FIPS) for states that

failed to timely establish state plans for the implementation of CAIR. This ensured that the controls of the cap-and-trade program were uniformly established in all subject states on a timely basis.

- The EPA Cross-State Air Pollution Rule (CSAPR). (12) Subsequent to the promulgation of CAIR, legal actions lead the US Court of Appeals for the DC Circuit to make the decision in 2008 to remand the CAIR back to the EPA to make the rule more consistent with the requirements of the Clean Air Act. However, the courts left the requirements of CAIR in place until the EPA finalized a replacement rule. In response, the EPA promulgated its Cross-State Air Pollution Rule (CSAPR) in 2011. Additionally, in conjunction with the rule the EPA established federal implementation plans (FIPS) for each state subject to the CSAPR in order to implement the rule as rapidly as possible. In the rulemaking process the EPA identified for subject states what portions of each state's emissions significantly contributed to ozone or PM2.5 pollution in downwind states. The CSAPR established mass emissions limitations of SO2 and NOx from power plants in subject states to eliminate the portion of those emissions that are significant contributions to non-attainment or maintenance of fine particulate matter and ozone air quality standards in downwind states. The CSAPR established annual mass emissions limitations for SO2 and NOx and additional ozone season NOx mass emissions limitations for NOx. Between the original CSAPR and subsequent actions, there were 26 states subject to the ozone season NOx mass emissions limitations to address the 1997 Ozone NAAQS, 18 states were subject to annual SO2 and NOx mass emissions limitations of the rule to address the 1997 Annual PM2.5 NAAQS, and 21 states were subject to annual SO2 and NOx mass emissions limitations to address the 2006 24-hr PM2.5 NAAQS (a combined total of 23 states for addressing the two PM2.5 NAAQS). Relative to previous mass-based emissions rules, the CSAPR significantly restricted the trading of allowances that could be utilized for compliance purposes by establishing state variability limits that ensure that a state's actual mass emissions would fulfill its Clean Air Act "good neighbor" obligations. The EPA determined that Delaware was not required to participate in CSAPR.
- In 2012 the CSAPR was challenged in court, and the US Court of Appeals for the DC Circuit vacated the CSAPR and the implementing FIPs. The Court remanded the rule to the EPA to address the Courts findings, and directed the EPA to continue administering CAIR pending the promulgation of a valid rule to replace CAIR. As of this ruling, CAIR cap-and-trade programs for annual SO2, annual NOx, and ozone season NOx remained in place. (12)
- In April of 2014 the US Supreme Court reversed the DC Circuit court's opinion vacating CSAPR. In June of 2014 the EPA filed a motion with the U.S. Court of Appeals for the DC Circuit to lift the stay of the CSAPR, and in October of 2014 the Court of Appeals for the DC Circuit granted the EPA's motion. In November of 2014 the EPA issued a ministerial

rule that aligned the dates in the CSAPR rule text with the revised court-ordered schedule, including 2015 Phase 1 CSAPR implementation and 2017 Phase 2 CSAPR implementation. (12)

- In November of 2015 the EPA proposed an update to the CSAPR by issuing the proposed CSAPR Update Rule. (13) Starting in 2017, this proposal would reduce summertime nitrogen oxides (NO<sub>x</sub>) emissions from power plants in 23 eastern states, by establishing NO<sub>x</sub> mass emission caps, in order to reduce the impact of those power plant emissions on downwind states. In its proposal, the EPA has requested comments regarding the potential application of short term NO<sub>x</sub> emission limits on these same power plants. The EPA determined that Delaware was not required to participate in the CSAPR Update.

These state and regional NO<sub>x</sub> reduction efforts have resulted in significant NO<sub>x</sub> emissions reductions from EGUs located in the state of Delaware. These reductions have occurred both in terms of ozone season NO<sub>x</sub> mass emissions (tons) and also in average ozone season NO<sub>x</sub> emissions rates (lb/MMBTU). The following table was assembled with data extracted from the United States Environmental Protection Agency's Air Markets Program Data (EPA's AMPD). (14) The table shows the ozone season NO<sub>x</sub> mass emissions (tons) and average NO<sub>x</sub> emissions rate (lb/MMBTU) for the EGU fleet located in the state of Delaware:

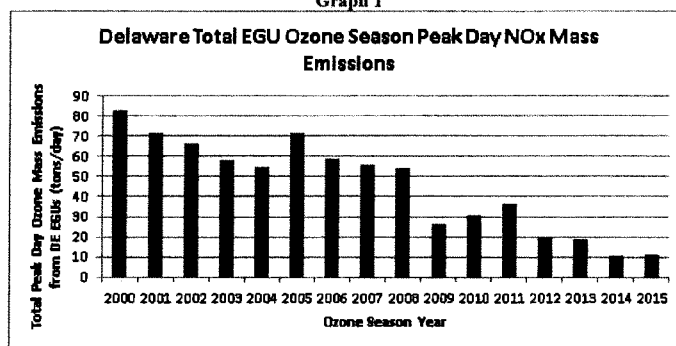


**Table 3**  
**2000 – 2015 Ozone Seasons**  
**State of Delaware**  
**Total EGU NOx Mass Emissions and Average NOx Emission Rate**

Year	Total EGU OS NOx Mass (tons)	Change in NOx Mass Emissions from 2000 (%)	Average NOx Emissions Rate (lb/MMBTU)	Change in Average NOx Emission Rate (%)
2000	4137	0.0	0.2784	0.0
2001	4777	15.5	0.2806	0.8
2002	4609	11.4	0.2415	-13.3
2003	3850	-6.9	0.2374	-14.7
2004	3659	-11.6	0.2449	-12.0
2005	5175	25.1	0.2818	1.2
2006	3567	-13.8	0.2582	-7.3
2007	4179	1.0	0.2398	-13.9
2008	3190	-22.9	0.2277	-18.2
2009	1280	-69.1	0.1695	-39.1
2010	2265	-45.3	0.1484	-46.7
2011	1879	-54.6	0.1250	-55.1
2012	1054	-74.5	0.0585	-79.0
2013	879	-78.7	0.0589	-78.9
2014	668	-83.9	0.0483	-82.7
2015	628	-84.8	0.0494	-82.3

However, relatively long term NOx mass emission caps (such as annual or seasonal caps) have limited impact on the short term NOx emissions (such as a 24-hour period) from EGUs that have a more direct impact on compliance with short term air quality standards, such as the 8-hour ozone NAAQS. To address this issue, Delaware's air quality regulations have included short term NOx emission rate limits (with 24-hour averaging periods) that are protective of the short term ozone NAAQS. These short term NOx emission rate limits have helped Delaware achieve significant reductions in ozone season peak daily NOx mass emissions from Delaware's EGUs.

Graph 1



It can be seen in the above Graph 1 that between the 2000 and 2015 ozone seasons, the Delaware's EGUs have achieved a NOx mass emissions reduction (for ozone season peak NOx mass emissions days) in excess of 80% reduction. This reduction in peak ozone season day NOx mass emissions provides benefit in attaining compliance with the 8-hour ozone NAAQS for both Delaware's citizens and downwind populations.

Even though Delaware has significantly reduced the NOx emissions from EGUs located in Delaware, as discussed above, Delaware continues to experience exceedances of the 8-hour ozone NAAQS. Pollutants transported from facilities in upwind states are significant contributors to Delaware's continuing issues in meeting the 8-hour ozone NAAQS.

#### **Modeling Identifies Impact of Upwind NOx Emissions Impacting Delaware's 8-hour Ozone NAAQS Compliance**

The US EPA performed modeling as part of the development of its Cross-State Air Pollution Rule in order to help determine the impact of transported pollutants on downwind states and those states' ability to attain and maintain the then current 2008 ozone NAAQS of 75ppb. Some results of the modeling that identify state contributions to ozone at individual monitoring locations can be found on the spreadsheet titled "Contributions of 8-hour ozone, annual PM2.5, and 24-hour PM2.5 from each state to each monitoring site" located in the "Technical Information and Support Documents" section of the US EPA's Cross-State Air Pollution Rule (CSAPR) website. (15)

The US EPA's modeling identified 13 individual states (in addition to Delaware itself) whose NOx emissions significantly impact the ability of Delaware to attain and maintain the then current 8-hr ozone standard of 75 ppb. (16) (A state significantly impacts another state if it impacts that state's air quality by 1% or more of the applicable air quality standard. For the then current 8-hr ozone standard of 75 ppb, a significant contribution was 0.75 ppb or greater.) The states identified by the US EPA as significantly impacting Delaware's air quality, and the modeling results quantifying each state's impact, are shown in the following table:

**Table 4**  
**States Significantly Impacting Compliance with the 8-hour**  
**Ozone Standard in Delaware and the Magnitude of that Impact**

<b>State</b>	<b>Maximum Contribution (ppb)</b>
CT	1.008
DE	6.256
IL	1.445
IN	1.737
KY	3.208
MD	23.951
MI	2.207
NJ	13.034
NY	9.092
OH	3.987
PA	13.344
TN	1.932
VA	6.039
WV	3.142

The EPA's modeling results, summarized in the above table, indicate that four states (Maryland, New Jersey, New York, and Pennsylvania) have greater impact on compliance of the 8-hour ozone standard in Delaware than the impact of Delaware itself. These modeling results tend to confirm that pollutant transport is a significant issue for the state of Delaware, and they also help explain Delaware's ongoing difficulties with the 8-hour ozone standard despite the significant actions Delaware has implemented to reduce NOx and VOC emissions in Delaware.

**Pennsylvania's Brunner Island EGU Facility's Impact on Delaware's 8-hour Ozone NAAQS Compliance**

As noted in Table 4 above, the EPA's modeling indicated that the state of Pennsylvania

significantly impacts Delaware's compliance with the 8-hour ozone NAAQS. Because of the magnitude of Pennsylvania's impact on Delaware's compliance with the 8-hour ozone standard, and the potential contribution to this impact by EGUs located in Pennsylvania, further modeling was performed to determine if individual Pennsylvania EGU facilities individually have a significant impact on Delaware's compliance with the 8-hour ozone standard.

In order to help Delaware assess the impact of upwind EGU facility NO<sub>x</sub> emissions on Delaware's 8-hour average ozone exceedances in 2011, Sonoma Technologies Inc. (STI) conducted air quality modeling using the Comprehensive Air Quality Model with extensions (CAMx) Ozone Source Apportionment Technology (OSAT) (17). The 2011 ozone season modeling was performed to determine 8-hour average ozone apportionments from individual upwind EGU facilities and upwind groups of EGU facilities. The modeling identified that a number of EGU facilities located in the state of Pennsylvania individually had significantly impacted Delaware's compliance with the 8-hour ozone NAAQS. The identified EGU facilities significantly impacting Delaware's ambient air quality included Pennsylvania's Brunner Island facility.

Because of the magnitude of its impact on Delaware's ambient ozone, the Brunner Island EGU facility is being individually addressed in this petition for a finding under §126(b) of the Clean Air Act.

The STI modeling results indicated that the Brunner Island power plant, located in York, Pennsylvania, emitted NO<sub>x</sub> during the 2011 ozone season at levels to individually have a significant impact on Delaware's air quality as measured by Delaware's ambient ozone monitors. The following table shows the days of the 2011 ozone season that the STI modeling estimated that the Brunner Island facility's NO<sub>x</sub> emissions impacted Delaware's ambient ozone at significant levels:

**Table 5**  
**Brunner Island NOx Emissions**  
**STI Modeling Estimated Impact on Delaware Air Monitors**  
**2011 Ozone Season**

Month	Day	Year	8-hour Ave O3 (ppb)
5	8	2011	0.93
5	30	2011	2.17
6	2	2011	0.75
6	4	2011	1.53
6	8	2011	4.83
6	9	2011	4.37
6	12	2011	1.5
6	18	2011	2.73
6	23	2011	1.01
6	25	2011	2.22
6	26	2011	2.41
6	29	2011	2.07
6	30	2011	1.17
7	2	2011	1.59
7	4	2011	1.26
7	5	2011	0.7
7	6	2011	0.85
7	7	2011	1.56
7	10	2011	0.77
7	12	2011	2.88
7	13	2011	1.1
7	15	2011	2.11
7	18	2011	1.03
7	22	2011	3.81
7	23	2011	3.58
7	24	2011	1.71
7	26	2011	0.72
7	27	2011	1.14
7	28	2011	0.93
7	29	2011	1.78
7	30	2011	1.53
7	31	2011	0.79
8	1	2011	3.47
8	2	2011	1.65
8	7	2011	0.88
8	8	2011	1.61
8	10	2011	2.55
8	20	2011	4.39
8	22	2011	0.81
8	31	2011	1.51
9	12	2011	1.53
9	13	2011	1.41
9	24	2011	1.43

As shown in the above Table 5, the STI modeling estimated that during the 2011 ozone season the Brunner Island facility's NOx emissions had a significant impact on Delaware's ambient ozone on 43 separate days relative to the 2015 8-hour ozone NAAQS of 0.070 ppm, and 41 days of significant impact relative to the 2008 8-hour ozone NAAQS of 0.075 ppm. As shown in the table, the highest estimated impact occurred June 8, 2011 with a modeled impact value of 4.83 ppb. The data in the above table also indicates that Brunner Island facility NOx emissions contributed at significant levels to Delaware's 2011 ozone NAAQS exceedances on 9 of the 15 days of exceedance.

#### **Brunner Island Electric Generating Station**

The Brunner Island electric generation facility is located in York county Pennsylvania. The Energy Information Administration (EIA) database indicates that the Brunner Island facility includes three coal fired steam electric generating. (18) The following table provides some technical information regarding the Brunner Island coal-fired electric generating units:

**Table 6**  
**Brunner Island Electric Generating Units**

Unit ID	Generator Prime Mover	EIA Nameplate Rating	EIA Summer Capacity	EIA Primary Fuel	EIA Commercial Operation Year	AMPD Max Heat Input Capacity	AMPD Reported NOx Controls
		(MW)	(MW)			(MMBTU/hr)	
1	Steam Turbine	363	306	Coal	1961	3220	LNB w/CCOFA & SOFA
2	Steam Turbine	405	363	Coal	1965	3655	LNB w/CCOFA & SOFA
3	Steam Turbine	848	742	Coal	1969	7430	LNB w/CCOFA & SOFA

The Brunner Island facility is currently owned and operated by Talen Energy. The facility is located within the PJM RTO and the facility and its electric generating units operate as independent power producers. These units would be expected to typically operate as dispatched by PJM for reliability and economic purposes to support the electric grid. EIA data indicates that the three Brunner Island coal-fired EGUs currently fire bituminous coal from Appalachian states as their primary fuel. Talen Energy has publicly announced that that permitting and planning to install natural gas firing capability for all three steam EGUs has been initiated, with spring 2017 being the time of expected gas firing capability. Talen Energy has also indicated that coal-firing capability will be retained for the three Brunner Island steam EGUs. Lacking additional permitting or regulatory requirements, it would be anticipated that the Brunner Island steam EGUs would fire coal whenever it would be economically beneficial to do so.

#### **Brunner Island NOx Emissions Limitations and Performance**

As noted in Table 6 above, the Brunner Island Units 1, 2, and 3 are currently equipped with low NOx burners (LNBs) and combustion air controls which were installed in the mid-1990s to satisfy the requirements of Pennsylvania's NOx RACT regulation. Pennsylvania has recently finalized a revision to its NOx RACT regulation, *Title 25. Environmental Protection/ Part I. Department of Environmental Protection/ Subpart C. Protection of Natural Resources, Article III Air Resources/ Chapter 129. Standards for Sources, Additional RACT Requirements for Major Sources of NOx and VOCs. (19)*

The revision to Pennsylvania's NOx RACT regulation also revises the NOx RACT provisions that are applicable to the Brunner Island Units 1, 2, and 3. The steam generators associated with Brunner Island Units 1, 2, and 3 are all coal-fueled tangentially fired combustion units with heat input ratings of greater than 250 MMBTU/hr. In accordance with the requirements of the revised Pennsylvania NOx RACT regulation, each of the three Brunner Island steam generating units are subject to a NOx RACT emissions rate limit of 0.35 lb/MMBTU based on a 30-day averaging period. Additionally, the revised Pennsylvania NOx RACT regulation permits the averaging of NOx emission rates among units at a single facility or multiple facilities under the control of a common owner for NOx RACT compliance purposes.

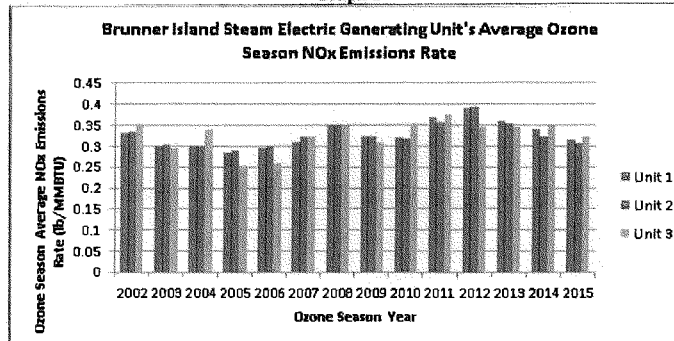
The revised Pennsylvania NOx RACT regulation's NOx emissions rate limit of 0.35 lb/MMBTU is representative of a presumptive NOx emission rate limit for a coal-fueled tangentially fired steam generator equipped with the equivalent of low-NOx burner technology. As the Brunner Island Units 1, 2, and 3 already incorporate this low-NOx burner technology, they are already operating at or near this presumptive limit of 0.35 lb/MMBTU. However, the use of a 30-day averaging period may facilitate the operation of one or more of the Brunner Island units at a daily average NOx emission rate in excess of 0.35 lb/MMBTU while still being able to attain the 0.35 lb/MMBTU average on a 30-day averaging period basis. Together the 30-day averaging

period and emissions averaging provisions of the applicable Pennsylvania NO<sub>x</sub> RACT do not ensure that the NO<sub>x</sub> emissions from the facility do not exceed an average rate of 0.35 lb/MMBTU over any given short time period, such as a 24 hour period. Because of these provisions in the revised Pennsylvania NO<sub>x</sub> RACT regulation, it does not appear likely that these revised regulatory provisions will result in any significant reduction in Brunner Island facility NO<sub>x</sub> emissions beyond historic and current levels. Therefore, the Pennsylvania NO<sub>x</sub> RACT provisions applicable to Brunner Island do not serve to limit this facility's ability to negatively impact downwind areas' compliance with the 8-hour ozone NAAQS.

Brunner Island Units 1, 2, and 3 have also all been subject to various NO<sub>x</sub> emissions cap and trade programs. Beginning with the 2001 ozone season through the 2002 ozone season, Brunner Island Units 1, 2, and 3 participated in the Ozone Transport Commission's NO<sub>x</sub> Budget Trading Program. Beginning with the 2003 ozone season through the 2008 ozone season, Brunner Island Units 1, 2, and 3 participated in the EPA's NO<sub>x</sub> Budget Program. Beginning with the 2009 ozone season through the 2014 ozone season, Brunner Island Units 1, 2, and 3 participated in the EPA's Clear Air Interstate Rule ozone season trading program. And beginning with the 2015 ozone season, Brunner Island Units 1, 2, and 3 participated in the Transport Rule ozone season NO<sub>x</sub> trading program. While these various trading programs effectively put a seasonal NO<sub>x</sub> emissions mass cap on the fleet of subject units, it did not require the subject units to limit their NO<sub>x</sub> emissions over any particular portion of the ozone season as long as the EGU was able to obtain sufficient NO<sub>x</sub> allowances to balance that unit's actual ozone season NO<sub>x</sub> mass emissions. The following graph shows the ozone season average NO<sub>x</sub> emission rate values for Brunner Island Units 1, 2, and 3 for the ozone season of 2002 through 2015.



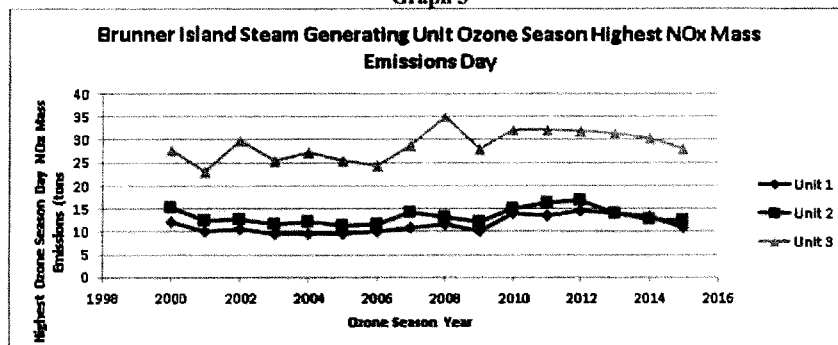
Graph 2



It can be seen in Graph 2 that, overall, there has been little change in the ozone season average NOx emissions rate for each of the three EGUs. While these EGUs have complied with the applicable requirements of the various NOx mass cap and trade programs, it appears that each of the three EGUs have been able to attain compliance without having to make any significant reductions in the respective EGU's ozone season average NOx emission rate.

Each of the three Brunner Island steam EGUs has also demonstrated a relatively consistent peak daily ozone season NOx mass emissions for the year 2000 through 2015 ozone seasons. The following graph shows each of the three units' ozone season peak daily NOx mass emissions for the year 2000 through 2015 ozone seasons:

Graph 3



Even with the regulatory and economic changes that have been occurring in the electric generation industry and the resulting impact on individual facilities and units, during some period in an ozone season it can be expected that an individual EGU or group of individual EGUs will operate at high capacity levels. The above graph is an indication that those discrete high capacity periods, however short, at the Brunner Island facility can be expected to produce high levels of daily NOx mass emissions at levels that can significantly impact Delaware's compliance with the 8-hour ozone NAAQS unless additional NOx emission controls or other appropriate regulatory restrictions are implemented.

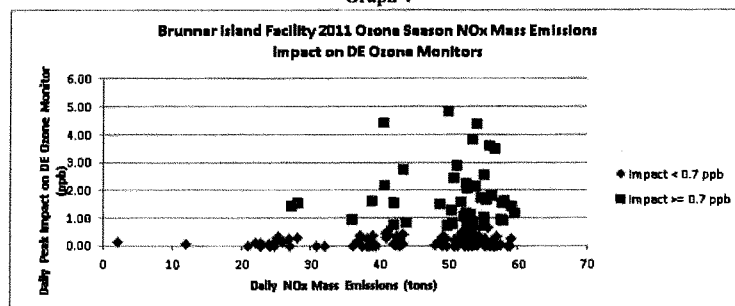
#### **Peak NOx Mass Emissions Are Not Always Required to Significantly Impact Downwind NAAQS**

While many evaluations for assessing downwind impact of upwind emissions are conducted for periods when the upwind emissions are at or near their peak, under some naturally occurring ambient conditions upwind NOx emissions much lower than peak levels can significantly impact downwind compliance with the 8-hour ozone NAAQS. This is a situation that can occur between the upwind Brunner Island EGU facility's NOx emissions and the monitored ozone levels in Delaware. The 2011 ozone season modeling performed by STI indicates that for the Brunner Island facility, it is not necessary for the facility to be operating near its maximum daily NOx mass emissions levels to significantly impact Delaware's compliance with the 8-hour ozone NAAQS.

The following graph is for the 2011 ozone season, and shows the Brunner Island EGU facility's daily NOx mass emissions versus the peak impact predicted by the STI modeling of those NOx mass emissions on ambient ozone at Delaware monitoring locations. The data for the Brunner

Island facility's NOx mass emissions was taken from the EPA's AMPD, and the modeling predicted ozone monitor impact was model's highest predicted impact of all of the Delaware monitor locations.

Graph 4



It can be seen in the above graph that the STI modeling predicted that the impact of NOx mass emissions from the Brunner Island facility on Delaware's monitoring locations varies greatly from day to day. The above graph also indicates that the 2011 ozone season modeling estimated that Brunner Island daily NOx mass emissions ranging from approximately 27.4 tons/day to approximately 59.7 tons/day had an impact of 0.7 ppb or greater at Delaware's ozone monitoring locations. At other times, the modeling indicated that the same range of the Brunner Island facility's NOx mass emissions had an impact of less than 0.7 ppb at Delaware's ozone monitoring locations. This is an indication that other variables/factors, such as ambient conditions and wind currents, may have a significant effect on the impact that Brunner Island facility NOx emissions have on Delaware's monitored ambient ozone.

The STI modeling indicated that on September 13, 2011, the Brunner Island EGU facility had a peak ozone impact of 1.41 ppb on Delaware ambient ozone monitors. On that day, Brunner Island coal-steam units 1&2 were on line the entire day and operated at elevated outputs most of the day, while the facility's coal-steam unit 3 was on line for less than half of the day and never reached 30% of its rated output during any of those hours. As documented in the EPA's AMPD, this resulted in a facility total daily NOx mass emission of approximately 27.4 tons (approximately 46% of the highest 2011 ozone season daily total NOx mass emissions from the facility). This information clearly shows that the Brunner Island facility has the capability of significantly impacting Delaware's compliance with the 8-hour ozone NAAQS even when the Brunner Island facility's NOx mass emissions are less than one half of the facility's current

potential to emit NOx on a short term (daily) basis.

It is of concern that the STI modeling information and AMPD emissions data indicate that for the September 13, 2011 date, the Brunner Island emissions of about half of the facility's recorded peak daily NOx emissions value had an estimated impact on the Delaware ozone of approximately twice the value identified as having significant impact (1.41 ppb estimated impact compared to 0.70 ppb identified as significant impact). This is an indication that even lower amounts of Brunner Island facility NOx mass emissions (compared to the 27.4 tons/day value) may still have significant impact on Delaware's measured ozone levels under certain atmospheric conditions.

It is a significant issue that the Brunner Island facility's NOx mass emissions alone can still have significant impact on Delaware's ambient ozone even when the EGUs at the Brunner Island facility are collectively operating at greatly reduced outputs, because this reduces the options available to ensure that the facility's NOx emissions do not significantly impact Delaware's compliance with the 8-hour ozone NAAQS. This is an indication that moderate reductions in Brunner Island NOx mass emissions rate (in terms of tons per hour), such as those that might occur as a result of application of more advanced combustion NOx controls or SNCR, do not appear to be sufficient to ensure that Brunner Island does not significantly impact Delaware's ambient ozone under all ambient conditions in the future. It appears that installation of SCR or a fuel switch to natural gas with advanced combustion controls appropriate regulatory requirements might be necessary to mitigate the Brunner Island facility's ability to negatively impact Delaware's compliance with the 8-hour ozone NAAQS.

#### **Brunner Island's Modification to Incorporate Natural Gas Fuel**

It has been publicly announced that the Brunner Island facility's current owner, Talen Energy, is continuing the process initiated by its predecessor to add natural gas firing capability to the EGUs at Brunner Island. Public statements by Talen Energy indicate the estimated completion of adding natural gas firing capability is 2017. However, public statements by Talen Energy also indicated that the Brunner Island facility EGUs will retain coal-firing capacity on all of the EGUs, and will have the ability to operate on only natural gas fuel, only coal fuel, or a combination of both fuels based upon fuel economics. It is Delaware's understanding that there will be no permit restrictions regarding the selections of fuel to be combusted at any particular time other than annual mass caps. It is also Delaware's understanding that there will be a slight increase in the facility's annual VOC emissions associated with the operation of the natural gas firing capability. Because the Brunner Island EGUs will retain the capability to fire any amount of coal fuel at any time, the addition of natural gas fuel firing capability at the Brunner Island EGUs does not reduce the potential future NOx mass emissions on a short term basis that is critical to downwind 8-hour ozone NAAQS compliance.

**Short Term NOx Emission Limits Are Required Assist in Reducing the Downwind Impact of Brunner Island NOx Emissions**

The information discussed above indicates that current and past EGU cap-and-trade NOx control programs, applicable to the Brunner Island facility, that were designed to limit annual and seasonal NOx emissions, and current and past PA RACT, have not served to limit the Brunner Island facility's NOx emissions to levels such that those emissions do not significantly contribute to exceedances of short term air quality standards, thereby imperiling the public health and welfare in downwind states. The modeling performed by STI tends to support this conclusion by quantifying the impact of Brunner Island NOx emissions on ozone levels measured at Delaware's monitoring locations.

Delaware is concerned that the NOx mass emission limits associated with CSAPR and, when effective, the proposed CSAPR Update will also be ineffective in properly protecting the public health and welfare in downwind states at all times with regards to the 8-hour ozone NAAQS. It is recognized that the provisions of CSAPR and the proposed CSAPR Update provide for more restrictive annual and seasonal NOx mass emissions than previous rules, and that the CSAPR and proposed CSAPR update programs also provide significantly more restrictive allowance trading provisions than previous rules. However, the provisions of CSAPR and CSAPR Update do not provide any limitations on the Brunner Island facility's NOx mass emissions for any period shorter than seasonal (such as hourly or daily). The lack of short term NOx emission rates facilitates the continued operation of the Brunner Island EGUs with inadequate NOx emission controls and resulting high NOx emissions over short periods of time. The lack of short term emissions limitations will therefore help facilitate the Brunner Island facility's NOx mass emissions at levels that will continue to support non-compliance with the 8-hour ozone NAAQS in Delaware, and thereby continue to impact the health and welfare of Delaware's citizens.

In order to be protective of short term air quality standards, such as the 8-hour ozone NAAQS, it is Delaware's opinion that it will be necessary to establish emissions limits with appropriate magnitudes and averaging periods at the Brunner Island facility that ensure that the emissions are adequately controlled during any particular time period. It is Delaware's opinion that selection of a short term NOx emission rate limit averaging period of no greater than 24 hours is appropriate to address the short term aspects of compliance with a short term NAAQS, such as the 8-hour ozone NAAQS.

**Requested EPA Action**

Even with extensive reduction of NOx emissions from EGU sources located in the state of Delaware, Delaware continues to experience exceedances of the 8-hour ozone

NAAQS. Modeling conducted by the EPA indicates that emissions from EGUs in upwind states are major contributors to Delaware's ongoing 8-hour ozone NAAQS compliance issues. Modeling performed for Delaware by Sonoma technologies Inc, (STI) indicates that the Brunner Island EGU facility, located in the upwind state of Pennsylvania, itself significantly impacts the level of ozone in Delaware's ambient air. The modeling has shown that not only can the Brunner Island facility significantly impact Delaware's 8-hour ozone NAAQS compliance when the facility is operating at high loads, but also that the Brunner Island facility significantly impact Delaware's 8-hour ozone NAAQS compliance when the facility is operating at 50% capacity or lower. The Brunner Island facility's impact on Delaware's 8-hour ozone NAAQS compliance has continued even though the Brunner Island facility has been in compliance with PA RACT and the applicable cap-and-trade NOx emissions control programs. These long term (annual, seasonal) cap-and-trade NOx control programs have not provided the level of short term NOx emission limits necessary to be supportive of the short term, 8-hour ozone NAAQS. Because the CSAPR, and proposed CSAPR Update, will continue to attempt to control NOx mass emissions on an annual and seasonal basis, these programs are also expected to permit an EGU facility such as Brunner Island to emit NOx at high levels over any given short term basis and remain in compliance overall with the annual and seasonal programs.

In order to be protective of short term air quality standards, such as the 8-hour ozone NAAQS, it is Delaware's opinion that it will be necessary to establish NOx emissions limits with appropriate magnitudes and averaging periods that ensure that the NOx emissions are adequately controlled during any particular time period. Therefore, Delaware is hereby petitioning the EPA under section 126(b) of the Clean Air Act to find that the Brunner Island EGU facility, located in Pennsylvania, is air pollutants in violation of the prohibition of section 110(a)(2)(D)(i) of the Clean Air Act, and to require the Brunner Island EGU facility to limit short term NOx emissions to levels that are protective of the 8-hour ozone NAAQS in downwind areas such as Delaware.

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- 11) Clean Air Interstate Rule (CAIR), <http://www.epa.gov/cair/>
- 12) Cross-State Air Pollution Rule (CSAPR), <http://www.epa.gov/crossstaterule/>
- 13) 40 CFR Parts 52, 78, and 97, Cross-State Air Pollution Rule Update for the 2008 Ozone NAAQS; Proposed Rules, Federal Register Vol. 80, No. 232, Thursday December 3, 2015, <https://www.gpo.gov/fdsys/pkg/FR-2015-12-03/pdf/2015-29796.pdf>
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STATE OF DELAWARE  
DEPARTMENT OF NATURAL RESOURCES  
AND ENVIRONMENTAL CONTROL

OFFICE OF THE  
SECRETARY

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August 8, 2016

Gina McCarthy, Administrator  
United States Environmental Protection Agency  
Ariel Rios Building  
1200 Pennsylvania Avenue, N.W.  
Mail Code: 1101A  
Washington, DC 20460

Dear Administrator McCarthy:

By this letter, the State of Delaware hereby petitions the Administrator of the Environmental Protection Agency (EPA) under §126(b) of the Clean Air Act (CAA) to find that the Harrison Power Station's electric generating units (EGUs), located near Haywood, Harrison County, West Virginia, are emitting air pollutants in violation of the provisions of Section 110(a)(2)(D)(i) of the CAA with respect to the 2008 0.075 ppm ozone NAAQS and the 2015 8-hour 0.070 ppm ozone NAAQS.

Section 110(a)(2)(D)(i) prohibits any source or other type of emissions activity within a State, "from emitting any air pollutant in amounts which will contribute significantly to nonattainment in, or interfere with maintenance by, any other State with respect to any such national primary or secondary ambient air quality standard." Section 126(b) of the CAA provides that, "[a]ny State or political subdivision may petition the Administrator for a finding that any major source or group of stationary sources emits or would emit any air pollutant in violation of the prohibition of Section 110(a)(2)(D)(ii) or this section."

CAA Section 126(b) requires that within 60 days after receipt of any petition and after public hearing, the Administrator shall make such a finding or deny the petition. We look forward to working with you and your staff during this period in which you make your finding regarding this petition and take the required actions to protect the health and welfare of


*Delaware's Good Nature depends on you!*



Ms. Gina McCarthy  
August 8, 2016  
Page Two

Delaware's citizens. Please do not hesitate to contact me if you have any questions or need additional information regarding this petition.

Sincerely,



David S. Small  
Secretary

CC: Jack Markell, Governor,  
State of Delaware

Ali Mirzakhaili, Director  
Department of Natural Resources and Environmental Control

Administrator Shawn M. Garvin  
US EPA Region III Office

William F. Durham, Director  
West Virginia Department of Environmental Protection

**Attachment 1****Delaware CAA 126 Petition****Harrison Power Station**

The State of Delaware submits this petition for a finding under §126(b) of the Clean Air Act that the Harrison Power Station's electric generating units (EGUs), located near Haywood, Harrison County, West Virginia, significantly contribute to Delaware's non-attainment of the 2008 8-hour ozone national ambient air quality standard (NAAQS) of 0.075 ppm and the latest 8-hour ozone NAAQS of 0.070 ppm adopted by the United States Environmental Protection Agency (EPA) on October 26, 2015. (1)

Delaware has complied with the requirements of §110(a)(2)(D)(i)(I) of the CAA by adopting in-state control measures for the prevention of emissions that would significantly contribute to non-attainment, or interfere with maintenance, of the ozone National Ambient Air Quality Standard (NAAQS) in a downwind area. (2) However, Delaware's ability to achieve and maintain health-based air quality standards for its own residents is severely impacted by sources outside of the state of Delaware. This is due to the fact that more than 94% of the ozone levels in Delaware are created by the transport of air pollutants from upwind areas. Attainment and maintenance of the 2008 and 2015 8-hour ozone NAAQSs in Delaware is possible only through additional emission reductions in the upwind states that significantly contribute to non-attainment and maintenance in Delaware.

Section 126(b) of the CAA provides that, "[a]ny State or political subdivision may petition the Administrator for a finding that any major source or group of stationary sources emits or would emit any air pollutant in violation of the prohibition of Section 110(a)(2)(D)(i) or this section." In accordance with §126(b) of the Clean Air Act, the state of Delaware petitions the Administrator of the EPA establish a timely schedule for the above-referenced Harrison Power Station electric generating facility and the state of West Virginia to put those entities in compliance with §110(a)(2)(D)(i) of the Clean Air Act with respect to the 2008 8-hour 0.075 ppm ozone NAAQS and 2015 8-hour 0.070 ppm ozone NAAQS. (3)

**Background**

The EPA began to address air quality issues related to ambient ozone through establishment of a related National Ambient Air Quality Standard in 1971. In 1997 the EPA first established the 8-

hour ozone NAAQS to protect human health and welfare at a level of 0.08 ppm. The EPA subsequently lowered the 8-hour ozone NAAQS to 0.075 ppm in 2008. After further evaluation, the EPA further lowered the 8-hour ozone standard to 0.070 ppm on October 26, 2015. (1)

The establishment of the short term ozone standard (8-hour NAAQS) was necessary to address the potential health impact of short term exposure to high levels of ozone. Short term exposure to ozone can cause rapid, shallow breathing and related airway irritation, coughing, wheezing, shortness of breath, and exacerbation of asthma, particularly in sensitive individuals and asthmatic children. Short term exposure also suppresses the immune system, decreasing the effectiveness of bodily defenses against bacterial infections. Research studies indicate that markers of cell damage increase with ozone exposure. Some studies suggest that there is a link between ozone exposure and premature death of adults and infant death. Other studies indicate a link between ozone and premature birth and adverse birth outcome, cardiovascular defects, and adverse changes in lung structure development in children. Children, the elderly, those with chronic lung disease, and asthmatics are especially susceptible to the pulmonary effects of ozone exposure. Additionally, studies have shown that ozone can adversely affects trees and vegetation, can cause reduced crop yields, and can contribute to nitrification of bodies of water.

Atmospheric ground level ozone that is harmful to human health and welfare is formed primarily by the chemical reaction of nitrogen oxides (NO<sub>x</sub>) with volatile organic compounds (VOC's) in the presence of heat and sunlight. Dry, hot, sunny days are most conducive to the formation of ozone. Because ground level ozone concentrations are highest when sunlight is the most intense, in the eastern United States the warm summer months (May 1 through September 30) are referred to as the ozone season. Weather also affects ozone concentrations and how quickly it is transported and dispersed. Periods of light winds allow ozone and ozone precursor pollutants to build up in any particular area leading to greater concentrations. However, the wind can also be responsible for transporting the ozone and ozone precursors over long distances downwind. This downwind pollutant transport can then combine with more local emissions to contribute to exceeding the ozone NAAQS in any particular location.

Delaware has experienced a number of exceedances of the health based 8-hr ozone NAAQS. (4) The following table identifies the number of 8-hour ozone NAAQS exceedances experienced in Delaware during the ozone seasons for the years 2000 through 2015:

**Table 1**  
**Actual Delaware Ozone Exceedances – 8-Hour NAAQS**

	New Castle County - No. of Days of Exceedance	Kent County - No. of Days of Exceedance	Sussex County - No. of Days of Exceedance	Total No. of Days of Exceedance
2016 Ozone Season * #	5	2	3	7
2015 Ozone Season**	2	0	0	2
2014 Ozone Season**	3	0	0	3
2013 Ozone Season**	1	0	1	2
2012 Ozone Season**	13	14	12	19
2011 Ozone Season**	11	3	6	15
2010 Ozone Season**	14	5	9	18
2009 Ozone Season**	3	0	0	3
2008 Ozone Season**	9	8	8	14
2007 Ozone Season***	5	0	0	5
2006 Ozone Season***	2	4	3	6
2005 Ozone Season***	8	2	8	16
2004 Ozone Season***	3	0	2	5
2003 Ozone Season***	5	3	5	7
2002 Ozone Season***	18	10	16	26
2001 Ozone Season***	18	8	10	21
2000 Ozone Season***	8	5	7	11

\* = 0.70 ppm Standard    \*\* = 0.075 ppm Standard    \*\*\* = 0.08 ppm Standard  
 #Partial 2016 Ozone Season May 1 through July 22 – Preliminary Data

On October 1, 2015, the EPA strengthened the 8-hour ozone NAAQS to 70 ppb based upon scientific evidence of ground level ozone's negative effect on public health and welfare. Relative to the 2008 8-hour ozone standard, the updated 8-hour ozone NAAQS is expected to further improve public health protection, particularly for at-risk groups, and also improve the health of trees, plants, and ecosystem. If the 2015 8-hour ozone standard of 70 ppb had been in effect for the past several years, based upon monitoring data, it is estimated that Delaware would have experienced a higher number of 8-hour ozone exceedances compared to the actual exceedances of the 2008 8-hour ozone standard of 75 ppb. The following table provides a comparison of the actual 8-hour ozone NAAQS exceedances and the estimated exceedance that would have occurred if the 70 ppb standard had been in effect:

**Table 2**  
**Comparison of Actual vs Estimated Days of Ozone Exceedance**  
**2008 8-hour Ozone NAAQS vs 2015 8-hour Ozone NAAQS**

Ozone Season	Actual Number of Days of 75 ppb Ozone Standard Exceedance	Actual Number of Monitor-Days of 75 ppb Ozone Standard Exceedance	Estimated Number of Days of Ozone Standard Exceedance Assuming 70 ppb	Estimated Number of Monitor-Days of Ozone Standard Exceedance Assuming 70 ppb
2010	18	28	36	91
2011	15	20	25	73
2012	19	39	28	107
2013	2	2	6	7
2014	3	3	8	17
2015	2	2	10	16

It can be seen in the above table that if the more stringent 2015 8-hour ozone NAAQS of 70 ppb were in effect during the 2010 through 2015 ozone seasons that Delaware would have exceeded that standard at a much higher rate than it experienced under the 2008 8-hour ozone NAAQS of 75 ppb. As shown in the above table, for the 2010 through 2015 ozone season, the number of 8-hour ozone NAAQS exceedance day would increase from 59 days under the 2008 NAAQS to 113 days under the 2015 NAAQS.

As discussed earlier, NO<sub>x</sub> is a precursor pollutant to the formation of atmospheric ozone. NO<sub>x</sub> is a generic term for a group of reactive gasses that are composed of nitrogen and various amounts of oxygen (including nitrogen oxide and nitrogen dioxide). NO<sub>x</sub> is formed in the combustion process as a result of high temperature chemical reactions of the nitrogen contained in the fuel and the nitrogen contained in the ambient combustion air along with oxygen in the combustion air. Fossil fuel-fired electric generating units are some of the largest emitters of NO<sub>x</sub>, with EGUs powered by coal-fired steam generators without NO<sub>x</sub> emissions controls exhibiting some of the highest NO<sub>x</sub> emission rates (in terms of lb/MMBTU).

Uncontrolled, higher nitrogen content fuels, such as coal and residual fuel oil, tend to result in higher NO<sub>x</sub> emissions than lower nitrogen content fuels (such as natural gas). Various combustion configurations tend to result in varying NO<sub>x</sub> emission rates (in terms of pounds of NO<sub>x</sub> emitted per million BTU of fuel heat input (lb/MMBTU)) due to amounts of excess air required for combustion, rate of fuel combustion, combustor geometry, peak combustion temperatures, and duration of combustion gasses at peak temperatures, etc. Combustion controls, such as low NO<sub>x</sub> burners and overfire air, are commercially available NO<sub>x</sub> reduction technologies adaptable and applicable to most EGU combustion systems. Post combustion NO<sub>x</sub> controls, such as selective non-catalytic reduction (SNCR) and selective catalytic reduction (SCR), are commercially available highly effective NO<sub>x</sub> reduction technologies that are

applicable to most EGU exhaust gas streams. These NOx controls are generally available for both new EGU installations and for retrofit on existing EGUs. Utilization of combustion controls and post combustion controls, singly or layered together for a single EGU, can result in significant reductions in the EGUs NOx emissions rate, greater than 90% reduction from uncontrolled levels for some EGUs.

To address the NOx emissions from EGU sources located in the state of Delaware, Delaware has promulgated a number of rules and regulations that effectively control the NOx emissions from these EGUs which also fulfills Delaware's obligation under §110(a)(2)(D)(i)(I) of the Clean Air Act. These rules and regulations have been previously submitted to the EPA in Delaware's June 2007 and subsequent state implementation plan (SIP) revisions, including the June 2012 revision. (5) The referenced rules and regulations include the following:

- 7 DE Admin Code 1112, Control of Nitrogen Oxide Emissions, which set RACT-based NOx emission rate standards for major stationary sources, including EGUs. (6)
- 7 DE Admin Code 1146, Electric Generating Unit (EGU) Multi-Pollutant Regulation, which included short term NOx emission rate limits (lb/MMBTU on rolling 24-hour average) and annual NOx mass emissions caps for coal-fired and residual oil-fired EGUs. (7)
- 7 DE Admin Code 1148, Control of Stationary Combustion Turbine Electric Generating Unit Emissions, which set NOx emission rate limits or approved NOx control technology requirements (such as water injection) for combustion turbines with a nameplate rating of 1 MW or greater that had not previously controlled their NOx emissions rate in accordance with the NOx RACT requirements of 7 DE Admin Code 1112. (8)

In addition to the NOx control regulations noted above, Delaware has participated in regional and federal initiatives, where applicable, that were designed to limit the NOx emissions from EGU sources whose NOx emissions may impact compliance with ozone standards in downwind states. These regional and federal initiatives include the following:

- The Ozone Transport Commission (OTC) NOx Budget Program. (9) In 1990, the OTC was created by amendments to the Clean Air Act. The OTC consisted of northeast and mid-Atlantic states with persistent summertime ozone problems. These OTC states include Connecticut, Delaware, the District of Columbia, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont, and portions of Virginia. The OTC was tasked with advising the EPA on ozone transport issues and for helping to develop and implement regional solutions to ozone problem experienced by the member states. Recognizing that the interstate transport of pollutants to downwind states contributed to summertime ozone problems in those downwind states, the OTC created and implemented its NOx Budget Program. The NOx Budget Program was a cap-and-trade

program to limit the total regional emission of NO<sub>x</sub> from fossil-fueled electric generating units and large boilers located in OTC states, and became effective in 1999. Cap and trade programs effectively reduce the total amount of emissions, usually for a geographic area, by placing a cap on the total emissions occurring in that geographic area without setting unit by unit limits. For the OTC NO<sub>x</sub> Budget Program, affected states were allocated a NO<sub>x</sub> emissions cap for the subject NO<sub>x</sub> emitting sources in the respective state, and the subject units were required to hold and surrender a NO<sub>x</sub> allowance for each ton of NO<sub>x</sub> emitted in order to comply with program requirements. This program did not include any unit specific NO<sub>x</sub> emissions rate requirements. The OTC NO<sub>x</sub> Budget Program effectively ended when the EPA began administering the EPA's NO<sub>x</sub> Budget Trading Program.

- The EPA NO<sub>x</sub> State Implementation Plan (SIP) Rule. (10) In 2003 the EPA implemented its NO<sub>x</sub> State Implementation Plan (SIP) Rule utilizing the NO<sub>x</sub> Budget Trading Program, a NO<sub>x</sub> emissions cap and trade program similar to that used for the OTC NO<sub>x</sub> Budget Program. Relative to the OTC NO<sub>x</sub> Budget Program, the EPA's NO<sub>x</sub> Budget Trading Program was expanded to include additional states (for a total of 20 states and also the District of Columbia) and established more stringent NO<sub>x</sub> emissions allowance allocations. The EPA's NO<sub>x</sub> State Implementation Plan (SIP) Rule was intended to reduce the regional transport of ozone and ozone-forming pollutants in the Eastern United States. The NO<sub>x</sub> State Implementation Plan (SIP) Rule was in place until 2009, when it was replaced by the EPA's Clean Air Interstate Rule (CAIR).
- The EPA Clean Air Interstate Rule (CAIR). (11) In 2005, the EPA promulgated its CAIR program that required states to reduce the emissions of SO<sub>2</sub> and NO<sub>x</sub> to help meet health based air quality standards for fine particulate matter and ozone. The EPA indicated in the proposal for the CAIR that NO<sub>x</sub> and SO<sub>2</sub> emissions in 23 states and the District of Columbia contributed to unhealthy levels of fine particulate matter in downwind states, and that the NO<sub>x</sub> emissions from 25 states and the District of Columbia contributed to unhealthy levels of 8-hour ozone in downwind states. EPA indicated that the reduction of SO<sub>2</sub> and NO<sub>x</sub> emissions from EGUs would serve to reduce the interstate transport of pollutants related to these emissions. CAIR established a cap-and-trade program covering EGUs to limit the emissions of SO<sub>2</sub> and NO<sub>x</sub> from these sources as an option for compliance with the reduction requirements. (All states subject to the CAIR selected this compliance option.) SO<sub>2</sub> and NO<sub>x</sub> emissions mass caps were established for individual states and allowances were issued by the EPA to cover those allowable emissions from subject sources. The cap-and-trade program was intended by the EPA to provide subject sources flexibility in meeting the mass emissions limitations through the installation of controls, fuel switching, or trading/purchase of excess allowances from other subject sources. The NO<sub>x</sub> emissions limitations of CAIR became effective in 2009, and the SO<sub>2</sub> emissions limitation of CAIR became effective in 2010. The EPA made a number of changes to the CAIR

subsequent to its original proposal, the most notable was the establishment of a process to provide for EPA to establish CAIR Federal Implementation Plans (FIPS) for states that failed to timely establish state plans for the implementation of CAIR. This ensured that the controls of the cap-and-trade program were uniformly established in all subject states on a timely basis.

- The EPA Cross-State Air Pollution Rule (CSAPR). (12) Subsequent to the promulgation of CAIR, legal actions lead the US Court of Appeals for the DC Circuit to make the decision in 2008 to remand the CAIR back to the EPA to make the rule more consistent with the requirements of the Clean Air Act. However, the courts left the requirements of CAIR in place until the EPA finalized a replacement rule. In response, the EPA promulgated its Cross-State Air Pollution Rule (CSAPR) in 2011. Additionally, in conjunction with the rule the EPA established federal implementation plans (FIPS) for each state subject to the CSAPR in order to implement the rule as rapidly as possible. In the rulemaking process the EPA identified for subject states what portions of each state's emissions significantly contributed to ozone or PM2.5 pollution in downwind states. The CSAPR established mass emissions limitations of SO2 and NOx from power plants in subject states to eliminate the portion of those emissions that are significant contributions to non-attainment or maintenance of fine particulate matter and ozone air quality standards in downwind states. The CSAPR established annual mass emissions limitations for SO2 and NOx and additional ozone season NOx mass emissions limitations for NOx. Between the original CSAPR and subsequent actions, there were 26 states subject to the ozone season NOx mass emissions limitations to address the 1997 Ozone NAAQS, 18 states were subject to annual SO2 and NOx mass emissions limitations of the rule to address the 1997 Annual PM2.5 NAAQS, and 21 states were subject to annual SO2 and NOx mass emissions limitations to address the 2006 24-hr PM2.5 NAAQS (a combined total of 23 states for addressing the two PM2.5 NAAQS). Relative to previous mass-based emissions rules, the CSAPR significantly restricted the trading of allowances that could be utilized for compliance purposes by establishing state variability limits that ensure that a state's actual mass emissions would fulfill its Clean Air Act "good neighbor" obligations. The EPA determined that Delaware was not required to participate in CSAPR.
- In 2012 the CSAPR was challenged in court, and the US Court of Appeals for the DC Circuit vacated the CSAPR and the implementing FIPs. The Court remanded the rule to the EPA to address the Courts findings, and directed the EPA to continue administering CAIR pending the promulgation of a valid rule to replace CAIR. As of this ruling, CAIR cap-and-trade programs for annual SO2, annual NOx, and ozone season NOx remained in place. (12)
- In April of 2014 the US Supreme Court reversed the DC Circuit court's opinion vacating CSAPR. In June of 2014 the EPA filed a motion with the U.S. Court of Appeals for the DC



Circuit to lift the stay of the CSAPR, and in October of 2014 the Court of Appeals for the DC Circuit granted the EPA's motion. In November of 2014 the EPA issued a ministerial rule that aligned the dates in the CSAPR rule text with the revised court-ordered schedule, including 2015 Phase 1 CSAPR implementation and 2017 Phase 2 CSAPR implementation. (12)

- In November of 2015 the EPA proposed an update to the CSAPR by issuing the proposed CSAPR Update Rule. (13) Starting in 2017, this proposal would reduce summertime nitrogen oxides (NO<sub>x</sub>) emissions from power plants in 23 eastern states, by establishing NO<sub>x</sub> mass emission caps, in order to reduce the impact of those power plant emissions on downwind states. In its proposal, the EPA has requested comments regarding the potential application of short term NO<sub>x</sub> emission limits on these same power plants. The EPA determined that Delaware was not required to participate in the CSAPR Update.

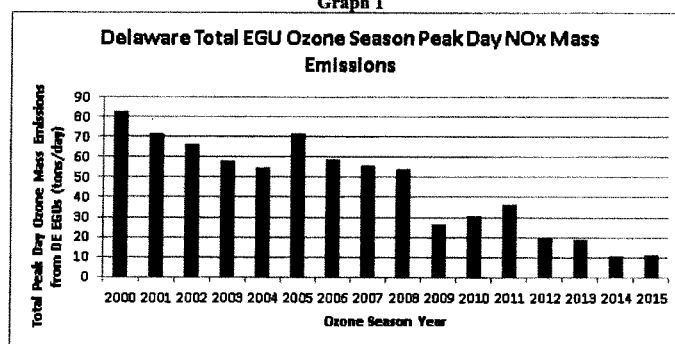
These State and regional NO<sub>x</sub> reduction efforts have resulted in significant NO<sub>x</sub> emissions reductions from EGUs located in the state of Delaware. These reductions have occurred both in terms of ozone season NO<sub>x</sub> mass emissions (tons) and also in average ozone season NO<sub>x</sub> emissions rates (lb/MMBTU). The following table was assembled with data extracted from the United States Environmental Protection Agency's Air Markets Program Data (EPA's AMPD). (14) The table shows the ozone season NO<sub>x</sub> mass emissions (tons) and average NO<sub>x</sub> emissions rate (lb/MMBTU) for the EGU fleet located in the state of Delaware:

**Table 3**  
**2000 – 2015 Ozone Seasons**  
**State of Delaware**  
**Total EGU NOx Mass Emissions and Average NOx Emission Rate**

Year	Total EGU OS NOx Mass (tons)	Change in NOx Mass Emissions from 2000 (%)	Average NOx Emissions Rate (lb/MMBTU)	Change in Average NOx Emission Rate (%)
2000	4137	0.0	0.2784	0.0
2001	4777	15.5	0.2806	0.8
2002	4609	11.4	0.2415	-13.3
2003	3850	-6.9	0.2374	-14.7
2004	3659	-11.6	0.2449	-12.0
2005	5175	25.1	0.2818	1.2
2006	3567	-13.8	0.2582	-7.3
2007	4179	1.0	0.2398	-13.9
2008	3190	-22.9	0.2277	-18.2
2009	1280	-69.1	0.1695	-39.1
2010	2265	-45.3	0.1484	-46.7
2011	1879	-54.6	0.1250	-55.1
2012	1054	-74.5	0.0585	-79.0
2013	879	-78.7	0.0589	-78.9
2014	668	-83.9	0.0483	-82.7
2015	628	-84.8	0.0494	-82.3

However, relatively long term NOx mass emission caps (such as annual or seasonal caps) have limited impact on the short term NOx emissions (such a 24-hour period) from EGUs that have a more direct impact on compliance with short term air quality standards, such as the 8-hour ozone NAAQS. To address this issue, Delaware's air quality regulations have included short term NOx emission rate limits (with 24-hour averaging periods) that are protective of the short term ozone NAAQS. These short term NOx emission rate limits have helped Delaware achieve significant reductions in ozone season peak daily NOx mass emissions from Delaware's EGUs.

Graph 1



It can be seen in the above Graph 1 that between the 2000 and 2015 ozone seasons, the Delaware's EGUs have achieved a NOx mass emissions reduction (for ozone season peak NOx mass emissions days) in excess of 80% reduction. This reduction in peak ozone season day NOx mass emissions provides benefit in attaining compliance with the 8-hour ozone NAAQS for both Delaware's citizens and downwind populations.

Even though Delaware has significantly reduced the NOx emissions from EGUs located in Delaware, as discussed above, Delaware continues to experience exceedances of the 8-hour ozone NAAQS. Pollutants transported from facilities in upwind states are significant contributors to Delaware's continuing issues in meeting the 8-hour ozone NAAQS.

#### **Modeling Identifies Impact of Upwind NOx Emissions Impacting Delaware's 8-hour Ozone NAAQS Compliance**

The US EPA performed modeling as part of the development of its Cross-State Air Pollution Rule in order to help determine the impact of transported pollutants on downwind states and those states' ability to attain and maintain the then current 2008 ozone NAAQS of 75ppb. Some results of the modeling that identify state contributions to ozone at individual monitoring locations can be found on the spreadsheet titled "Contributions of 8-hour ozone, annual PM2.5, and 24-hour PM2.5 from each state to each monitoring site" located in the "Technical Information and Support Documents" section of the US EPA's Cross-State Air Pollution Rule (CSAPR) website. (15)

The US EPA's modeling identified 13 individual states (in addition to Delaware itself) whose NOx emissions significantly impact the ability of Delaware to attain and maintain the then current 8-hr ozone standard of 75 ppb. (16) (A state significantly impacts another state if it impacts that state's air quality by 1% or more of the applicable air quality standard. For the then current 8-hr ozone standard of 75 ppb, a significant contribution was 0.75 ppb or greater.) The states identified by the US EPA as significantly impacting Delaware's air quality, and the modeling results quantifying each state's impact, are shown in the following table:

**Table 4**  
**States Significantly Impacting Compliance with the 8-hour**  
**Ozone Standard in Delaware and the Magnitude of that Impact**  
**Maximum**  
**Contribution**

<b>State</b>	<b>(ppb)</b>
CT	1.008
DE	6.256
IL	1.445
IN	1.737
KY	3.208
MD	23.951
MI	2.207
NJ	13.034
NY	9.092
OH	3.987
PA	13.344
TN	1.932
VA	6.039
WV	3.142

The EPA's modeling results, summarized in the above table, indicate that four states (Maryland, New Jersey, New York, and Pennsylvania) have greater impact on compliance of the 8-hour ozone standard in Delaware than the impact of Delaware itself. The EPA's modeling results summarized in the above table also indicate that three states (Kentucky, Ohio, and West Virginia) individually have an impact on compliance of the 8-hour ozone standard in Delaware of 50% of the impact that Delaware impacts itself. These modeling results tend to confirm that pollutant transport is a significant issue for the state of Delaware, and they also help explain Delaware's ongoing difficulties with the 8-hour ozone standard despite the significant actions Delaware has implemented to reduce NOx and VOC emissions in Delaware.

#### **Harrison Power Station's Impact on Delaware's 8-hour Ozone NAAQS Compliance**

As noted in Table 4 above, the EPA's modeling indicated that the State of West Virginia significantly impacts Delaware's compliance with the 8-hour ozone NAAQS. Because of the magnitude of West Virginia's impact on Delaware's compliance with the 8-hour ozone standard, and the potential contribution to this impact by EGUs located in West Virginia, further modeling was performed to determine if individual West Virginia EGU facilities individually have a significant impact on Delaware's compliance with the 8-hour ozone standard.

In order to help Delaware assess the impact of upwind EGU facility NO<sub>x</sub> emissions on Delaware's 8-hour average ozone exceedances in 2011, Sonoma Technologies Inc. (STI) conducted air quality modeling using the Comprehensive Air Quality Model with extensions (CAMx) Ozone Source Apportionment Technology (OSAT) (17). The 2011 ozone season modeling was performed to determine 8-hour average ozone apportionments from individual upwind EGU facilities and upwind groups of EGU facilities. The modeling identified that the Harrison Power Station located in the state of West Virginia individually had significantly impacted Delaware's compliance with the 8-hour ozone NAAQS.

Because of the magnitude of its impact on Delaware's ambient ozone, the Harrison Power Station is being individually addressed in this petition for a finding under §126(b) of the Clean Air Act.

The STI modeling results indicated that the Harrison Power Station, located in Harrison County, West Virginia, emitted NO<sub>x</sub> during the 2011 ozone season at levels to individually have a significant impact on Delaware's air quality as measured by Delaware's ambient ozone monitors. The following table shows the days of the 2011 ozone season that the STI modeling estimated that the Harrison Power Station's NO<sub>x</sub> emissions impacted Delaware's ambient ozone at significant levels:

**Table 5**  
**Harrison Power Station NO<sub>x</sub> Emissions**  
**STI Modeling Estimated Impact on Delaware Air Monitors**  
**2011 Ozone Season**

Month	Day	Year	STI Estimated 8-Hour Avg	AAMPD Daily NO <sub>x</sub> Mass
			Ozone Impact (ppb)	Emissions (tons)
6	18	2011	0.71	35.634
8	10	2011	0.84	61.588

As shown in the above Table 5, the STI modeling estimated that during the 2011 ozone season the Harrison Power Station's NO<sub>x</sub> emissions had a significant impact on Delaware's ambient ozone on two days relative to the 2015 8-hour ozone NAAQS of 0.070 ppm, and one day of

significant impact relative to the 2008 8-hour ozone NAAQS of 0.075 ppm. As shown in the table, the highest estimated impact occurred August 10, 2011 with a modeled impact value of 0.84 ppb.

#### Harrison Power Station

The Harrison Power Station is located near Haywood, Harrison County, West Virginia. The Energy Information Administration (EIA) database indicates that the Harrison Power Station includes three coal fired steam electric generating units that incorporate Foster Wheeler supercritical steam generators. (18) The following table provides some technical information regarding the Harrison Power Station's coal-fired electric generating units:

:

**Table 6**  
**Harrison Power Station Electric Generating Units**

Unit	Generator Prime Mover	EIA Nameplate Rating (MW)	EIA Summer Capacity (MW)	EIA Primary Fuel	EIA Commercial Operation Year	Permit Heat Input Capacity (MMBTU/hr)	AMPD Heat Input Capacity (MMBTU/hr)	AMPD Reported NOx Controls
1	Steam Turbine	684	652	Bit Coal	1972	6325	7583	LNB & SCR
2	Steam Turbine	684	651	Bit Coal	1973	6325	7500	LNB & SCR
3	Steam Turbine	684	651	Bit Coal	1974	6325	7700	LNB & SCR

The Harrison Power Station is currently owned and operated by Monongahela Power Company. The facility is located within the PJM RTO and the facility and its electric generating units operate as independent power producers. These units would be expected to typically operate as dispatched by PJM for reliability and economic purposes to support the electric grid. EIA data indicates that the three Harrison Power Station coal-fired EGUs predominately fire bituminous coal from the state of West Virginia as their primary fuel.

As shown in Table 6, there is a significant difference in the heat input capacity rating for the three Harrison Power Station coal-fired EGUs listed in the station's permit and the heat input rating for those same EGUs listed in the AMPD. The difference in these values is significant, and can have an impact when estimating unit capacity factors and performing pollutant potential to emit (PTE) calculations. A review of the hourly heat input data in the AMPD indicates many hours for each unit with heat inputs well in excess of the permit values for heat input capacity. Therefore, it is assumed that the actual heat input capacity for the three Harrison Power Station coal-fired EGUs is more accurately represented by the heat input capacity values identified in the AMPD.

#### Harrison Power Station NOx Emissions Limitations and Performance

As noted in Table 6 above, the Harrison Power Station Units 1, 2, and 3 are currently equipped with low NOx burners (LNBs) and selective catalytic reduction systems (SCR) for control of NOx emissions. AMPD data indicates that the SCR for Unit 1 was installed in 2001, and the SCRs for Units 2 and 3 were installed in 2003. The SCRs were installed to assist in compliance with the requirements of the EPA's NOx State Implementation Plan (SIP) Rule and facilitate participation in the NOx Budget Program.

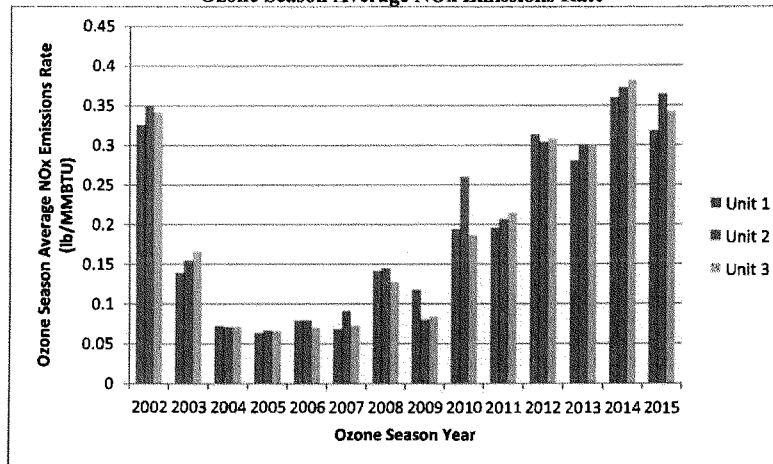
The Harrison Power Station coal-fired Units 1, 2, and 3 are also subject to operating permit NOx emission rate limits. The Harrison Power Station permit indicates that the NOx emission rate limits are those prescribed in the Harrison Power Station's Acid Rain Program (ARP). The ARP NOx emission rate limits for each of the three coal-fired units is 0.42 lb/MMBTU, annual average. (19) Data from the AMPD appears to indicate that the Harrison Power Station coal-fired EGUs have consistently been in compliance with these ARP NOx emission rate limits.

Monongahela Power Company has submitted a permit amendment to install and operate a refined coal facility at the Harrison Power Station. The refined coal process is intended to produce a lower emitting coal-fuel for combustion in the Harrison Power Station's coal fired EGU steam generators. In the proposed permit amendment, a provision has been proposed to include ozone season NOx emission rate limits of 0.20 lb/MMBTU, 30-day average, for each of the three coal-fired EGUs. As of the preparation of this petition, this permit amendment has not been approved and is therefore not yet in force. More discussion of the proposed ozone season 0.20 lb/MMBTU NOx emission rate limitation is provided below in this petition.

Harrison Power Station Units 1, 2, and 3 have also all been subject to various NOx emissions cap and trade programs. Beginning with the 2003 ozone season through the 2008 ozone season, Harrison Power Station Units 1, 2, and 3 participated in the EPA's NOx Budget Program. Beginning with the 2009 ozone season through the 2014 ozone season, Harrison Power Station Units 1, 2, and 3 participated in the EPA's Clean Air Interstate Rule ozone season trading program. And beginning with the 2015 ozone season, Harrison Power Station Units 1, 2, and 3 participated in the Transport Rule ozone season NOx trading program. While these various trading programs effectively put a seasonal NOx emissions mass cap on the fleet of subject units, it did not require the subject units to limit their NOx emissions over any particular portion of the ozone season as long as the EGU was able to obtain sufficient NOx allowances to balance that unit's actual ozone season NOx mass emissions.

The following graph shows the ozone season average NOx emission rate values for Harrison Power Station 1, 2, and 3 for the ozone season of 2002 through 2015.

**Graph 2**  
**Harrison Power Station Electric Generating Units**  
**Ozone Season Average NOx Emissions Rate**

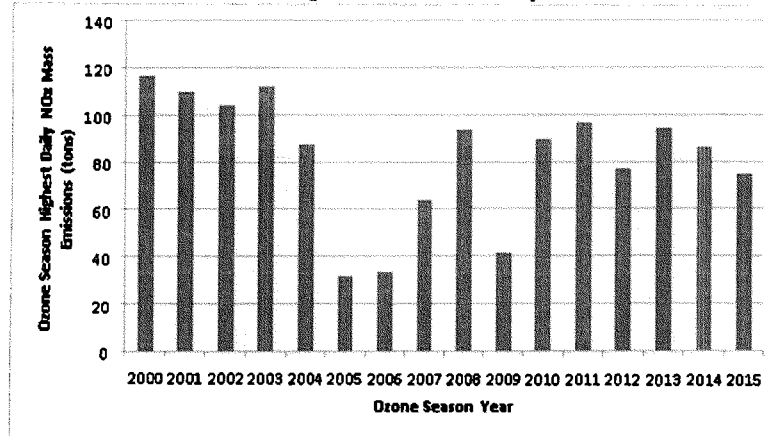


It can be seen in Graph 2 above that for a period of several years after installation of SCR NOx controls in 2003, the three Harrison Power Station coal-fired electric generating units exhibited ozone season average NOx emissions rates representative of operation of the SCRs with good pollution control practices. However, from the 2010 ozone season and beyond, the ozone season average NOx emission rates for each of the three Harrison Power Station coal-fired EGUs were well above what might be expected from coal-fired EGU's with operating SCRs. And as shown in Graph 2, the ozone season average NOx emission rates from the Harrison Power Station coal-fired EGUs for the 2014 and 2015 ozone seasons were as high as the pre-SCR installation ozone season year of 2002. This is an indication that existing NOx emission rate limits and seasonal NOx mass emissions regulatory requirements have not been sufficient to result in consistently low NOx emission rates from the Harrison Power Station EGUs.

The following graph shows the Harrison Power Station's highest daily ozone season NOx mass emissions for the 2000 through 2015 ozone seasons.



**Graph 3**  
**Harrison Power Station Highest Ozone Season Daily NOx Mass Emissions**



The information in the above graph indicates that the existing NOx emission rate limits and seasonal NOx mass emissions regulatory requirements, in conjunction with the installation of SCR NOx emissions controls in 2003, have not been sufficient to result in consistently low peak ozone season daily NOx mass emissions from the Harrison Power Station EGUs

The information in the above graph also indicates that in the ozone seasons since SCRs were installed (2003) on the Harrison Power Station EGUs, ten of the thirteen years show a daily peak NOx mass emissions value in excess of the 61.588 ton/day NOx mass emissions associated with the STI modeling that estimated an impact of 0.84 ppb on Delaware's ambient ozone.

Emissions data in the AMPD for the Harrison Power Station indicates that daily ozone season NOx emissions from the Harrison Power Station are frequently greater than the 61.588 tons/day that STI modeling estimated had an impact of 0.84 ppb on Delaware's ambient ozone on August 10, 2011. The following table shows the number of days that the Harrison Power Station ozone season NOx mass emissions exceeded 61.588 tons/day during the 2002 through 2015 ozone seasons.

**Table 7**  
**Harrison Power Station**  
**Ozone Season Days w/NOx Emissions Above STI Estimated Significant Delaware Impact**

Ozone Season	O.S. Days w/NOx Mass Emissions Greater Than 61.588 Tons
2002	69
2003	5
2004	27
2005	0
2006	0
2007	1
2008	13
2009	0
2010	11
2011	6
2012	10
2013	50
2014	103
2015	24

It can be seen in the above table that in recent years the Harrison Power Station's daily ozone season NOx mass emissions have frequently exceeded the 61.588 ton/day value that STI modeling estimated had an impact of 0.84 ppb on Delaware's ambient ozone on August 10, 2011. There can be no doubt that operation of the Harrison Power Station's coal-fired EGUs with NOx emission rates well in excess of the rates achievable with the installed SCRs, as shown in Graph 2, contribute greatly to the frequency of ozone season high NOx mass emission days.

The contrast between operation of the Harrison Power Station EGUs with and without high levels of NOx control from the existing SCRs can be easily seen when comparing AMPD data for the 2005 and 2015 ozone seasons. During the 2005 ozone season, the AMPD data shown in Graph 2 indicates that the average ozone season NOx emission rate (in lb/MMBTU) for the facility was one of the lowest average values between the 2002 and the 2015 ozone seasons. The 2015 is the latest ozone season for which a full season of data was available. The following table compares the highest heat input days for the Harrison Power Facility for the 2005 and 2015 ozone seasons.

**Table 8**  
**Harrison Power Station 2005 and 2015 Ozone Season High Heat Input Days**

	Facility Heat Input	Facility NOx Mass Emissions	Facility Avg. NOx Emissions Rate
Highest Ozone Season Heat Input Date	(MMBTU)	(tons)	(lb/MMBTU)
June 27, 2005	425666.2	11.466	0.0539
June 22, 2015	394072.5	65.118	0.3305

The data in Table 8 clearly shows that even though the Harrison Power Station heat input was higher on June 27, 2005 compared to June 22, 2015, the NOx mass emissions from the facility on June 27, 2005 were only a fraction of the facility's NOx mass emissions on June 22, 2015. The table shows that the difference in NOx mass emissions is primarily the result of a significantly lower NOx emission rate on June 27, 2005. This data clearly points out the impact of operation of SCR in accordance with good pollution control practices compared to just having the SCRs in place without adequate incentive to reduce NOx emissions.

The AMPD emissions data for the Harrison Power Station indicates that not only are there large changes in NOx emission control operations between ozone seasons, but there are also large swings in NOx emission control operations during a single ozone season. For example, the STI modeling estimated that Harrison Power Station NOx emissions had an impact of 0.71 ppb on Delaware's ambient ozone on June 18, 2011 and had an impact of 0.84 ppb on Delaware's ambient ozone on August 10, 2011. The following table shows some relevant operating data for the Harrison Power Station for June 18, 2011 and August 10, 2011.

**Table 9**  
**Harrison Power Station 2011 Ozone Season NOx Emissions Rate Comparison**

Date	Units on Line	Facility Heat Input Capacity Factor (%)	Total NOx Mass Emissions (tons)	Facility Avg. NOx Emissions Rate (lb/MMBTU)
June 18, 2011	3 of 3	93	35.634	0.1694
August 10, 2011	2 of 3	54	61.588	0.4237

It can be seen in the above table that the Harrison Power Station NOx mass emissions on August 10, 2011, with only two of three coal-fired EGUs on line, were significantly higher than on June 18, 2011 when all three coal-fired EGUs were on line and operating at high capacity factors. The unexpected increase in NOx mass emissions with the lower facility capacity factor is due to a significantly higher average daily NOx emission rate on August 10, 2011 when compared to the June 18, 2011 facility daily average NOx emissions rate. It can be seen in the table that the August 10, 2011 facility average NOx emissions rate is more than double than the June 18, 2011 facility average NOx emissions rate. The high August 10, 2011 facility daily average NOx

emissions rate appears representative of operation with the SCRs totally out of service. The June 18, 2011 facility daily average NO<sub>x</sub> emission rate of 0.1694 lb/MMBTU appears to be representative of operation with the SCRs in service but being operated at reduced levels of effectiveness. This is an indication that decisions to operate the SCR NO<sub>x</sub> controls at the Harrison Power Station are not being made only on a seasonal basis, but perhaps also on a daily basis as a result of other EGU operating influences.

**Peak NO<sub>x</sub> Mass Emissions Are Not Always Required to Significantly Impact Downwind NAAQS Compliance**

While many evaluations for assessing downwind impact of upwind emissions are conducted for periods when the upwind emissions are at or near their peak, under some naturally occurring ambient conditions upwind NO<sub>x</sub> emissions, much lower than peak levels, can significantly impact downwind compliance with the 8-hour ozone NAAQS. This is a situation that can occur between the upwind Harrison Power Station's NO<sub>x</sub> emissions and the monitored ozone levels in Delaware.

The 2011 ozone season modeling performed by STI indicates that for the Harrison Power Station, it is not necessary for the facility to be operating near its maximum daily NO<sub>x</sub> mass emissions levels to significantly impact Delaware's compliance with the 2015 8-hour ozone NAAQS of 0.70 ppb. As shown in Table 5, the STI modeling estimated that on June 18, 2011, the Harrison Power Station NO<sub>x</sub> mass emissions of 35.634 tons had an impact of 0.71 ppb on Delaware's ambient ozone. This value of 35.634 tons/day is significantly lower than the Harrison Power Station's highest daily ozone season NO<sub>x</sub> mass emissions since installation of the SCRs, 96.965 tons/day recorded on August 13, 2011.

Emissions data in the AMPD for the Harrison Power Station indicates that daily ozone season NO<sub>x</sub> emissions from the Harrison Power Station are frequently greater than the 35.634 tons/day that STI modeling estimated had an impact of 0.71 ppb on Delaware's ambient ozone on June 18, 2011. The following table shows the number of days that the Harrison Power Station ozone season NO<sub>x</sub> mass emissions exceeded 35.634 tons/day during the 2002 through 2015 ozone seasons.

**Table 10**  
**Harrison Power Station**  
**Ozone Season Days w/NOx Emissions Above STI Estimated Significant Delaware Impact**

Ozone Season	O.S. Days w/NOx Mass Emissions Greater Than 35.634 Tons
2002	140
2003	33
2004	29
2005	0
2006	0
2007	5
2008	30
2009	1
2010	75
2011	80
2012	126
2013	140
2014	150
2015	143

It can be seen in the above table that in recent years the Harrison Power Station's daily ozone season NOx mass emissions have frequently exceeded the 35.634 ton/day value that STI modeling estimated had an impact of 0.71 ppb on Delaware's ambient ozone on June 18, 2011. The data in the above table also indicates that frequency of ozone season daily NOx mass emissions at this level over the last several years is similar to the number of events during the 2002 ozone season, the last ozone season prior to installation of the SCRs. There can be no doubt that operation of the Harrison Power Station's coal-fired EGUs with NOx emission rates well in excess of the rates achievable with the installed SCRs, as shown in Graph 2, contribute greatly to the frequency of ozone season high NOx mass emission days.

As of the time of preparation of this petition, preliminary AMPD data was available for the Harrison Power Station for May and June of 2016, the first two months of the 2016 ozone season. The preliminary data for May and June 2016 indicates that Harrison Power Station had NOx mass emissions exceeding 35.634 tons/day on 14 days. The average NOx emission rates for the three Harrison Power Station coal-fired EGUs for the May and June 2016 period was 0.1008 lb/MMBTU for Unit 1, 0.2369 lb/MMBTU for Unit 2, and 0.1624 lb/MMBTU for Unit 3. The overall station NOx emission rate for the May through June 2016 period was 0.1590. The Harrison Power Station's overall heat input capacity factor (based on AMPD heat input capacity ratings) for these 14 days ranged from 68% to 87%. This preliminary data appears to indicate that the Harrison Power Station SCR NOx emission control devices are still not being consistently operated in manner representative of good pollution control practices.

**Short Term NOx Emission Limits Are Required To Assist in Reducing the Downwind Impact of Harrison Power Station NOx Emissions**

The information discussed above indicates that current and past EGU cap-and-trade NOx control programs, applicable to the Harrison Power Station, that were designed to limit annual and seasonal NOx emissions, along with the existing annual average NOx emissions rate limits, have not served to limit the Harrison Power Station's NOx emissions to levels such that those emissions do not significantly contribute to exceedances of short term air quality standards, thereby imperiling the public health and welfare in downwind states. The modeling performed by STI tends to support this conclusion by quantifying the impact of Harrison Power Station NOx emissions on ozone levels measured at Delaware's monitoring locations.

It is interesting to note that the EPA's EGU cap-and-trade NOx control programs resulted in the installation of SCR, the most effective commercially available NOx control technology, on the Harrison Power Station coal-fired EGUs. And the AMPD data indicates that in the early years of the cap-and-trade program, the Harrison Power Station effectively operated their SCR NOx controls for cap-and-trade program compliance purposes. However, changing conditions in the power generation industry have resulted in conditions where NOx cap-and-trade compliance allowances are available at prices that make it uneconomic to operate existing NOx controls, such as Harrison's SCRS, for cap-and-trade NOx control programs. Additional incentive is required to ensure that existing EGU NOx controls are consistently operated in accordance with good pollution control practices.

Delaware is concerned that the NOx mass emission limits associated with CSAPR and, when effective, the proposed CSAPR Update will also be ineffective in properly protecting the public health and welfare in downwind states at all times with regards to the 8-hour ozone NAAQS. It is recognized that the provisions of CSAPR and the proposed CSAPR Update provide for more restrictive annual and seasonal NOx mass emissions than previous rules, and that the CSAPR and proposed CSAPR update programs also provide significantly more restrictive allowance trading provisions than previous rules. However, the provisions of CSAPR and CSAPR Update do not provide any limitations on the Harrison Power Station's NOx mass emissions for any period shorter than seasonal (such as hourly or daily). The lack of sufficiently stringent short term NOx emission rates facilitates the continued operation of the Harrison Power Station EGUs with inadequate NOx emission control and resulting high NOx emissions over short periods of time. The lack of sufficiently stringent short term emissions limitations will therefore help facilitate the Harrison Power Station's NOx mass emissions at levels that will continue to support non-compliance with the 8-hour ozone NAAQS in Delaware, and thereby continue to impact the health and welfare of Delaware's citizens.

In order to be protective of short term air quality standards, such as the 8-hour ozone NAAQS, it is Delaware's opinion that it will be necessary to establish emissions limits with appropriate magnitudes and averaging periods at the Harrison Power Station that ensure that the NOx emissions are adequately controlled during any particular time period. It is Delaware's opinion that selection of a short term NOx emission rate limit averaging period of no greater than 24 hours is also appropriate to address the short term aspects of compliance with a short term NAAQS, such as the 8-hour ozone NAAQS.

#### **Proposed Use of Clean Coal Process at the Harrison Power Station**

Delaware is aware that Monongahela Power Company has applied to the West Virginia Department of Environmental Protection for a permit to install and operate a clean coal technology called Refined Coal at the Harrison Power Station. The proposed Refined Coal process for the Harrison Power Station will include the production of a refined coal using the Chem-Mod Process and the combustion of that refined coal in the station's power boilers. (20) The West Virginia Department of Environmental Protection has prepared an Engineering Evaluation/Fact Sheet that addresses the technical aspects of the proposed Refined Coal installation at Harrison Power Station. (21) The Engineering Evaluation/Fact Sheet indicates that the Refined Coal process installation at the Harrison Power Station is intended, in part, to reduce NOx emissions. The Refined Coal process will impact the coal fuel burned for all three Harrison Power Station coal-fired EGUs.

The West Virginia Engineering Evaluation/Fact Sheet indicates that in conjunction with the installation and operation of the Chem-Mod Refined Coal process at the Harrison Power Station, the operating permit will be revised for the coal fired units to include the following NOx emission rate limitations, including an ozone season NOx emission rate limitation:

*4.1.13.a The NOx emission rate shall not exceed 0.25 lb/mmBtu on a 30 day rolling average; and*

*4.1.13.b Beginning the 30 day period that commences May 1 and ends on May 30 and for each succeeding 30 day period through September 30, the NOx emission rate shall not exceed <sup>(1)</sup>0.20 lb/mmBtu.*

*<sup>(1)</sup> But for the following one-time exception for Unit 2 boiler only, during the five (5) consecutive 30 day periods of May through September 2016, preceding and during a catalyst replacement: The NOx emission rate shall not exceed 0.28 lb/mmBtu on a 30 day rolling average.*

The ozone season NOx emission rate limitation of 0.20 lb/MMBTU, 30-day period average, does not provide the level of control necessary to ensure that the Harrison Power Station does not

significantly impact Delaware's ambient ozone. As discussed earlier, and shown in Table 5, the STI modeling estimated that the Harrison Power Station's NOx emissions of 35.634 tons on June 18, 2011 had an impact of 0.71 ppb on Delaware's ambient ozone. This level of NOx mass emissions from the Harrison Power Station can be easily exceeded if the three Harrison Power Station coal-fired steam generators are operated at full capacity, as shown in the following table.

<b>Table 11</b> <b>Harrison Power Station</b> <b>NOx Potential To Emit with Refined Coal Project Proposed NOx Rate Limit</b>				
Unit	Estimated NOx Daily Potential to Emit at Permit		Estimated NOx Daily Potential to Emit at AMPD	
	Permit Heat Input Rating (MMBTU/hr)	Heat Input Rating and 0.20 lb/MMBTU NOx Rate (tons/day)	AMPD Heat Input Rating (MMBTU/hr)	Heat Input Rating and 0.20 lb/MMBTU NOx Rate (tons/day)
1	6325	15.2	7583	18.2
2	6325	15.2	7500	18.0
3	6325	15.2	7700	18.5
Total	18975	45.5	22783	54.7

As shown in the above Table 11, it is not necessary for the Harrison Power Station coal-fired EGUs to be operating at full load, 24-hours per day, for the facility's NOx emissions to exceed the 35.634 tons per day value estimated by STI to have significant impact on Delaware's ambient ozone. As discussed earlier, AMPD data for the three Harrison Power Station coal-fired EGUs lists many hours with the heat inputs well in excess of the permit heat input rating values and close to the AMPD heat input rating values. Therefore, it is assumed that the estimated daily NOx potential to emit values for the Harrison Power Station in the above Table 11 are more accurately represented by the values estimated using the AMPD heat input ratings.

It can be seen in the above Table 11 that even if the NOx emissions rate limit associated with the Harrison Power Station's Refined Coal application (0.20 lb/MMBTU, 30-day average) was met on a daily basis, the Harrison Power Station has a NOx mass emissions potential to emit well in excess of the 35.634 tons/day value estimated by STI to have a significant impact on Delaware's ambient ozone. Using the 35.634 ton/day NOx mass emissions value and a daily average NOx emissions rate of 0.20 lb/MMBTU, it is estimated that the Harrison Power Station would reach the daily 35.634 ton NOx mass emissions with a daily heat input of 356,340 MMBTU. Using the AMPD heat input rating for the three Harrison Power Station's coal-fired EGUs, the 356,340 MMBTU daily heat input value represents an approximate 65% daily heat input capacity factor.

During recent ozone seasons, the Harrison Power Station has exceeded the 356,340 MMBTU daily heat input value numerous times, as documented in the AMPD. The following table lists the number of ozone season days that the Harrison Power Station has exceeded a daily heat input value of 356,340 MMBTU in recent years.



**Table 12**  
**Harrison Power Station**  
**Number of Ozone Season Days 356,340 MMBTU Daily Heat Input**

Ozone Season Year	Number of Ozone Season Days
	Harrison Power Station Exceeded 356,340 MMBTU
2011	16
2012	26
2013	34
2014	41
2015	39
2016*	48

\*2016 Partial Ozone Season Data – May 1 through June 30 Only

It can be seen in Table 12 above that over the last five ozone seasons (and a partial 2016 ozone season, as of the preparation of this petition) there have been many days where the Harrison Power Station daily heat input exceeds the 356,340 MMBTU value, which, when combined with a 0.20 lb/MMBTU NO<sub>x</sub> emissions rate limit, would produce an estimated 35.630 ton/day of NO<sub>x</sub> mass emissions. The 35.630 ton/day NO<sub>x</sub> emissions value from the Harrison Power Station is that which STI estimated to have a 0.71 ppb impact on Delaware's ambient ozone on June 18, 2011.

It should be noted that the proposed 0.20 lb/MMBTU emission rate limits for the Harrison Power Station coal-fired EGUs are based on 30-day averaging periods. A 30-day averaging period provides an emitting facility the flexibility to have some extended periods operating with emission rates in excess of the numerical limit while still attaining the 30-day average emissions limitation. There is no means of ensuring that such a period of operation with the NO<sub>x</sub> emissions rate in excess of the 30-day numerical limit does not occur during a period where ambient conditions are favorable for impacting downwind ozone. As discussed earlier, it is Delaware's opinion that in order to be protective of short term air quality standards, such as the 8-hour ozone NAAQS, it is necessary to establish emissions limits with appropriate magnitudes and averaging periods to ensure that the NO<sub>x</sub> emissions are adequately controlled during any particular time period during the ozone season.

It is Delaware's opinion that the proposed NO<sub>x</sub> emission rate limitation of 0.20 lb/MMBTU, 30-day average during the ozone season, for the Harrison Power Station will not be sufficient to ensure that the Harrison Power Station does not significantly impact Delaware's ambient ozone. It is Delaware's opinion that adoption of a short term NO<sub>x</sub> emission rate limit of 0.125 lb/MMBTU, and a NO<sub>x</sub> emission rate limit averaging period of no greater than 24 hours, will be

required to ensure that the Harrison Power Station does not significantly impact Delaware's with the 8-hour ozone NAAQS.

#### **Requested EPA Action**

Even with extensive reduction of NO<sub>x</sub> emissions from EGU sources located in the state of Delaware, Delaware continues to experience exceedances of the 8-hour ozone NAAQS. Modeling conducted by the EPA indicates that emissions from EGUs in upwind states are major contributors to Delaware's ongoing 8-hour ozone NAAQS compliance issues. Modeling performed for Delaware by Sonoma technologies Inc, (STI) indicates that the Harrison Power Station, located in the upwind state of West Virginia, itself significantly impacts the level of ozone in Delaware's ambient air. The modeling has shown that not only can the Harrison Power Station significantly impact Delaware's 8-hour ozone NAAQS compliance when the facility is operating with high NO<sub>x</sub> mass emission rates, but can also significant impact Delaware's 8-hour ozone compliance when the facility is operating at greatly reduced NO<sub>x</sub> mass emission rates. The historic variability in Harrison Power Station's daily NO<sub>x</sub> mass emissions can be due to variability in operating capacity of the three coal-fired EGUs, variability in the operation of the coal-fired EGU's SCR NO<sub>x</sub> controls, or a combination of both. The compliance flexibility of applicable NO<sub>x</sub> cap-and-trade programs and relatively high, long term NO<sub>x</sub> emission rate limitations permit the Harrison Power Station owner/operator to make decisions concerning whether to operate SCR controls or not for any given ozone season or part of an ozone season.

The Harrison Power Station's impact on Delaware's 8-hour ozone NAAQS compliance has continued even though the Harrison Power Station is equipped with some of the most effective NO<sub>x</sub> emission controls (SCR) and has been in compliance with its permit NO<sub>x</sub> emissions rate limits and applicable cap-and-trade NO<sub>x</sub> emissions control programs. These permit NO<sub>x</sub> emission rate limits and long term (annual, seasonal) cap-and-trade NO<sub>x</sub> control programs have not provided the level of short term NO<sub>x</sub> emission limits necessary to be supportive of the short term, 8-hour ozone NAAQS. Because the CSAPR, and proposed CSAPR Update, will continue to attempt to control NO<sub>x</sub> mass emissions on an annual and seasonal basis, these programs are also expected to permit an EGU facility such as the Harrison Power Station to emit NO<sub>x</sub> at high levels over any given short term basis while allowing a subject EGU facility to remain in compliance overall with the annual and seasonal programs.

A facility modification for the Harrison Power Station has been proposed to install and operate a refined coal process to provide lower-emitting coal for combustion in the Harrison Power Station's coal-fired steam generators. As part of the refined coal proposal, a permit modification has been proposed to apply ozone season NO<sub>x</sub> emission rate limits of 0.20 lb/MMBTU, 30-day average, for the three Harrison Power Station coal-fired EGUs. As discussed earlier, these

proposed limits, if adopted, will still provide the Harrison Power Station the flexibility to emit NO<sub>x</sub> mass emission during an ozone season at levels that STI modeling has estimated to significantly impact Delaware's ambient ozone.

In order to be protective of short term air quality standards, such as the 8-hour ozone NAAQS, it is Delaware's opinion that it will be necessary to establish NO<sub>x</sub> emissions limits with appropriate magnitudes and averaging periods that ensure that the NO<sub>x</sub> emissions are adequately controlled during any particular time period. Therefore, Delaware is hereby petitioning the EPA under §126(b) of the Clean Air Act to make a finding within 60 days of EPA's receipt of this petition that the Harrison Power Station, located in West Virginia, emits or would emit air pollutants in violation of the prohibition of §110(a)(2)(D)(i) or §126 of the Clean Air Act, and to order the Harrison Power Station to either comply with short term NO<sub>x</sub> emissions limitations sufficient to protect Delaware or to cease operating within 3 months thereafter.

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- 13) 40 CFR Parts 52, 78, and 97, Cross-State Air Pollution Rule Update for the 2008 Ozone NAAQS; Proposed Rules, Federal Register Vol. 80, No. 232, Thursday December 3, 2015, <https://www.gpo.gov/fdsys/pkg/FR-2015-12-03/pdf/2015-29796.pdf>
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STATE OF DELAWARE  
DEPARTMENT OF NATURAL RESOURCES  
AND ENVIRONMENTAL CONTROL

OFFICE OF THE  
SECRETARY

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November 10, 2016

Ms. Gina McCarthy  
Administrator  
United States Environmental Protection Agency  
Ariel Rios Building  
1200 Pennsylvania Avenue, N.W.  
Mail Code: 1101A  
Washington, DC 20460

Dear Administrator McCarthy:

By this letter, the State of Delaware hereby petitions the Administrator of the Environmental Protection Agency (EPA) under §126(b) of the Clean Air Act (CAA) to find that the Homer City Generating Station's electric generating units (EGUs), located in Indiana County, Pennsylvania, are emitting air pollutants in violation of the provisions of Section 110(a)(2)(D)(i) of the CAA with respect to the 2008 0.075 ppm ozone NAAQS and the 2015 8-hour 0.070 ppm ozone NAAQS.

Section 110(a)(2)(D)(i) prohibits any source or other type of emissions activity within a State, "from emitting any air pollutant in amounts which will contribute significantly to nonattainment in, or interfere with maintenance by, any other State with respect to any such national primary or secondary ambient air quality standard." Section 126(b) of the CAA provides that, "[a]ny State or political subdivision may petition the Administrator for a finding that any major source or group of stationary sources emits or would emit any air pollutant in violation of the prohibition of Section 110(a)(2)(D)(ii) or this section."

I am aware of EPA efforts that are underway to address transported emissions, to include the recent finalization of the update to the Cross State Air Pollution Rule (CSAPR), planned future efforts beyond the CSAPR Update Rule that will be necessary to fully address interstate transport for the 2008 ozone NAAQS and for the recent 2015 ozone NAAQS, and federal Tier 3 vehicle emissions and fuel standards measures to reduce NOx emissions. While helpful these efforts are not adequate to mitigate the impacts of upwind emissions on Delaware's air quality

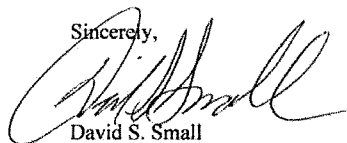
*Delaware's Good Nature depends on you!*

Ms. Gina McCarthy  
November 2, 2016  
Page Two

and are tangent to the CAA Section 126 process. EPA has effectively closed the door to CAA tools designed to bring clean air to Delaware by establishing nonattainment area boundaries that effectively penalize areas like Delaware rather than apply the CAA to the emissions that cause our unhealthy air, by failing to act on a CAA 176 petition in the timing mandated by the CAA, by extending CAA attainment timeframes rather than bumping up areas and promulgating required federal implementation plans. From a downwind perspective EPA has lost sight of the CAA mandate that requires attainment "as expeditiously as practicable and no later than...."

CAA Section 126(b) requires that within 60 days after receipt of any petition and after public hearing, the Administrator shall make such a finding or deny the petition. We look forward to working with you and your staff during this period in which you make your finding regarding this petition and take the required actions to protect the health and welfare of Delaware's citizens. Please do not hesitate to contact me if you have any questions or need additional information regarding this petition.

Sincerely,



David S. Small  
Secretary

CC: Jack Markell, Governor,  
State of Delaware

Ali Mirzakhali, Director  
Department of Natural Resources and Environmental Control

Administrator Shawn M. Garvin  
US EPA Region III Office

Krishnan Ramamurthy, Director  
Pennsylvania Department of Environmental Protection

**Attachment 1****Delaware CAA 126 Petition****Homer City Generating Station**

The State of Delaware submits this petition for a finding under §126(b) of the Clean Air Act that the Homer City Generating Station's electric generating units (EGUs), located in Indiana County, Pennsylvania, significantly contribute to Delaware's non-attainment of the 2008 8-hour ozone national ambient air quality standard (NAAQS) of 0.075 ppm and the latest 8-hour ozone NAAQS of 0.070 ppm adopted by the United States Environmental Protection Agency (EPA) on October 26, 2015. (1)

Delaware has complied with the requirements of §110(a)(2)(D)(i)(I) of the CAA by adopting in-state control measures for the prevention of emissions that would significantly contribute to non-attainment, or interfere with maintenance, of the ozone National Ambient Air Quality Standard (NAAQS) in a downwind area. (2) However, Delaware's ability to achieve and maintain health-based air quality standards for its own residents is severely impacted by sources outside of the state of Delaware. This is due to the fact that more than 94% of the ozone levels in Delaware are created by the transport of air pollutants from upwind areas. Attainment and maintenance of the 2008 and 2015 8-hour ozone NAAQSs in Delaware is possible only through additional emission reductions in the upwind states that significantly contribute to non-attainment and maintenance in Delaware.

Section 126(b) of the CAA provides that, "[a]ny State or political subdivision may petition the Administrator for a finding that any major source or group of stationary sources emits or would emit any air pollutant in violation of the prohibition of Section 110(a)(2)(D)(i) or this section." In accordance with §126(b) of the Clean Air Act, the state of Delaware petitions the Administrator of the EPA to establish a timely schedule for the above-referenced Homer City Generating Station electric generating facility and the state of Pennsylvania to put those entities in compliance with §110(a)(2)(D)(i) of the Clean Air Act with respect to the 2008 8-hour 0.075 ppm ozone NAAQS and 2015 8-hour 0.070 ppm ozone NAAQS. (3)

**Background**

The EPA began to address air quality issues related to ambient ozone through establishment of a related National Ambient Air Quality Standard in 1971. In 1997 the EPA first established the 8-hour ozone NAAQS to protect human health and welfare at a level of 0.08 ppm. The EPA

subsequently lowered the 8-hour ozone NAAQS to 0.075 ppm in 2008. After further evaluation, the EPA further lowered the 8-hour ozone standard to 0.070 ppm on October 26, 2015. (1)

The establishment of the short term ozone standard (8-hour NAAQS) was necessary to address the potential health impact of short term exposure to high levels of ozone. Short term exposure to ozone can cause rapid, shallow breathing and related airway irritation, coughing, wheezing, shortness of breath, and exacerbation of asthma, particularly in sensitive individuals and asthmatic children. Short term exposure also suppresses the immune system, decreasing the effectiveness of bodily defenses against bacterial infections. Research studies indicate that markers of cell damage increase with ozone exposure. Some studies suggest that there is a link between ozone exposure and premature death of adults and infant death. Other studies indicate a link between ozone and premature birth and adverse birth outcome, cardiovascular defects, and adverse changes in lung structure development in children. Children, the elderly, those with chronic lung disease, and asthmatics are especially susceptible to the pulmonary effects of ozone exposure. Additionally, studies have shown that ozone can adversely affect trees and vegetation, can cause reduced crop yields, and can contribute to nitrification of bodies of water.

Atmospheric ground level ozone that is harmful to human health and welfare is formed primarily by the chemical reaction of nitrogen oxides (NO<sub>x</sub>) with volatile organic compounds (VOC's) in the presence of heat and sunlight. Dry, hot, sunny days are most conducive to the formation of ozone. Because ground level ozone concentrations are highest when sunlight is the most intense, in the eastern United States the warm summer months (May 1 through September 30) are referred to as the ozone season. Weather also affects ozone concentrations and how quickly it is transported and dispersed. Periods of light winds allow ozone and ozone precursor pollutants to build up in any particular area leading to greater concentrations. However, the wind can also be responsible for transporting the ozone and ozone precursors over long distances downwind. This downwind pollutant transport can then combine with more local emissions to contribute to exceeding the ozone NAAQS in any particular location.

Delaware has experienced a number of exceedances of the health based 8-hr ozone NAAQS. (4) The following table identifies the number of 8-hour ozone NAAQS exceedances experienced in Delaware during the ozone seasons for the years 2000 through 2016:



**Table 1**  
**Actual Delaware Ozone Exceedances – 8-Hour NAAQS**

	New Castle County - No. of Days of Exceedance	Kent County - No. of Days of Exceedance	Sussex County - No. of Days of Exceedance	Total No. of Days of Exceedance
2016 Ozone Season **	10	2	3	11
2015 Ozone Season **	2	0	0	2
2014 Ozone Season **	3	0	0	3
2013 Ozone Season **	1	0	1	2
2012 Ozone Season **	13	14	12	19
2011 Ozone Season **	11	3	6	15
2010 Ozone Season **	14	5	9	18
2009 Ozone Season **	3	0	0	3
2008 Ozone Season **	9	8	8	14
2007 Ozone Season ***	5	0	0	5
2006 Ozone Season ***	2	4	3	6
2005 Ozone Season ***	8	2	8	16
2004 Ozone Season ***	3	0	2	5

\* = 0.070 ppm Standard    \*\* = 0.075 ppm Standard    \*\*\* = 0.08 ppm Standard  
 # = Preliminary Data

On October 1, 2015, the EPA strengthened the 8-hour ozone NAAQS to 70 ppb based upon scientific evidence of ground level ozone's negative effect on public health and welfare. Relative to the 2008 8-hour ozone standard, the updated 8-hour ozone NAAQS is expected to further improve public health protection, particularly for at-risk groups, and also improve the health of trees, plants, and ecosystem. If the 2015 8-hour ozone standard of 70 ppb had been in effect for the past several years, based upon monitoring data, it is estimated that Delaware would have experienced a higher number of 8-hour ozone exceedances compared to the actual exceedances of the 2008 8-hour ozone standard of 75 ppb. The following table provides a comparison of the actual 8-hour ozone NAAQS exceedances and the estimated exceedance that would have occurred if the 70 ppb standard had been in effect:

**Table 2**  
**Comparison of Actual vs Estimated Days of Ozone Exceedance**  
**2008 8-hour Ozone NAAQS vs 2015 8-hour Ozone NAAQS**

Ozone Season	Actual Number of Days of 75 ppb Ozone Standard Exceedance	Actual Number of Monitor-Days of 75 ppb Ozone Standard Exceedance	Estimated Number of Days of Ozone Standard Exceedance Assuming 70 ppb Standard	Estimated Number of Monitor-Days of Ozone Standard Exceedance Assuming 70 ppb Standard
2010	18	28	36	91
2011	15	20	25	73
2012	19	39	28	107
2013	2	2	6	7
2014	3	3	8	17
2015	2	2	10	16
2016	6	17	11*	34*

\*2015 8-hour ozone NAAQS limit of 70ppb in effect, actual exceedances shown (preliminary date)

It can be seen in the above table that if the more stringent 2015 8-hour ozone NAAQS of 70 ppb were in effect during the 2010 through 2015 ozone seasons that Delaware would have exceeded that standard at a much higher rate than it experienced under the 2008 8-hour ozone NAAQS of 75 ppb. As shown in the above table, for the 2010 through 2015 ozone season, the number of 8-hour ozone NAAQS exceedance day would increase from 59 days under the 2008 NAAQS to 113 days under the 2015 NAAQS. It can also be seen in the above table that Delaware continued to experience exceedances of the 2008 8-hour ozone NAAQS, as well as exceedances of the 2015 8-hour ozone NAAQS, during the 2016 ozone season.

As discussed earlier, NO<sub>x</sub> is a precursor pollutant to the formation of atmospheric ozone. NO<sub>x</sub> is a generic term for a group of reactive gasses that are composed of nitrogen and various amounts of oxygen (including nitrogen oxide and nitrogen dioxide). NO<sub>x</sub> is formed in the combustion process as a result of high temperature chemical reactions of the nitrogen contained in the fuel and the nitrogen contained in the ambient combustion air along with oxygen in the combustion air. Fossil fuel-fired electric generating units are some of the largest emitters of NO<sub>x</sub>, with EGUs powered by coal-fired steam generators without NO<sub>x</sub> emissions controls exhibiting some of the highest NO<sub>x</sub> emission rates (in terms of lb/MMBTU).

Uncontrolled, higher nitrogen content fuels, such as coal and residual fuel oil, tend to result in higher NO<sub>x</sub> emissions than lower nitrogen content fuels (such as natural gas). Various combustion configurations tend to result in varying NO<sub>x</sub> emission rates (in terms of pounds of NO<sub>x</sub> emitted per million BTU of fuel heat input (lb/MMBTU)) due to amounts of excess air required for combustion, rate of fuel combustion, combustor geometry, peak combustion temperatures, and duration of combustion gasses at peak temperatures, etc. Combustion

controls, such as low NOx burners and overfire air, are commercially available NOx reduction technologies adaptable and applicable to most EGU combustion systems. Post combustion NOx controls, such as selective non-catalytic reduction (SNCR) and selective catalytic reduction (SCR), are commercially available highly effective NOx reduction technologies that are applicable to most EGU exhaust gas streams. These NOx controls are generally available for both new EGU installations and for retrofit on existing EGUs. Utilization of combustion controls and post combustion controls, singly or layered together for a single EGU, can result in significant reductions in the EGUs NOx emissions rate, greater than 90% reduction from uncontrolled levels for some EGUs.

To address the NOx emissions from EGU sources located in the state of Delaware, Delaware has promulgated a number of rules and regulations that effectively control the NOx emissions from these EGUs which also fulfills Delaware's obligation under §110(a)(2)(D)(i)(I) of the Clean Air Act. These rules and regulations have been previously submitted to the EPA in Delaware's June 2007 and subsequent state implementation plan (SIP) revisions, including the June 2012 revision.

(5) The referenced rules and regulations include the following:

- 7 DE Admin Code 1112, Control of Nitrogen Oxide Emissions, which set RACT-based NOx emission rate standards for major stationary sources, including EGUs. (6)
- 7 DE Admin Code 1146, Electric Generating Unit (EGU) Multi-Pollutant Regulation, which included short term NOx emission rate limits (lb/MMBTU on rolling 24-hour average) and annual NOx mass emissions caps for coal-fired and residual oil-fired EGUs. (7)
- 7 DE Admin Code 1148, Control of Stationary Combustion Turbine Electric Generating Unit Emissions, which set NOx emission rate limits or approved NOx control technology requirements (such as water injection) for combustion turbines with a nameplate rating of 1 MW or greater that had not previously controlled their NOx emissions rate in accordance with the NOx RACT requirements of 7 DE Admin Code 1112. (8)

In addition to the NOx control regulations noted above, Delaware has participated in regional and federal initiatives, where applicable, that were designed to limit the NOx emissions from EGU sources whose NOx emissions may impact compliance with ozone standards in downwind states. These regional and federal initiatives include the following:

- The Ozone Transport Commission (OTC) NOx Budget Program. (9) In 1990, the OTC was created by amendments to the Clean Air Act. The OTC consisted of northeast and mid-Atlantic states with persistent summertime ozone problems. These OTC states include Connecticut, Delaware, the District of Columbia, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont, and portions of Virginia. The OTC was tasked with advising the EPA on ozone transport issues and for

helping to develop and implement regional solutions to ozone problem experienced by the member states. Recognizing that the interstate transport of pollutants to downwind states contributed to summertime ozone problems in those downwind states, the OTC created and implemented its NOx Budget Program. The NOx Budget Program was a cap-and-trade program to limit the total regional emission of NOx from fossil-fueled electric generating units and large boilers located in OTC states, and became effective in 1999. Cap and trade programs effectively reduce the total amount of emissions, usually for a geographic area, by placing a cap on the total emissions occurring in that geographic area without setting unit by unit limits. For the OTC NOx Budget Program, affected states were allocated a NOx emissions cap for the subject NOx emitting sources in the respective state, and the subject units were required to hold and surrender a NOx allowance for each ton of NOx emitted in order to comply with program requirements. This program did not include any unit specific NOx emissions rate requirements. The OTC NOx Budget Program effectively ended when the EPA began administering the EPA's NOx Budget Trading Program.

- The EPA NOx State Implementation Plan (SIP) Rule. *(10)* In 2003 the EPA implemented its NOx State Implementation Plan (SIP) Rule utilizing the NOx Budget Trading Program, a NOx emissions cap and trade program similar to that used for the OTC NOx Budget Program. Relative to the OTC NOx Budget Program, the EPA's NOx Budget Trading Program was expanded to include additional states (for a total of 20 states and also the District of Columbia) and established more stringent NOx emissions allowance allocations. The EPA's NOx State Implementation Plan (SIP) Rule was intended to reduce the regional transport of ozone and ozone-forming pollutants in the Eastern United States. The NOx State Implementation Plan (SIP) Rule was in place until 2009, when it was replaced by the EPA's Clean Air Interstate Rule (CAIR).
- The EPA Clean Air Interstate Rule (CAIR). *(11)* In 2005, the EPA promulgated its CAIR program that required states to reduce the emissions of SO2 and NOx to help meet health based air quality standards for fine particulate matter and ozone. The EPA indicated in the proposal for the CAIR that NOx and SO2 emissions in 23 states and the District of Columbia contributed to unhealthy levels of fine particulate matter in downwind states, and that the NOx emissions from 25 states and the District of Columbia contributed to unhealthy levels of 8-hour ozone in downwind states. EPA indicated that the reduction of SO2 and NOx emissions from EGUs would serve to reduce the interstate transport of pollutants related to these emissions. CAIR established a cap-and-trade program covering EGUs to limit the emissions of SO2 and NOx from these sources as an option for compliance with the reduction requirements. (All states subject to the CAIR selected this compliance option.) SO2 and NOx emissions mass caps were established for individual states and allowances were issued by the EPA to cover those allowable emissions from subject sources. The cap-and-trade program was intended by the EPA to provide subject sources

flexibility in meeting the mass emissions limitations through the installation of controls, fuel switching, or trading/purchase of excess allowances from other subject sources. The NO<sub>x</sub> emissions limitations of CAIR became effective in 2009, and the SO<sub>2</sub> emissions limitation of CAIR became effective in 2010. The EPA made a number of changes to the CAIR subsequent to its original proposal, the most notable was the establishment of a process to provide for EPA to establish CAIR Federal Implementation Plans (FIPS) for states that failed to timely establish state plans for the implementation of CAIR. This ensured that the controls of the cap-and-trade program were uniformly established in all subject states on a timely basis.

- The EPA Cross-State Air Pollution Rule (CSAPR). (12) Subsequent to the promulgation of CAIR, legal actions lead the US Court of Appeals for the DC Circuit to make the decision in 2008 to remand the CAIR back to the EPA to make the rule more consistent with the requirements of the Clean Air Act. However, the courts left the requirements of CAIR in place until the EPA finalized a replacement rule. In response, the EPA promulgated its Cross-State Air Pollution Rule (CSAPR) in 2011. Additionally, in conjunction with the rule the EPA established federal implementation plans (FIPS) for each state subject to the CSAPR in order to implement the rule as rapidly as possible. In the rulemaking process the EPA identified for subject states what portions of each state's emissions significantly contributed to ozone or PM<sub>2.5</sub> pollution in downwind states. The CSAPR established mass emissions limitations of SO<sub>2</sub> and NO<sub>x</sub> from power plants in subject states to eliminate the portion of those emissions that are significant contributions to non-attainment or maintenance of fine particulate matter and ozone air quality standards in downwind states. The CSAPR established annual mass emissions limitations for SO<sub>2</sub> and NO<sub>x</sub> and additional ozone season NO<sub>x</sub> mass emissions limitations for NO<sub>x</sub>. Between the original CSAPR and subsequent actions, there were 26 states subject to the ozone season NO<sub>x</sub> mass emissions limitations to address the 1997 Ozone NAAQS, 18 states were subject to annual SO<sub>2</sub> and NO<sub>x</sub> mass emissions limitations of the rule to address the 1997 Annual PM<sub>2.5</sub> NAAQS, and 21 states were subject to annual SO<sub>2</sub> and NO<sub>x</sub> mass emissions limitations to address the 2006 24-hr PM<sub>2.5</sub> NAAQS (a combined total of 23 states for addressing the two PM<sub>2.5</sub> NAAQS). Relative to previous mass-based emissions rules, the CSAPR significantly restricted the trading of allowances that could be utilized for compliance purposes by establishing state variability limits that ensure that a state's actual mass emissions would fulfill its Clean Air Act "good neighbor" obligations. The EPA determined that Delaware was not required to participate in CSAPR.
- In 2012 the CSAPR was challenged in court, and the US Court of Appeals for the DC Circuit vacated the CSAPR and the implementing FIPs. The Court remanded the rule to the EPA to address the Courts findings, and directed the EPA to continue administering CAIR

pending the promulgation of a valid rule to replace CAIR. As of this ruling, CAIR cap-and-trade programs for annual SO<sub>2</sub>, annual NO<sub>x</sub>, and ozone season NO<sub>x</sub> remained in place. *(12)*

- In April of 2014 the US Supreme Court reversed the DC Circuit court's opinion vacating CSAPR. In June of 2014 the EPA filed a motion with the U.S. Court of Appeals for the DC Circuit to lift the stay of the CSAPR, and in October of 2014 the Court of Appeals for the DC Circuit granted the EPA's motion. In November of 2014 the EPA issued a ministerial rule that aligned the dates in the CSAPR rule text with the revised court-ordered schedule, including 2015 Phase 1 CSAPR implementation and 2017 Phase 2 CSAPR implementation. *(12)*
- In November of 2015 the EPA proposed an update to the CSAPR by issuing the proposed CSAPR Update Rule. *(13)* Starting in 2017, this proposal would reduce summertime nitrogen oxides (NO<sub>x</sub>) emissions from power plants in 23 eastern states, by establishing NO<sub>x</sub> mass emission caps, in order to reduce the impact of those power plant emissions on downwind states. In its proposal, the EPA requested comments regarding the potential application of short term NO<sub>x</sub> emission limits on these same power plants. The EPA determined that Delaware was not required to participate in the CSAPR Update.
- On September 7 of 2016 the EPA finalized the update to the CSAPR by issuing the Cross-State Air Pollution Rule Update for the 2008 Ozone NAAQS, Final Rule. *(14)* The CSAPR Update Rule addresses the ozone season (May – September) transport of ozone pollution in the eastern United States that crosses state lines to help downwind states and communities meet and maintain the 2008 ozone national ambient air quality standard (NAAQS). Starting in May 2017, this final rule puts in place NO<sub>x</sub> emissions caps that will provide additional reductions of ozone season NO<sub>x</sub> emissions from power plants in 22 states in the eastern United States.

These State and regional NO<sub>x</sub> reduction efforts have resulted in significant NO<sub>x</sub> emissions reductions from EGUs located in the state of Delaware. These reductions have occurred both in terms of ozone season NO<sub>x</sub> mass emissions (tons) and also in average ozone season NO<sub>x</sub> emissions rates (lb/MMBTU). The following table was assembled with data extracted from the United States Environmental Protection Agency's Air Markets Program Data (EPA's AMPD). *(15)* The table shows the ozone season NO<sub>x</sub> mass emissions (tons) and average NO<sub>x</sub> emissions rate (lb/MMBTU) for the EGU fleet located in the state of Delaware:

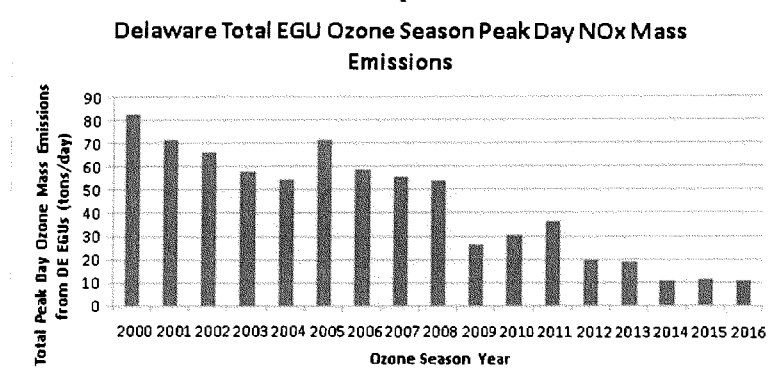
**Table 3**  
**2000 – 2016 Ozone Seasons**  
**State of Delaware**  
**Total EGU NOx Mass Emissions and Average NOx Emission Rate**

Ozone Season	Total EGU OS NOx (tons)	Change in NOx Mass Emissions from 2000 (%)	Average NOx Emissions Rate (lb/MMBTU)	Change in Average NOx Emission Rate (%)
Year				
2000	4137	0.0	0.2784	0.0
2001	4777	15.5	0.2806	0.8
2002	4609	11.4	0.2415	-13.3
2003	3850	-6.9	0.2374	-14.7
2004	3659	-11.6	0.2449	-12.0
2005	5175	25.1	0.2818	1.2
2006	3567	-13.8	0.2582	-7.3
2007	4179	1.0	0.2398	-13.9
2008	3190	-22.9	0.2277	-18.2
2009	1280	-69.1	0.1695	-39.1
2010	2265	-45.3	0.1484	-46.7
2011	1879	-54.6	0.1250	-55.1
2012	1054	-74.5	0.0585	-79.0
2013	879	-78.7	0.0589	-78.9
2014	668	-83.9	0.0483	-82.7
2015	635	-84.6	0.0480	-82.8
2016*	613	-85.2	0.0396	-85.8

\* Preliminary AMPD Data

However, relatively long term NOx mass emission caps (such as annual or seasonal caps) have limited impact on the short term NOx emissions (such a 24-hour period) from EGUs that have a more direct impact on compliance with short term air quality standards, such as the 8-hour ozone NAAQS. To address this issue, Delaware's air quality regulations have included short term NOx emission rate limits (with 24-hour averaging periods) that are protective of the short term ozone NAAQS. These short term NOx emission rate limits have helped Delaware achieve significant reductions in ozone season peak daily NOx mass emissions from Delaware's EGUs.

Graph 1



It can be seen in the above Graph 1 that between the 2000 and 2016 ozone seasons, the Delaware's EGUs have achieved a NOx mass emissions reduction (for ozone season peak NOx mass emissions days) in excess of 80% reduction. This reduction in peak ozone season day NOx mass emissions provides benefit in attaining compliance with the 8-hour ozone NAAQS for both Delaware's citizens and downwind populations.

Even though Delaware has significantly reduced the NOx emissions from EGUs located in Delaware, as discussed above, Delaware continues to experience exceedances of the 8-hour ozone NAAQS. Pollutants transported from facilities in upwind states are significant contributors to Delaware's continuing issues in meeting the 8-hour ozone NAAQS.

#### **Modeling Identifies Impact of Upwind NOx Emissions Impacting Delaware's 8-hour Ozone NAAQS Compliance**

The US EPA performed modeling as part of the development of its Cross-State Air Pollution Rule in order to help determine the impact of transported pollutants on downwind states and those states' ability to attain and maintain the then current 2008 ozone NAAQS of 75ppb. Some results of the modeling that identify state contributions to ozone at individual monitoring locations can be found on the spreadsheet titled "Contributions of 8-hour ozone, annual PM2.5, and 24-hour PM2.5 from each state to each monitoring site" located in the "Technical Information and Support Documents" section of the US EPA's Cross-State Air Pollution Rule (CSAPR) website. (16)



The US EPA's modeling identified 13 individual states (in addition to Delaware itself) whose NOx emissions significantly impact the ability of Delaware to attain and maintain the then current 8-hr ozone standard of 75 ppb. (17) (A state significantly impacts another state if it impacts that state's air quality by 1% or more of the applicable air quality standard. For the then current 8-hr ozone standard of 75 ppb, a significant contribution was 0.75 ppb or greater.) The states identified by the US EPA as significantly impacting Delaware's air quality, and the modeling results quantifying each state's impact, are shown in the following table:

**Table 4**  
**States Significantly Impacting Compliance with the 8-hour**  
**Ozone Standard in Delaware and the Magnitude of that Impact**

State	Maximum
	Contribution (ppb)
CT	1.008
DE	6.256
IL	1.445
IN	1.737
KY	3.208
MD	23.951
MI	2.207
NJ	13.034
NY	9.092
OH	3.987
PA	13.344
TN	1.932
VA	6.039
WV	3.142

The EPA's modeling results, summarized in the above table, indicate that four states (Maryland, New Jersey, New York, and Pennsylvania) have greater impact on compliance of the 8-hour ozone standard in Delaware than the impact of Delaware itself. The EPA's modeling results summarized in the above table also indicate that three states (Kentucky, Ohio, and West Virginia) individually have an impact on compliance of the 8-hour ozone standard in Delaware of 50% of the impact that Delaware impacts itself. These modeling results tend to confirm that pollutant transport is a significant issue for the state of Delaware, and they also help explain Delaware's ongoing difficulties with the 8-hour ozone standard despite the significant actions Delaware has implemented to reduce NOx and VOC emissions in Delaware.

**Pennsylvania's Homer City Generating Station's Impact on Delaware's 8-hour Ozone NAAQS Compliance**

As noted in Table 4 above, the EPA's modeling indicated that the state of Pennsylvania significantly impacts Delaware's compliance with the 8-hour ozone NAAQS. Because of the magnitude of Pennsylvania's impact on Delaware's compliance with the 8-hour ozone standard, and the potential contribution to this impact by EGUs located in Pennsylvania, further modeling was performed to determine if individual Pennsylvania EGU facilities individually have a significant impact on Delaware's compliance with the 8-hour ozone standard.

In order to help Delaware assess the impact of upwind EGU facility NO<sub>x</sub> emissions on Delaware's 8-hour average ozone exceedances in 2011, Sonoma Technologies Inc. (STI) conducted air quality modeling using the Comprehensive Air Quality Model with extensions (CAMx) Ozone Source Apportionment Technology (OSAT) (18). The 2011 ozone season modeling was performed to determine 8-hour average ozone apportionments from individual upwind EGU facilities and upwind groups of EGU facilities. The modeling identified that a number of EGU facilities located in the state of Pennsylvania individually had significantly impacted Delaware's compliance with the 8-hour ozone NAAQS during the 2011 ozone season. The identified EGU facilities significantly impacting Delaware's ambient air quality included Pennsylvania's Homer City Generating Station.

Because of the magnitude of its impact on Delaware's ambient ozone, the Homer City Generating Station is being individually addressed in this petition for a finding under §126(b) of the Clean Air Act.

The STI modeling results indicated that the Homer City Generating Station, located in Indiana County, Pennsylvania, emitted NO<sub>x</sub> during the 2011 ozone season at levels to individually have a significant impact on Delaware's ambient air quality on July 18, 2011. The following table shows the STI modeling estimated impact of Homer City Generating Station's NO<sub>x</sub> emissions on Delaware's ambient ozone on July 18, 2011:

**Table 5**  
**Homer City Generating Station**  
**STI Modeling Estimated Impact on Delaware Air Monitors**  
**July 18, 2011**

Delaware Air Monitoring Location	STI Modeling Estimated Impact (ppb)
Brandywine	0.94
Bellefonte	0.82
MLK	0.82

As shown in the above Table 5, the STI modeling estimated that on July 18, 2011 the Homer City Generation Station NO<sub>x</sub> emissions had a significant impact on Delaware's ambient ozone relative to both the 2008 8-hour ozone NAAQS of 0.075 ppm and the 2015 8-hour ozone NAAQS of 0.070 ppm. As shown in the table, the highest STI modeling ambient ozone impact was 0.94 ppb.

A review of the Homer City Generating Station's emissions data in the AMPD indicates that on July 18, 2011, the Homer City Generating Station emitted 38.153 tons of NO<sub>x</sub>. The review of the AMPD data indicates that over the past few years that the Homer City Generating Station's ozone season daily NO<sub>x</sub> mass emissions have frequently exceeded the 38.153 ton/day value. The following table indicates the number of ozone season days that Homer City Generating Station exceeded the 38.153 ton/day value.

**Table 6**  
**Homer City Generating Station**  
**Ozone Season Days With NO<sub>x</sub> Mass Emissions Greater Than 38.153 tons/day**

Ozone Season Days with NO <sub>x</sub> Mass Emissions Greater Than 38.153 tons/day	
Ozone Season Year	
2011	17
2012	25
2013	124
2014	126
2015	101
2016*	48

\*AMPD Preliminary Data

It can be seen in Table 6 that during recent ozone seasons there have been a number of days where the Homer City Generating Station has emitted NO<sub>x</sub> mass in excess of 38.153 tons/day, the value that was shown by the STI modeling to have had significant impact on Delaware's ambient ozone on July 18, 2011. While weather patterns impact the frequency and magnitude that the Homer City Generating Station's NO<sub>x</sub> emissions affect Delaware's air quality, the data provides an indication that the NO<sub>x</sub> emissions from the Homer City Generating Station have historically been at levels sufficient to have a significant impact.

#### **Homer City Generating Station**

The Homer City Generating Station is located in Indiana County, Pennsylvania. The Energy Information Administration (EIA) database indicates that the Homer Generating Station includes three coal fired steam electric generating units. (19) The following table provides some technical information regarding the Homer City Generating Station's coal-fired electric generating units:

**Table 7****Homer City Generating Station's Electric Generating Units**

	EIA Nameplate Rating (MW)	EIA Comercial Operation Year	EIA Primary Fuel	AMPD Heat Input Rating (MMBTU/hr)	AMPD Listed NOx Controls
Unit 1	660	1969	Bit Coal	6792	LNB OFA SCR
Unit 2	660	1969	Bit Coal	6792	LNB OFA SCR
Unit 3	692	1977	Bit Coal	7260	LNB OFA SCR

The Homer City Generating Station Units 1 and 2 incorporate supercritical Foster Wheeler steam generators, and Unit 3 incorporates a Babcock & Wilcox subcritical steam generator. All three steam generators fire bituminous coal as their primary fuel, with EIA information indicating that the bituminous coal fuel has historically come from Pennsylvania sources.

The Homer City Generating Station is contractually operated, maintained, and managed by NRG Energy. The Homer City Generating Station operates as an independent power producer and provides capacity, energy, and energy related services to the PJM regional transmission organization (RTO). The Homer City Generating Station also has the ability to sell energy into the NYISO RTO under certain restrictions.

**Homer City Generating Station NOx Emissions Limitations and Performance**

As noted in Table 7 above, the Homer City Generating Station Units 1, 2, and 3 are currently equipped with low NOx burners (LNBs), overfire air (OFA), and selective catalytic reduction systems (SCR) for control of NOx emissions. The LNBs and OFA NOx combustion controls were installed on the Homer City Generating Station EGUs in the mid-1990s for compliance with the state of Pennsylvania's NOx RACT requirements. In accordance with Pennsylvania's previous NOx RACT requirements (see discussion of Pennsylvania's 2016 revision to its NOx RACT regulation requirement below), the Homer City Generating Station EGU's were subject to NOx emission rate limits of 0.50 lb/MMBTU, on a 30-day rolling average. AMPD data indicates that the Homer City Generating Station EGUs have consistently been in compliance with these NOx RACT limits.

Also as indicated in Table 7 above, Homer City Generating Station Units 1, 2, and 3 are all equipped with SCR for NOx emissions control. AMPD data indicates that the SCRs for Unit 1 and Unit 3 were installed in 2001, and the SCR for Unit 2 was installed in 2000. The SCRs were installed to assist in compliance with the seasonal NOx emissions limitations and requirements of the Ozone Transport Commission's (OTC) NOx Budget Program and the subsequent EPA NOx State Implementation Plan (SIP) Rule and its associated NOx Budget Trading Program.

Pennsylvania has recently finalized a revision to its NO<sub>x</sub> RACT regulation, *Title 25. Environmental Protection/ Part I. Department of Environmental Protection/ Subpart C. Protection of Natural Resources, Article III Air Resources/ Chapter 129. Standards for Sources, Additional RACT Requirements for Major Sources of NO<sub>x</sub> and VOCs.* (20) The revisions to Pennsylvania's NO<sub>x</sub> RACT regulation become effective in 2017. The revision to Pennsylvania's NO<sub>x</sub> RACT regulation revises the NO<sub>x</sub> RACT provisions that are applicable to the Homer City Generating Station Units 1, 2, and 3.

The steam generators associated with Homer City Generating Station Units 1, 2, and 3 are all coal-fueled, wall-fired combustion units with heat input ratings of greater than 250 MMBTU/hr and are all equipped with SCR NO<sub>x</sub> emission controls. In accordance with the requirements of §129.97 of the revised Pennsylvania NO<sub>x</sub> RACT regulation, the presumptive NO<sub>x</sub> RACT emission rate limitation for Homer City Generating Station's coal-fired EGUs, with a SCR system flue gas inlet temperature equal to or greater than 600°F, is 0.12 lb/MMBTU, and compliance with this limit is also required in the event of SCR system by-pass, as follows:

*§129.97(g)(viii) For a coal-fired combustion unit with a selective catalytic reduction system operating with an inlet temperature equal to or greater than 600°F, 0.12 lb NO<sub>x</sub>/million Btu heat input. Compliance with this emission limit is also required when by-passing the selective catalytic reduction system.*

Additionally, under §129.98 of the revised Pennsylvania NO<sub>x</sub> RACT regulation, the owner or operator of a major NO<sub>x</sub> emitting facility subject to the regulation with at least one air contamination source subject to a NO<sub>x</sub> RACT emission limitation in §129.97 of the regulation that can not meet the applicable limitation may elect to meet the limitation by averaging NO<sub>x</sub> emissions on either a facility-wide or system wide basis using a 30-day rolling average. The regulation requires that system-wide averaging must be among sources under the common control of the same owner or operator within the same ozone non-attainment area of Pennsylvania.

*§129.98(a) The owner or operator of a major NO<sub>x</sub> emitting facility subject to § 129.96 (relating to applicability) that includes at least one air contamination source subject to a NO<sub>x</sub> RACT emission limitation in § 129.97 (relating to presumptive RACT requirements, RACT emission limitations and petition for alternative compliance schedule) that cannot meet the applicable NO<sub>x</sub> RACT emission limitation may elect to meet the applicable NO<sub>x</sub> RACT emission limitation in § 129.97 by averaging NO<sub>x</sub> emissions on either a facility-wide or system-wide basis using a 30-day rolling average. System-wide emissions averaging must be among sources under common control of the same owner or operator within the same ozone nonattainment area in this Commonwealth.*

Compliance with the averaging provisions of the revised Pennsylvania NO<sub>x</sub> RACT regulation is determined as follows:

§129.98(e) *The owner or operator shall calculate the alternative facility-wide or system-wide NO<sub>x</sub> RACT emissions limitation using a 30-day rolling average for the air contamination sources included in the application for the operating permit modification or plan approval, if otherwise required, submitted under subsection (b) by using the following equation to sum the emissions for all of the sources included in the NO<sub>x</sub> emissions averaging plan:*

$$\left[ \sum_{i=1}^n E_{i_{actual}} \right] \leq \left[ \sum_{i=1}^n E_{i_{allowable}} \right]$$

*Where:*

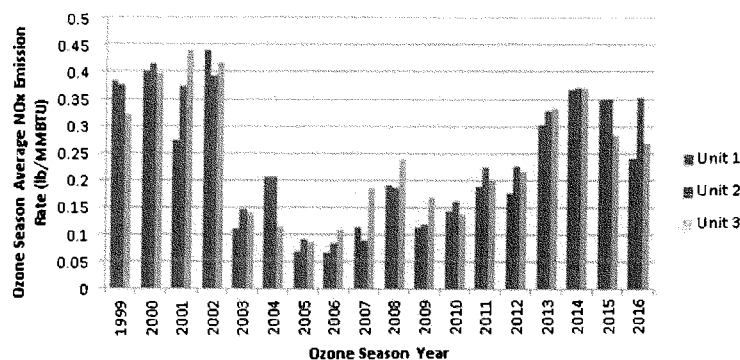
*E<sub>i<sub>actual</sub></sub>* = The actual NO<sub>x</sub> mass emissions, including emissions during start-ups, shutdowns and malfunctions, for air contamination source *i* on a 30-day rolling basis.

*E<sub>i<sub>allowable</sub></sub>* = The allowable NO<sub>x</sub> mass emissions computed using the allowable emission rate limitations for air contamination source *i* on a 30-day rolling basis specified in § 129.97. If an air contamination source included in an averaging plan is subject to a numerical emission rate limit that is more stringent than the applicable allowable emission rate limitation in § 129.97, then the numerical emission rate limit shall be used for the calculation of the allowable NO<sub>x</sub> mass emissions.

*n* = The number of air contamination sources included in the NO<sub>x</sub> emissions averaging plan.

Even though all three of the Homer City Generating Station coal-fired EGUs have been equipped with SCR NO<sub>x</sub> controls for a number of years, the units have been operated during recent ozone seasons with NO<sub>x</sub> emission rates reflective of coal-fired EGUs that do not incorporate SCR NO<sub>x</sub> controls. However, all three of the Homer City coal-fired EGUs have historically demonstrated the ability to operate with ozone season average NO<sub>x</sub> rates below 0.12 lb/MMBTU. The following graph shows the 2000 through 2015 ozone season average NO<sub>x</sub> emission rate values for the Homer City Generating Station coal-fired EGUs.

**Graph 2**  
**Homer City Generating Station Units 1, 2 and 3**  
**Ozone Season Average NOx Emission Rate**



As shown in the above graph, all three Homer City coal-fired EGUs demonstrated the ability to operate with ozone season NOx emission rate values under 0.12 lb/MMBTU. The lowest ozone season average NOx emission rate for Unit 1 of 0.0695 lb/MMBTU was recorded in 2006. The lowest ozone season average NOx emission rate for Unit 2 of 0.0826 was also recorded in 2006. The lowest ozone season average NOx emission rate for Unit 3 of 0.0872 was recorded in 2005. All of these low ozone season NOx rates were recorded several ozone seasons after the initial installation of the respective SCRs, and during the period when the units were subject to the EPA's NOx State Implementation Plan (SIP) Rule and the related NOx Budget Trading Program.

#### **Potential Impact of the Absence of Short Term NOx Emission Rate Averaging Times**

Pennsylvania's revised NOx RACT regulation established a presumptive NOx RACT rate of 0.12 lb/MMBTU for SCR-equipped coal-fired EGUs beginning in 2017. If all three of the Homer City Generating Station coal-fired EGUs (or the Homer City facility NOx emission rate average) met a 0.12 lb/MMBTU limit, and each operated at its maximum rated heat input, the daily NOx mass emissions from the Homer City Generating Station would not meet or exceed the 38.153 tons of NOx per day value (the value shown by STI modeling to have a significant impact on Delaware's ambient ozone on July 18, 2011). However, Pennsylvania's new RACT regulation permits compliance with the 0.12 lb/MMBTU NOx rate limit by averaging NOx emissions among units at a common facility on a 30-day rolling average compliance basis.

When taken in conjunction with Pennsylvania's NOx RACT regulations provisions under §129.98 which allows averaging of unit emissions at a common facility, it is possible that the Homer City Generation Station could emit NOx at rates well above 0.12 lb/MMBTU for one or more days and still maintain compliance with the 0.12 lb/MMBTU, 30-day rolling average. This could allow the Homer City Generating Station to emit NOx mass emissions in excess of 38.153 tons/day (the value shown by STI modeling to have a significant impact on Delaware's ambient ozone on July 18, 2011) and maintain compliance with the 0.12 lb/MMBTU, 30-day rolling average, NOx emission rate limit.

The following is an example of how the Homer City Generating Station could emit NOx at an average rate of 38.153 tons/day (the value shown by STI modeling to have a significant impact on Delaware's ambient ozone on July 18, 2011) for one day during an ozone season and remain in compliance with Pennsylvania's revised RACT regulation. The AMPD 2015 ozone season operating heat input data was selected to form the basis for this example, as it is anticipated that it would be most representative of Homer City Generating Station facility and unit operations in the near future. For the purposes of this example, it is assumed that the Homer City Generating Station owner/operator chooses to comply with the Pennsylvania NOx RACT limits using the facility average the provisions of the RACT regulation.

- As indicated in the AMPD for the 2015 ozone season, the highest heat input day was July 19. The AMPD indicated that on that day the Homer City Generating Station combusted 380,847 MMBTU.
- For July 18, 2015, assuming that the Homer City Generating Station emitted 38.153 tons of NOx (the value shown by STI modeling to have a significant impact on Delaware's ambient ozone on July 18, 2011) and combusted 380,847 MMBTU, the average daily NOx emission rate would be estimated to be 0.2004 lb/MMBTU.
- For the 2015 ozone season, the AMPD data indicated that the lowest 30-day total heat input was 6,575,991 MMBTU. The estimated NOx emissions that would have been emitted combusting 6,575,991 MMBTU at an average NOx emission rate of 0.12 lb/MMBTU is 394.6 tons. (This is the allowable NOx mass emissions for the 30-day average in accordance with the provisions of the Pennsylvania NOx RACT for compliance purposes.)
- The required Homer City Generating Station facility average NOx emission rate required to comply with the 0.12 lb/MMBTU 30-day average and accounting for the 38.153 ton/day of NOx mass emissions for one day is estimated to be:  

$$\frac{((394.6 \text{ tons} - 38.153 \text{ tons}) * 2000 \text{ lb/ton})}{(6,575,991 \text{ MMBTU} - 380,847 \text{ MMBTU})}$$

$$= 0.1148 \text{ lb/MMBTU}$$
- The estimated required average NOx emission rate of 0.1148 lb/MMBTU appears to be within the capabilities of all three of the Homer City Generating Station coal-fired EGUs, as shown by the historic average ozone season NOx emission rate data included in the above Graph 2.



The additional following example illustrates how the averaging provisions may also provide for compliance even when the Homer City Generating Station operated for a day with extraordinarily high NOx mass emissions. For this example it is assumed that a worst NOx mass emissions day would occur with all three Homer City Generating Station coal-fired EGUs operating for 24-hours at their AMPD listed maximum hourly heat input (shown in Table 7) at the highest average facility NOx emission rate that has been observed over the last few ozone seasons.

- The 24-hour heat input for all of the Homer City Generating Station coal-fired EGUs operating at their full heat input capacity is estimated as:  
 $(6792\text{MMBTU/hr} + 6792\text{MMBTU/hr} + 7260\text{MMBTU/hr}) * 24\text{hrs/day} = 500,256\text{ MMBTU}.$
- The highest average facility NOx emission rate for the Homer City facility over the last few seasons is 0.3285 lb/MMBTU, which occurred during the 2015 ozone season.
- Using the estimated maximum heat input and the 2015 ozone season average NOx emission rate, the estimated NOx mass emissions would be:  
 $500,256\text{MMBTU/day} * 0.3285\text{lb/MMBTU} = 82.167\text{ tons/day}.$
- The required Homer City Generating Station facility average NOx emission rate required to comply with the 0.12 lb/MMBTU 30-day average and accounting for the 82.167 ton/day of NOx mass emissions for one day is estimated to be:  

$$((394.6\text{ tons} - 82.167\text{ tons}) * 2000\text{ lb/ton}) / (6,575,991\text{ MMBTU} - 500,256\text{ MMBTU})$$

$$= 0.1028\text{ lb/MMBTU}$$
- The estimated required average NOx emission rate of 0.1028 lb/MMBTU appears to be within the capabilities of all three of the Homer City Generating Station coal-fired EGUs, as shown by the historic average ozone season NOx emission rate data included in the above Graph 2.

As discussed earlier in this petition and as shown in Graph 2, all three Homer City Generating Station coal-fired EGUs have historically demonstrated the ability to operate with ozone season average NOx emission rates well below 0.12 lb/MMBTU. These historic Homer City Generating Station ozone season average NOx emission rates demonstrate that the facility has the capability to operate for extended periods at the levels necessary to remain in compliance with the provisions of the Pennsylvania NOx RACT regulation in the event the facility incurred the NOx emission excursions discussed in the above two examples.

While the above two examples are theoretical, they represent realistic scenarios where the Homer City Generating Station could have daily NOx emissions at or above levels that have been shown by STI's modeling to significantly impact Delaware's ambient ozone while the facility remains in compliance with Pennsylvania's new RACT regulation, *Title 25. Environmental Protection/ Part I. Department of Environmental Protection/ Subpart C. Protection of Natural Resources, Article III Air Resources/ Chapter 129. Standards for Sources, Additional RACT Requirements for Major Sources of NOx and VOCs.*

Delaware does not agree that a 30-day averaging period, as provided for in Pennsylvania's revised NOx RACT regulation, is appropriate in conjunction with the 0.12 lb/MMBTU NOx rate limit. It is Delaware's opinion that the use of a 30-day rolling average for an emissions limitation is not protective of short term NAAQS such as the 2008 and 2015 8-hour ozone NAAQS, and can potentially have a negative impact on Delaware's ability to be in compliance with the short term air quality standards of the 2008 and 2015 8-hour ozone NAAQS.

**Short Term NOx Emission Limits Are Required To Assist in Reducing the Downwind Impact of Homer City Generating Station NOx Emissions**

The information discussed above indicates that currently applicable NOx emission rate limits and applicable EGU cap-and-trade NOx control programs, that were designed to limit annual and seasonal NOx emissions, have not served to limit the Homer City Generating Station's NOx emissions to levels such that those emissions do not significantly contribute to downwind exceedances of short term air quality standards, thereby imperiling the public health and welfare in downwind states. The modeling performed by STI supports this conclusion by quantifying the impact of the Homer City Generating Station's NOx emissions on ozone levels measured at Delaware's monitoring locations.

Pennsylvania has recently revised its NOx RACT regulation. In accordance with the provisions of the revised NOx RACT regulation, beginning in 2017, the Homer City Generating Station coal-fired EGUs will be subject to a NOx emission rate limit of 0.12 lb/MMBTU, and in accordance with provisions of the revised NOx RACT regulation may elect to comply with the limit by averaging the emissions of the three coal-fired EGUs at the facility and on a 30-day rolling average basis. However, as discussed earlier, the 30-day averaging provisions of the revised NOx RACT regulation do not ensure that the Homer City EGU facility will not emit NOx emissions that have been shown by STI modeling to significantly impact Delaware's ambient ozone while still remaining in compliance with applicable NOx emission limitations. Sufficiently stringent NOx emission rate limits based on shorter term averaging periods (such as 24-hour) are needed to help ensure that the Homer City Electric Generating Station does not significantly impact downwind jurisdictions' ability to comply with the 8-hour ozone NAAQS.

It is interesting to note that the NOx emissions rate limitations and EGU cap-and-trade NOx control programs applicable to the Homer City Generating Station resulted in the installation of SCR, the most effective commercially available NOx control technology, on the Homer City Generating Station's coal-fired EGUs. AMPD data indicates that after the installation of the SCRs, the Homer City Generating Station coal-fired EGUs demonstrated ozone season average NOx emission rates reflective of effective SCR operation. However, the AMPD also demonstrates that the Homer City Generating Station did not consistently operate the SCR controls during subsequent ozone seasons to attain similar average ozone season NOx emission

rates. Since the early years of installation of SCRs at the Homer City Generating Station, changing conditions in the power generation industry have resulted in conditions where NOx cap-and-trade compliance allowances are available at prices that make it uneconomic to operate existing NOx controls, such as Homer City Generating Station SCRs, for compliance with cap-and-trade NOx control programs. Additional regulatory incentive is required to ensure that the existing EGU NOx controls are consistently operated in accordance with good pollution control practices.

Delaware is concerned that the NOx mass emission limits associated with the CSAPR Update will be ineffective in properly protecting the public health and welfare in downwind states at all times with regards to the 8-hour ozone NAAQS. It is recognized that the provisions of the CSAPR Update provide for more restrictive annual and seasonal NOx mass emissions than previous rules, and that the CSAPR Update programs also provide significantly more restrictive allowance trading provisions than previous rules. However, the provisions of the CSAPR Update do not provide any limitations on the Homer City Generating Station's NOx mass emissions for any period shorter than seasonal (such as hourly or daily). The lack of sufficiently stringent short term NOx emission rates facilitates the continued operation of the Homer City Generating Station's coal-fired EGUs with inadequate NOx emission control and resulting high NOx emissions over short periods of time. The lack of sufficiently stringent short term emissions limitations will therefore help facilitate the Homer City Generating Station's NOx mass emissions at levels that will continue to support non-compliance with the 8-hour ozone NAAQS in Delaware, and thereby continue to impact the health and welfare of Delaware's citizens.

In order to be protective of short term air quality standards, such as the 8-hour ozone NAAQS, it is Delaware's opinion that it is necessary to establish emissions limits with appropriate magnitudes and averaging periods for the Homer City Generating Station that ensure that the NOx emissions are adequately controlled during any particular time period. It is Delaware's opinion that selection of a short term NOx emission rate limit averaging period of no greater than 24 hours is also appropriate to address the short term aspects of compliance with a short term NAAQS, such as the 8-hour ozone NAAQS.

#### **Requested EPA Action**

Even with extensive reduction of NOx emissions from EGU sources located in the state of Delaware, Delaware continues to experience exceedances of the 8-hour ozone NAAQS. Modeling conducted by the EPA indicates that emissions from EGUs in upwind states are major contributors to Delaware's ongoing 8-hour ozone NAAQS compliance issues. Modeling performed for Delaware by Sonoma technologies Inc, (STI) indicates that the

Homer City Generating Station, located in the upwind state of Pennsylvania, itself significantly impacts the level of ozone in Delaware's ambient air.

The Homer City Generating Station's impact on Delaware's 8-hour ozone NAAQS compliance has been shown to occur even though the Homer City Generating Station's coal-fired EGUs are equipped with some of the most effective NOx emission controls (SCR) and have been in compliance with their permit NOx emissions rate limits and applicable cap-and-trade NOx emission control programs. These permit NOx emission rate limits and long term (annual, seasonal) cap-and-trade NOx control programs have not provided the level of short term NOx emission limits necessary to be supportive of the short term, 8-hour ozone NAAQS. Because the CSAPR Update will continue to attempt to control NOx mass emissions on an annual and seasonal basis, these programs are also expected to permit an EGU facility such as the Homer City Generating Station to emit NOx at high levels over any given short term period while the subject EGU facility remains in overall compliance with the annual and seasonal programs.

The historic compliance flexibility provided to the Homer City Generating Station by applicable NOx cap-and-trade programs and relatively high, long term NOx emission rate limitations have permitted the Homer City Generating Station owner/operator to make decisions concerning whether to operate SCR controls or not for any given ozone season or part of an ozone season. The result of this compliance flexibility is evident in Graph 2, where it can be seen that during recent ozone seasons the Homer City Generating Station coal-fired EGUs have operated with average NOx emission rates representative of coal-fired EGUs that did not incorporate functioning SCR NOx controls.

Pennsylvania has recently revised its NOx RACT regulation, *Title 25. Environmental Protection/ Part I. Department of Environmental Protection/ Subpart C. Protection of Natural Resources, Article III Air Resources/ Chapter 129. Standards for Sources, Additional RACT Requirements for Major Sources of NOx and VOCs*. The revision to Pennsylvania's NOx RACT regulation will be effective beginning in 2017, and includes NOx emissions rate limits that will be applicable to the Homer City Generating Station coal-fired EGUs. This includes a NOx emission rate limit of 0.12 lb/MMBTU, provisions to allow averaging among all of the units at the facility, and provisions to have compliance based on a rolling 30-day average basis. As discussed earlier in this petition, the 30-day averaging provisions of the regulation give the Homer City Generating Station the ability to emit NOx at a level estimated by STI modeling to significantly impact Delaware's ambient ozone while remaining in compliance with the provisions of the revised Pennsylvania NOx RACT regulation.

In order to be protective of short term air quality standards, such as the 8-hour ozone NAAQS, it is Delaware's opinion that it will be necessary to establish NOx emissions limits with appropriate magnitudes and averaging periods that ensure that the NOx emissions are adequately controlled during any particular time period. Therefore, Delaware is hereby petitioning the EPA under section 126(b) of the Clean Air Act to find that the Homer City Generating Station, located in

Pennsylvania, emits air pollutants in violation of the prohibition of section 110(a)(2)(D)(i) of the Clean Air Act, and to require the Homer City Generating Station to limit short term NO<sub>x</sub> emissions to levels that are protective of the 8-hour ozone NAAQS in downwind areas such as Delaware.

#### References

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- 2) Approval and Promulgation of Air Quality Implementation Plans; Delaware; Section 110(a)(2) Infrastructure Requirements for the 1997 8-Hour Ozone and the 1997 and 2006 Fine Particulate Matter National Ambient Air Quality Standards, Federal Register /Vol. 76, No. 150 /Thursday, August 4, 2011 /Rules and Regulations, page 47069, <http://www.gpo.gov/fdsys/pkg/FR-2011-08-04/pdf/2011-19694.pdf#page=1>
- 3) Clean Air Act, Title I - Air Pollution Prevention and Control, Part A – Air Quality and Emissions Limitations, Section 126, <http://www.epa.gov/air/caa/title1.html>
- 4) Delaware Air Quality Monitoring Network, Reports, <http://apps.dnrec.delaware.gov/AirMonitoring/>
- 5) Revision to State Implementation Plan for Ozone, June 12, 2012, [http://www.dnrec.delaware.gov/dwhs/Info/Regs/Documents/DE\\_110a2\\_0075\\_proposed.pdf](http://www.dnrec.delaware.gov/dwhs/Info/Regs/Documents/DE_110a2_0075_proposed.pdf)
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- 9) Overview of the Ozone Transport Commission (OTC) NO<sub>x</sub> Budget Program, <http://www.epa.gov/airmarkets/progsregs/nox/otc-overview.html>
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- 11) Clean Air Interstate Rule (CAIR), <http://www.epa.gov/cair/>
- 12) Cross-State Air Pollution Rule (CSAPR), <http://www.epa.gov/crossstaterule/>
- 13) 40 CFR Parts 52, 78, and 97, Cross-State Air Pollution Rule Update for the 2008 Ozone NAAQS; Proposed Rules, Federal Register Vol. 80, No. 232, Thursday December 3, 2015, <https://www.gpo.gov/fdsys/pkg/FR-2015-12-03/pdf/2015-29796.pdf>
- 14) 40 CFR Parts 52, 78, and 97, Final Rule – Cross-State Air Pollution Rule Update for the 2008 Ozone NAAQS, <https://www3.epa.gov/airmarkets/CSAPRU/Cross-State%20Air%20Pollution%20Rule%20Update%20for%20the%202008%20Ozone%20NAAQS%202060%20AS05%20FRM.pdf>

- 15) United States Environmental Protection Agency's Air Markets Program Data (EPA's AMPD) – EGU emissions data extracted from the EPA's AMPD using various search criteria as required. <http://ampd.epa.gov/ampd/QueryToolie.html>
- 16) United States Environmental Protection Agency Cross-State Air Pollution Rule, Technical Information and Support Documents, Air Quality Modeling Final Rule TSD, Contributions of the 8-hour ozone and 24-hour PM2.5 from each state to each monitoring site, [http://www.epa.gov/crossstaterule/pdfs/CSAPR\\_Ozone%20and%20PM2.5\\_Contributions.xls](http://www.epa.gov/crossstaterule/pdfs/CSAPR_Ozone%20and%20PM2.5_Contributions.xls)
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- 19) U.S. Energy Information Administration, <http://www.eia.gov/electricity/data/detail-data.html>
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STATE OF DELAWARE  
DEPARTMENT OF NATURAL RESOURCES  
AND ENVIRONMENTAL CONTROL

OFFICE OF THE  
SECRETARY

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November 28, 2016

Ms. Gina McCarthy, Administrator  
United States Environmental Protection Agency  
Ariel Rios Building  
1200 Pennsylvania Avenue, N.W.  
Mail Code: 1101A  
Washington, DC 20460

Dear Administrator McCarthy:

By this letter, the State of Delaware hereby petitions the Administrator of the Environmental Protection Agency (EPA) under §126(b) of the Clean Air Act (CAA) to find that the Conemaugh Generating Station's electric generating units (EGUs), located in Indiana County, Pennsylvania, are emitting air pollutants in violation of the provisions of Section 110(a)(2)(D)(i) of the CAA with respect to the 2008 0.075 ppm ozone NAAQS and the 2015 8-hour 0.070 ppm ozone NAAQS.

Section 110(a)(2)(D)(i) prohibits any source or other type of emissions activity within a State, "from emitting any air pollutant in amounts which will contribute significantly to nonattainment in, or interfere with maintenance by, any other State with respect to any such national primary or secondary ambient air quality standard." Section 126(b) of the CAA provides that, "[a]ny State or political subdivision may petition the Administrator for a finding that any major source or group of stationary sources emits or would emit any air pollutant in violation of the prohibition of Section 110(a)(2)(D)(ii) or this section."

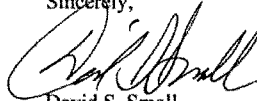
I am aware of EPA efforts that are underway to address transported emissions, to include the recent finalization of the update to the Cross State Air Pollution Rule (CSAPR), planned future efforts beyond the CSAPR Update Rule that will be necessary to fully address interstate transport for the 2008 ozone NAAQS and for the recent 2015 ozone NAAQS, and federal Tier 3 vehicle emissions and fuel standards measures to reduce NOx emissions. While helpful, these efforts are not adequate to mitigate the impacts of upwind emissions on Delaware's air quality and are tangent to the CAA Section 126 process. EPA has effectively closed the door to CAA tools designed to bring clean air to Delaware by establishing nonattainment area boundaries that

*Delaware's Good Nature depends on you!*

Ms. Gina McCarthy  
November 28, 2016  
Page Two

effectively penalize areas like Delaware rather than apply the CAA to the emissions that cause our unhealthy air, by failing to act on a CAA 176 petition in the timing mandated by the CAA, by extending CAA attainment timeframes rather than bumping up areas and promulgating required federal implementation plans. From a downwind perspective, EPA has lost sight of the CAA mandate that requires attainment "as expeditiously as practicable and no later than...." CAA Section 126(b) requires that within 60 days after receipt of any petition and after public hearing, the Administrator shall make such a finding or deny the petition. We look forward to working with you and your staff during this period in which you make your finding regarding this petition and take the required actions to protect the health and welfare of Delaware's citizens. Please do not hesitate to contact me if you have any questions or need additional information regarding this petition.

Sincerely,



David S. Small  
Secretary

CC: Jack Markell, Governor,  
State of Delaware

Ali Mirzakhali, Director  
Department of Natural Resources and Environmental Control

Administrator Shawn M. Garvin  
US EPA Region III Office

Krishnan Ramamurthy, Director  
Pennsylvania Department of Environmental Protection



**Attachment 1****Delaware CAA 126 Petition****Conemaugh Generating Station**

The State of Delaware submits this petition for a finding under §126(b) of the Clean Air Act that the Conemaugh Generating Station's electric generating units (EGUs), located in Indiana County, Pennsylvania, significantly contribute to Delaware's non-attainment of the 2008 8-hour ozone national ambient air quality standard (NAAQS) of 0.075 ppm and the latest 8-hour ozone NAAQS of 0.070 ppm adopted by the United States Environmental Protection Agency (EPA) on October 26, 2015. (1)

Delaware has complied with the requirements of §110(a)(2)(D)(i)(I) of the CAA by adopting in-state control measures for the prevention of emissions that would significantly contribute to non-attainment, or interfere with maintenance, of the ozone National Ambient Air Quality Standard (NAAQS) in a downwind area. (2) However, Delaware's ability to achieve and maintain health-based air quality standards for its own residents is severely impacted by sources outside of the state of Delaware. This is due to the fact that more than 94% of the ozone levels in Delaware are created by the transport of air pollutants from upwind areas. Attainment and maintenance of the 2008 and 2015 8-hour ozone NAAQSs in Delaware is possible only through additional emission reductions in the upwind states that significantly contribute to non-attainment and maintenance in Delaware.

Section 126(b) of the CAA provides that, "[a]ny State or political subdivision may petition the Administrator for a finding that any major source or group of stationary sources emits or would emit any air pollutant in violation of the prohibition of Section 110(a)(2)(D)(i) or this section." In accordance with §126(b) of the Clean Air Act, the state of Delaware petitions the Administrator of the EPA establish a timely schedule for the above-referenced Conemaugh Generating Station electric generating facility and the state of Pennsylvania to put those entities in compliance with §110(a)(2)(D)(i) of the Clean Air Act with respect to the 2008 8-hour 0.075 ppm ozone NAAQS and 2015 8-hour 0.070 ppm ozone NAAQS. (3)

**Background**

The EPA began to address air quality issues related to ambient ozone through establishment of a related National Ambient Air Quality Standard in 1971. In 1997 the EPA first established the 8-hour ozone NAAQS to protect human health and welfare at a level of 0.08 ppm. The EPA

subsequently lowered the 8-hour ozone NAAQS to 0.075 ppm in 2008. After further evaluation, the EPA further lowered the 8-hour ozone standard to 0.070 ppm on October 26, 2015. (1)

The establishment of the short term ozone standard (8-hour NAAQS) was necessary to address the potential health impact of short term exposure to high levels of ozone. Short term exposure to ozone can cause rapid, shallow breathing and related airway irritation, coughing, wheezing, shortness of breath, and exacerbation of asthma, particularly in sensitive individuals and asthmatic children. Short term exposure also suppresses the immune system, decreasing the effectiveness of bodily defenses against bacterial infections. Research studies indicate that markers of cell damage increase with ozone exposure. Some studies suggest that there is a link between ozone exposure and premature death of adults and infant death. Other studies indicate a link between ozone and premature birth and adverse birth outcome, cardiovascular defects, and adverse changes in lung structure development in children. Children, the elderly, those with chronic lung disease, and asthmatics are especially susceptible to the pulmonary effects of ozone exposure. Additionally, studies have shown that ozone can adversely affects trees and vegetation, can cause reduced crop yields, and can contribute to nitrification of bodies of water.

Atmospheric ground level ozone that is harmful to human health and welfare is formed primarily by the chemical reaction of nitrogen oxides (NO<sub>x</sub>) with volatile organic compounds (VOC's) in the presence of heat and sunlight. Dry, hot, sunny days are most conducive to the formation of ozone. Because ground level ozone concentrations are highest when sunlight is the most intense, in the eastern United States the warm summer months (May 1 through September 30) are referred to as the ozone season. Weather also affects ozone concentrations and how quickly it is transported and dispersed. Periods of light winds allow ozone and ozone precursor pollutants to build up in any particular area leading to greater concentrations. However, the wind can also be responsible for transporting the ozone and ozone precursors over long distances downwind. This downwind pollutant transport can then combine with more local emissions to contribute to exceeding the ozone NAAQS in any particular location.

Delaware has experienced a number of exceedances of the health based 8-hr ozone NAAQS. (4) The following table identifies the number of 8-hour ozone NAAQS exceedances experienced in Delaware during the ozone seasons for the years 2000 through 2016:

**Table 1**  
**Actual Delaware Ozone Exceedances – 8-Hour NAAQS**

	New Castle County - No. of Days of Exceedance	Kent County - No. of Days of Exceedance	Sussex County - No. of Days of Exceedance	Total No. of Days of Exceedance
2016 Ozone Season **	10	2	3	11
2015 Ozone Season **	2	0	0	2
2014 Ozone Season **	3	0	0	3
2013 Ozone Season **	1	0	1	2
2012 Ozone Season **	13	14	12	19
2011 Ozone Season **	11	3	6	15
2010 Ozone Season **	14	5	9	18
2009 Ozone Season **	3	0	0	3
2008 Ozone Season **	9	8	8	14
2007 Ozone Season ***	5	0	0	5
2006 Ozone Season ***	2	4	3	6
2005 Ozone Season ***	8	2	8	16
2004 Ozone Season ***	3	0	2	5

\* = 0.070 ppm Standard    \*\* = 0.075 ppm Standard    \*\*\* = 0.08 ppm Standard  
# = Preliminary Data

On October 1, 2015, the EPA strengthened the 8-hour ozone NAAQS to 70 ppb based upon scientific evidence of ground level ozone's negative effect on public health and welfare. Relative to the 2008 8-hour ozone standard, the updated 8-hour ozone NAAQS is expected to further improve public health protection, particularly for at-risk groups, and also improve the health of trees, plants, and ecosystem. If the 2015 8-hour ozone standard of 70 ppb had been in effect for the past several years, based upon monitoring data, it is estimated that Delaware would have experienced a higher number of 8-hour ozone exceedances compared to the actual exceedances of the 2008 8-hour ozone standard of 75 ppb. The following table provides a comparison of the actual 8-hour ozone NAAQS exceedances and the estimated exceedance that would have occurred if the 70 ppb standard had been in effect:

**Table 2**  
**Comparison of Actual vs Estimated Days of Ozone Exceedance**  
**2008 8-hour Ozone NAAQS vs 2015 8-hour Ozone NAAQS**

Ozone Season	Actual Number of Days of 75 ppb Ozone Standard Exceedance	Actual Number of Monitor-Days of 75 ppb Ozone Standard Exceedance	Estimated Number of Days of Ozone Standard Exceedance Assuming 70 ppb Standard	Estimated Number of Monitor-Days of Ozone Standard Exceedance Assuming 70 ppb Standard
2010	18	28	36	91
2011	15	20	25	73
2012	19	39	28	107
2013	2	2	6	7
2014	3	3	8	17
2015	2	2	10	16
2016	6	17	11*	34*

\*2015 8-hour ozone NAAQS limit of 70ppb in effect, actual exceedances shown (preliminary data)

It can be seen in the above table that if the more stringent 2015 8-hour ozone NAAQS of 70 ppb were in effect during the 2010 through 2015 ozone seasons that Delaware would have exceeded that standard at a much higher rate than it experienced under the 2008 8-hour ozone NAAQS of 75 ppb. As shown in the above table, for the 2010 through 2015 ozone season, the number of 8-hour ozone NAAQS exceedance day would increase from 59 days under the 2008 NAAQS to 113 days under the 2015 NAAQS.

As discussed earlier, NO<sub>x</sub> is a precursor pollutant to the formation of atmospheric ozone. NO<sub>x</sub> is a generic term for a group of reactive gasses that are composed of nitrogen and various amounts of oxygen (including nitrogen oxide and nitrogen dioxide). NO<sub>x</sub> is formed in the combustion process as a result of high temperature chemical reactions of the nitrogen contained in the fuel and the nitrogen contained in the ambient combustion air along with oxygen in the combustion air. Fossil fuel-fired electric generating units are some of the largest emitters of NO<sub>x</sub>, with EGUs powered by coal-fired steam generators without NO<sub>x</sub> emissions controls exhibiting some of the highest NO<sub>x</sub> emission rates (in terms of lb/MMBTU).

Uncontrolled, higher nitrogen content fuels, such as coal and residual fuel oil, tend to result in higher NO<sub>x</sub> emissions than lower nitrogen content fuels (such as natural gas). Various combustion configurations tend to result in varying NO<sub>x</sub> emission rates (in terms of pounds of NO<sub>x</sub> emitted per million BTU of fuel heat input (lb/MMBTU)) due to amounts of excess air required for combustion, rate of fuel combustion, combustor geometry, peak combustion temperatures, and duration of combustion gasses at peak temperatures, etc. Combustion controls, such as low NO<sub>x</sub> burners and overfire air, are commercially available NO<sub>x</sub> reduction technologies adaptable and applicable to most EGU combustion systems. Post combustion NO<sub>x</sub>

controls, such as selective non-catalytic reduction (SNCR) and selective catalytic reduction (SCR), are commercially available highly effective NO<sub>x</sub> reduction technologies that are applicable to most EGU exhaust gas streams. These NO<sub>x</sub> controls are generally available for both new EGU installations and for retrofit on existing EGUs. Utilization of combustion controls and post combustion controls, singly or layered together for a single EGU, can result in significant reductions in the EGUs NO<sub>x</sub> emissions rate, greater than 90% reduction from uncontrolled levels for some EGUs.

To address the NO<sub>x</sub> emissions from EGU sources located in the state of Delaware, Delaware has promulgated a number of rules and regulations that effectively control the NO<sub>x</sub> emissions from these EGUs which also fulfills Delaware's obligation under §110(a)(2)(D)(i)(I) of the Clean Air Act. These rules and regulations have been previously submitted to the EPA in Delaware's June 2007 and subsequent state implementation plan (SIP) revisions, including the June 2012 revision. (5) The referenced rules and regulations include the following:

- 7 DE Admin Code 1112, Control of Nitrogen Oxide Emissions, which set RACT-based NO<sub>x</sub> emission rate standards for major stationary sources, including EGUs. (6)
- 7 DE Admin Code 1146, Electric Generating Unit (EGU) Multi-Pollutant Regulation, which included short term NO<sub>x</sub> emission rate limits (lb/MMBTU on rolling 24-hour average) and annual NO<sub>x</sub> mass emissions caps for coal-fired and residual oil-fired EGUs. (7)
- 7 DE Admin Code 1148, Control of Stationary Combustion Turbine Electric Generating Unit Emissions, which set NO<sub>x</sub> emission rate limits or approved NO<sub>x</sub> control technology requirements (such as water injection) for combustion turbines with a nameplate rating of 1 MW or greater that had not previously controlled their NO<sub>x</sub> emissions rate in accordance with the NO<sub>x</sub> RACT requirements of 7 DE Admin Code 1112. (8)

In addition to the NO<sub>x</sub> control regulations noted above, Delaware has participated in regional and federal initiatives, where applicable, that were designed to limit the NO<sub>x</sub> emissions from EGU sources whose NO<sub>x</sub> emissions may impact compliance with ozone standards in downwind states. These regional and federal initiatives include the following:

- The Ozone Transport Commission (OTC) NO<sub>x</sub> Budget Program. (9) In 1990, the OTC was created by amendments to the Clean Air Act. The OTC consisted of northeast and mid-Atlantic states with persistent summertime ozone problems. These OTC states include Connecticut, Delaware, the District of Columbia, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont, and portions of Virginia. The OTC was tasked with advising the EPA on ozone transport issues and for helping to develop and implement regional solutions to ozone problem experienced by the member states. Recognizing that the interstate transport of pollutants to downwind states

contributed to summertime ozone problems in those downwind states, the OTC created and implemented its NOx Budget Program. The NOx Budget Program was a cap-and-trade program to limit the total regional emission of NOx from fossil-fueled electric generating units and large boilers located in OTC states, and became effective in 1999. Cap and trade programs effectively reduce the total amount of emissions, usually for a geographic area, by placing a cap on the total emissions occurring in that geographic area without setting unit by unit limits. For the OTC NOx Budget Program, affected states were allocated a NOx emissions cap for the subject NOx emitting sources in the respective state, and the subject units were required to hold and surrender a NOx allowance for each ton of NOx emitted in order to comply with program requirements. This program did not include any unit specific NOx emissions rate requirements. The OTC NOx Budget Program effectively ended when the EPA began administering the EPA's NOx Budget Trading Program.

- The EPA NOx State Implementation Plan (SIP) Rule. (10) In 2003 the EPA implemented its NOx State Implementation Plan (SIP) Rule utilizing the NOx Budget Trading Program, a NOx emissions cap and trade program similar to that used for the OTC NOx Budget Program. Relative to the OTC NOx Budget Program, the EPA's NOx Budget Trading Program was expanded to include additional states (for a total of 20 states and also the District of Columbia) and established more stringent NOx emissions allowance allocations. The EPA's NOx State Implementation Plan (SIP) Rule was intended to reduce the regional transport of ozone and ozone-forming pollutants in the Eastern United States. The NOx State Implementation Plan (SIP) Rule was in place until 2009, when it was replaced by the EPA's Clean Air Interstate Rule (CAIR).
- The EPA Clean Air Interstate Rule (CAIR). (11) In 2005, the EPA promulgated its CAIR program that required states to reduce the emissions of SO2 and NOx to help meet health based air quality standards for fine particulate matter and ozone. The EPA indicated in the proposal for the CAIR that NOx and SO2 emissions in 23 states and the District of Columbia contributed to unhealthy levels of fine particulate matter in downwind states, and that the NOx emissions from 25 states and the District of Columbia contributed to unhealthy levels of 8-hour ozone in downwind states. EPA indicated that the reduction of SO2 and NOx emissions from EGUs would serve to reduce the interstate transport of pollutants related to these emissions. CAIR established a cap-and-trade program covering EGUs to limit the emissions of SO2 and NOx from these sources as an option for compliance with the reduction requirements. (All states subject to the CAIR selected this compliance option.) SO2 and NOx emissions mass caps were established for individual states and allowances were issued by the EPA to cover those allowable emissions from subject sources. The cap-and-trade program was intended by the EPA to provide subject sources flexibility in meeting the mass emissions limitations through the installation of controls, fuel switching, or trading/purchase of excess allowances from other subject sources. The NOx

emissions limitations of CAIR became effective in 2009, and the SO<sub>2</sub> emissions limitation of CAIR became effective in 2010. The EPA made a number of changes to the CAIR subsequent to its original proposal, the most notable was the establishment of a process to provide for EPA to establish CAIR Federal Implementation Plans (FIPS) for states that failed to timely establish state plans for the implementation of CAIR. This ensured that the controls of the cap-and-trade program were uniformly established in all subject states on a timely basis.

- The EPA Cross-State Air Pollution Rule (CSAPR). *(12)* Subsequent to the promulgation of CAIR, legal actions lead the US Court of Appeals for the DC Circuit to make the decision in 2008 to remand the CAIR back to the EPA to make the rule more consistent with the requirements of the Clean Air Act. However, the courts left the requirements of CAIR in place until the EPA finalized a replacement rule. In response, the EPA promulgated its Cross-State Air Pollution Rule (CSAPR) in 2011. Additionally, in conjunction with the rule the EPA established federal implementation plans (FIPS) for each state subject to the CSAPR in order to implement the rule as rapidly as possible. In the rulemaking process the EPA identified for subject states what portions of each state's emissions significantly contributed to ozone or PM<sub>2.5</sub> pollution in downwind states. The CSAPR established mass emissions limitations of SO<sub>2</sub> and NO<sub>x</sub> from power plants in subject states to eliminate the portion of those emissions that are significant contributions to non-attainment or maintenance of fine particulate matter and ozone air quality standards in downwind states. The CSAPR established annual mass emissions limitations for SO<sub>2</sub> and NO<sub>x</sub> and additional ozone season NO<sub>x</sub> mass emissions limitations for NO<sub>x</sub>. Between the original CSAPR and subsequent actions, there were 26 states subject to the ozone season NO<sub>x</sub> mass emissions limitations to address the 1997 Ozone NAAQS, 18 states were subject to annual SO<sub>2</sub> and NO<sub>x</sub> mass emissions limitations of the rule to address the 1997 Annual PM<sub>2.5</sub> NAAQS, and 21 states were subject to annual SO<sub>2</sub> and NO<sub>x</sub> mass emissions limitations to address the 2006 24-hr PM<sub>2.5</sub> NAAQS (a combined total of 23 states for addressing the two PM<sub>2.5</sub> NAAQS). Relative to previous mass-based emissions rules, the CSAPR significantly restricted the trading of allowances that could be utilized for compliance purposes by establishing state variability limits that ensure that a state's actual mass emissions would fulfill its Clean Air Act "good neighbor" obligations. The EPA determined that Delaware was not required to participate in CSAPR.
- In 2012 the CSAPR was challenged in court, and the US Court of Appeals for the DC Circuit vacated the CSAPR and the implementing FIPs. The Court remanded the rule to the EPA to address the Courts findings, and directed the EPA to continue administering CAIR pending the promulgation of a valid rule to replace CAIR. As of this ruling, CAIR cap-and-trade programs for annual SO<sub>2</sub>, annual NO<sub>x</sub>, and ozone season NO<sub>x</sub> remained in place. *(12)*

- In April of 2014 the US Supreme Court reversed the DC Circuit court's opinion vacating CSAPR. In June of 2014 the EPA filed a motion with the U.S. Court of Appeals for the DC Circuit to lift the stay of the CSAPR, and in October of 2014 the Court of Appeals for the DC Circuit granted the EPA's motion. In November of 2014 the EPA issued a ministerial rule that aligned the dates in the CSAPR rule text with the revised court-ordered schedule, including 2015 Phase 1 CSAPR implementation and 2017 Phase 2 CSAPR implementation. *(12)*
- In November of 2015 the EPA proposed an update to the CSAPR by issuing the proposed CSAPR Update Rule. *(13)* Starting in 2017, this proposal would reduce summertime nitrogen oxides (NO<sub>x</sub>) emissions from power plants in 23 eastern states, by establishing NO<sub>x</sub> mass emission caps, in order to reduce the impact of those power plant emissions on downwind states. In its proposal, the EPA has requested comments regarding the potential application of short term NO<sub>x</sub> emission limits on these same power plants. The EPA determined that Delaware was not required to participate in the CSAPR Update.
- On September 7 of 2016 the EPA finalized the update to the CSAPR by issuing the Cross-State Air Pollution Rule Update for the 2008 Ozone NAAQS, Final Rule. *(14)* The CSAPR Update Rule addresses the ozone season (May – September) transport of ozone pollution in the eastern United States that crosses state lines to help downwind states and communities meet and maintain the 2008 ozone national ambient air quality standard (NAAQS). Starting in May 2017, this final rule puts in place NO<sub>x</sub> emissions caps that will provide additional reductions of ozone season NO<sub>x</sub> emissions from power plants in 22 states in the eastern United States.

These State and regional NO<sub>x</sub> reduction efforts have resulted in significant NO<sub>x</sub> emissions reductions from EGUs located in the state of Delaware. These reductions have occurred both in terms of ozone season NO<sub>x</sub> mass emissions (tons) and also in average ozone season NO<sub>x</sub> emissions rates (lb/MMBTU). The following table was assembled with data extracted from the United States Environmental Protection Agency's Air Markets Program Data (EPA's AMPD). *(15)* The table shows the ozone season NO<sub>x</sub> mass emissions (tons) and average NO<sub>x</sub> emissions rate (lb/MMBTU) for the EGU fleet located in the state of Delaware:



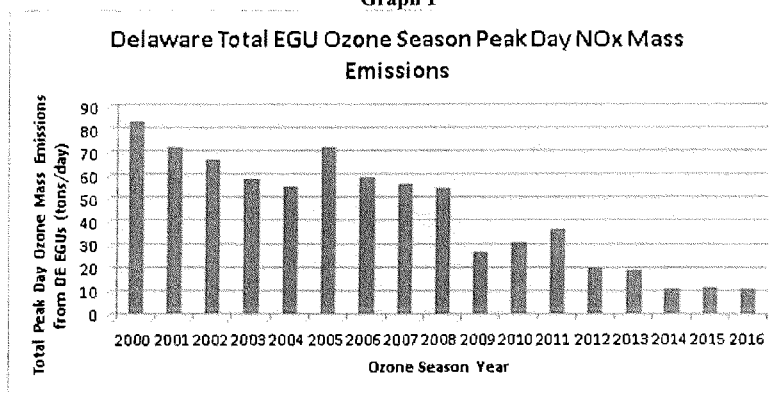
**Table 3**  
**2000 – 2016 Ozone Seasons**  
**State of Delaware**  
**Total EGU NOx Mass Emissions and Average NOx Emission Rate**

Ozone Season	Total EGU OS NOx (tons)	Change in NOx Mass Emissions from 2000 (%)	Average NOx Emissions Rate (lb/MMBTU)	Change in Average NOx Emission Rate (%)
2000	4137	0.0	0.2784	0.0
2001	4777	15.5	0.2806	0.8
2002	4609	11.4	0.2415	-13.3
2003	3850	-6.9	0.2374	-14.7
2004	3659	-11.6	0.2449	-12.0
2005	5175	25.1	0.2818	1.2
2006	3567	-13.8	0.2582	-7.3
2007	4179	1.0	0.2398	-13.9
2008	3190	-22.9	0.2277	-18.2
2009	1280	-69.1	0.1695	-39.1
2010	2265	-45.3	0.1484	-46.7
2011	1879	-54.6	0.1250	-55.1
2012	1054	-74.5	0.0585	-79.0
2013	879	-78.7	0.0589	-78.9
2014	668	-83.9	0.0483	-82.7
2015	635	-84.6	0.0480	-82.8
2016*	613	-85.2	0.0396	-85.8

\* Preliminary AMPD Data

However, relatively long term NOx mass emission caps (such as annual or seasonal caps) have limited impact on the short term NOx emissions (such a 24-hour period) from EGUs that have a more direct impact on compliance with short term air quality standards, such as the 8-hour ozone NAAQS. To address this issue, Delaware's air quality regulations have included short term NOx emission rate limits (with 24-hour averaging periods) that are protective of the short term ozone NAAQS. These short term NOx emission rate limits have helped Delaware achieve significant reductions in ozone season peak daily NOx mass emissions from Delaware's EGUs.

Graph 1



It can be seen in the above Graph 1 that between the 2000 and 2016 ozone seasons, the Delaware's EGUs have achieved a NOx mass emissions reduction (for ozone season peak NOx mass emissions days) in excess of 80% reduction. This reduction in peak ozone season day NOx mass emissions provides benefit in attaining compliance with the 8-hour ozone NAAQS for both Delaware's citizens and downwind populations.

Even though Delaware has significantly reduced the NOx emissions from EGUs located in Delaware, as discussed above, Delaware continues to experience exceedances of the 8-hour ozone NAAQS. Pollutants transported from facilities in upwind states are significant contributors to Delaware's continuing issues in meeting the 8-hour ozone NAAQS.

#### **Modeling Identifies Impact of Upwind NOx Emissions Impacting Delaware's 8-hour Ozone NAAQS Compliance**

The US EPA performed modeling as part of the development of its Cross-State Air Pollution Rule in order to help determine the impact of transported pollutants on downwind states and those states' ability to attain and maintain the then current 2008 ozone NAAQS of 75ppb. Some results of the modeling that identify state contributions to ozone at individual monitoring locations can be found on the spreadsheet titled "Contributions of 8-hour ozone, annual PM2.5, and 24-hour PM2.5 from each state to each monitoring site" located in the "Technical Information and Support Documents" section of the US EPA's Cross-State Air Pollution Rule (CSAPR) website. (16)

The US EPA's modeling identified 13 individual states (in addition to Delaware itself) whose NOx emissions significantly impact the ability of Delaware to attain and maintain the then current 8-hr ozone standard of 75 ppb. (17) (A state significantly impacts another state if it impacts that state's air quality by 1% or more of the applicable air quality standard. For the then current 8-hr ozone standard of 75 ppb, a significant contribution was 0.75 ppb or greater.) The states identified by the US EPA as significantly impacting Delaware's air quality, and the modeling results quantifying each state's impact, are shown in the following table:

**Table 4**  
**States Significantly Impacting Compliance with the 8-hour**  
**Ozone Standard in Delaware and the Magnitude of that Impact**

State	Maximum Contribution (ppb)
CT	1.008
DE	6.256
IL	1.445
IN	1.737
KY	3.208
MD	23.951
MI	2.207
NJ	13.034
NY	9.092
OH	3.987
PA	13.344
TN	1.932
VA	6.039
WV	3.142

The EPA's modeling results, summarized in the above table, indicate that four states (Maryland, New Jersey, New York, and Pennsylvania) have greater impact on compliance of the 8-hour ozone standard in Delaware than the impact of Delaware itself. The EPA's modeling results summarized in the above table also indicate that three states (Kentucky, Ohio, and West Virginia) individually have an impact on compliance of the 8-hour ozone standard in Delaware of 50% of the impact that Delaware impacts itself. These modeling results tend to confirm that pollutant transport is a significant issue for the state of Delaware, and they also help explain Delaware's ongoing difficulties with the 8-hour ozone standard despite the significant actions Delaware has implemented to reduce NOx and VOC emissions in Delaware.

**Pennsylvania's Conemaugh Generating Station's Impact on Delaware's 8-hour Ozone NAAQS Compliance**

As noted in Table 4 above, the EPA's modeling indicated that the state of Pennsylvania significantly impacts Delaware's compliance with the 8-hour ozone NAAQS. Because of the magnitude of Pennsylvania's impact on Delaware's compliance with the 8-hour ozone standard, and the potential contribution to this impact by EGUs located in Pennsylvania, further modeling was performed to determine if individual Pennsylvania EGU facilities individually have a significant impact on Delaware's compliance with the 8-hour ozone standard.

In order to help Delaware assess the impact of upwind EGU facility NO<sub>x</sub> emissions on Delaware's 8-hour average ozone exceedances in 2011, Sonoma Technologies Inc. (STI) conducted air quality modeling using the Comprehensive Air Quality Model with extensions (CAMx) Ozone Source Apportionment Technology (OSAT) (18). The 2011 ozone season modeling was performed to determine 8-hour average ozone apportionments from individual upwind EGU facilities and upwind groups of EGU facilities. The modeling identified that a number of EGU facilities located in the state of Pennsylvania individually had significantly impacted Delaware's compliance with the 8-hour ozone NAAQS during the 2011 ozone season. The identified EGU facilities significantly impacting Delaware's ambient air quality included Pennsylvania's Conemaugh Generating Station.

Because of the magnitude of its impact on Delaware's ambient ozone, the Conemaugh Generating Station is being individually addressed in this petition for a finding under §126(b) of the Clean Air Act.

The STI modeling results indicated that the Conemaugh Generating Station, located in Indiana County, Pennsylvania, emitted NO<sub>x</sub> on a number of days during the 2011 ozone season such that the magnitude of the emissions had a significant impact on Delaware's ambient air quality. The following table shows the 2011 ozone season days that the STI modeling determined that the Conemaugh Generating Station's NO<sub>x</sub> emissions had a significant impact on Delaware's ambient ozone:

**Table 5**  
**Conemaugh Generating Station**  
**STI Modeling Calculated Impact on Delaware Air Monitors**  
**2011 Ozone Season**

Date	Conemaugh Facility Daily NOx Mass Emissions - AMPD (tons)	STI Modeling Estimated Daily Highest Impact On DE Ozone Monitors (ppb)	Actual 2008 8-Hour Ozone NAAQS Exceedance Day In Delaware
June 8, 2011	62.78	1.91	Yes
June 9, 2011	59.788	1.28	Yes
June 18, 2011	54.516	0.86	
July 6, 2011	66.353	0.80	
July 7, 2011	67.173	1.03	Yes
July 12, 2011	64.875	0.94	Yes
July 18, 2011	62.926	2.02	Yes
July 22, 2011	56.973	0.77	Yes
July 23, 2011	61.212	2.10	Yes
July 29, 2011	63.235	1.02	Yes

As shown in the above Table 5, the STI modeling calculated that during the 2011 ozone season the Conemaugh Generating Station's NOx emissions had a significant impact on Delaware's ambient ozone on 10 separate days relative to both the 2008 8-hour ozone NAAQS of 0.075 ppm and 2015 8-hour ozone NAAQS of 0.070 ppm.

The above Table 5 also shows that of the 10 days of the 2011 ozone season that the STI modeling showed that the Conemaugh Generating Station significantly impacted Delaware's ambient ozone, 8 of the 10 days coincided with actual ozone exceedances as measured by Delaware's ambient ozone monitors.

However, emissions and meteorological data related to the dates shown in Table 5, where Conemaugh Generating Station NOx emissions were shown by STI modeling to significantly impact Delaware's 8-hour average ambient ozone, indicates that NOx emissions over periods shorter than 24-hours are directly related to the significant downwind ozone impact.

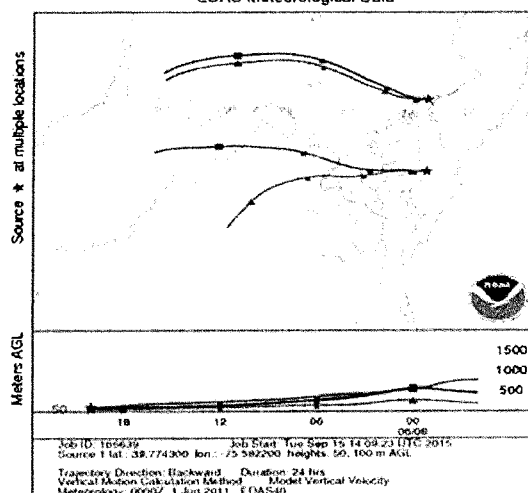
As an example, for June 8 and 9, 2011, the STI modeling showed that the Conemaugh Generating Station's NOx emissions had a significant impact on Delaware's ambient ozone. As indicated in the following table, the Conemaugh emissions contributed 1.91 ppb ozone for a peak 8-hour concentration beginning at 1100 hours on June 8, 2011, and contributed 1.28 ppb ozone for a peak 8-hour concentration beginning at 1100 hours on June 9, 2011.

**Table 6**  
**Conemaugh Generating Station**  
**STI Modeling Calculated Impact on Delaware Air Monitors**  
**June 8 and 9, 2011**

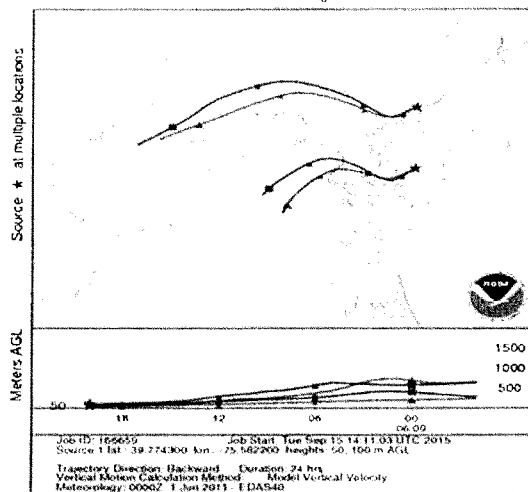
Monitoring Station															Date				Source					Modeled Apportionment
AQS Site ID		State	County	Local Site Name	Designated Area or CESA	Year	Month	Day	Starting Hour of Peak 8-hour Total Concentration EDT (hh:mm:ss)	Tag Name	FIPS	State	Plant Name	Notes	8-hour Ave O3 (ppb)									
1E+08 DE			New Castle	LUMS_POI	Philadelphia-Car	2011	6	8	110000	05	42063	PA	Conemaugh		1.94									
1E+08 DE			New Castle	BRANDYVA	Philadelphia-Car	2011	6	9	110000	05	42063	PA	Conemaugh		1.28									

In order to estimate the timing relationship between the Conemaugh Generating Station's NOx emissions and the STI modeled significant impact on Delaware's ambient ozone on June 8 and 9, 2011, NOAA Hysplit Models were run utilizing the meteorological data for those dates. Figure 1 below shows the graphical Hysplit model output for June 8, 2011 and Figure 2 below shows the graphical Hysplit model output for June 9, 2011.

**Figure 1**  
**NOAA HYSPLIT MODEL**  
**Backward trajectories ending at 2000 UTC 08 Jun 11**  
**EDAS Meteorological Data**



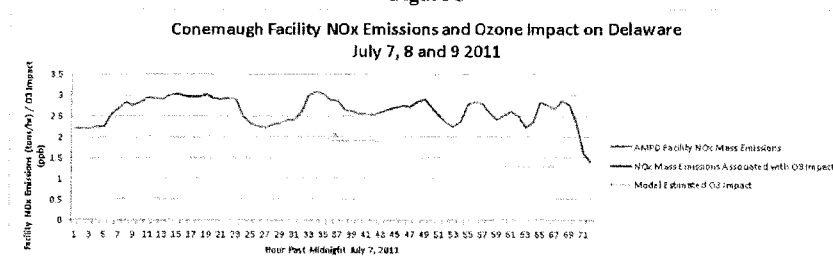
**Figure 2**  
 NOAA HYSPLIT MODEL  
 Backward trajectories ending at 2000 UTC 09 Jun 11  
 EDAS Meteorological Data



It can be seen in Figure 1 above that on June 8, 2011 there was an approximate 21-hour path from the Conemaugh Generating Station location (Long 79.0611) to the STI model's impacted Delaware ozone monitor. It can be seen in Figure 2 that on June 9, 2011 there was an approximate 16-hour path from the Conemaugh Generating Station location (Long 79.0611) to the STI model's impacted Delaware ozone monitor. Using these time delays and the STI model output's estimated start of the individual 8-hour ozone impact events, AMPD data was collected to show the Conemaugh Generating Station's facility NO<sub>x</sub> emissions that coincided with the STI model's calculated ozone impact events.

The following graph shows the Conemaugh facility's NO<sub>x</sub> mass emissions during the time period leading up to the STI model's estimated ozone impact events on June 8 and June 9, 2011. The blue line on the chart is the hourly Conemaugh Electric Generating Station's total facility NO<sub>x</sub> mass emissions as recorded in the AMPD. The red portions of the same line represent the hourly NO<sub>x</sub> mass emissions estimated to coincide with the travel path duration of the NO<sub>x</sub> emissions related to the 8-hour ozone impacts that are shown in the green line segments.

Figure 3



It can be seen in above Figure 3 that even on consecutive days there is a variation in the relationship in the timing of the Conemaugh Generating Station's NOx emissions and their model estimated variable impact on downwind ambient ozone in Delaware.

Other 2011 ozone season Conemaugh Generating Station NOx emissions data and meteorological information further demonstrates the variability of the Conemaugh Generating Station NOx emissions on Delaware's ambient ozone. On July 12, 2011, the STI modeling showed that the Conemaugh Generating Station's NOx emissions had a significant impact on Delaware's ambient ozone. As indicated in the following table, the Conemaugh emissions contributed 0.81 ppb ozone for a peak 8-hour concentration beginning at 1200 hours on July 12, 2011, and contributed 0.94 ppb ozone for a peak 8-hour concentration beginning at 1300 hours on July 12, 2011.

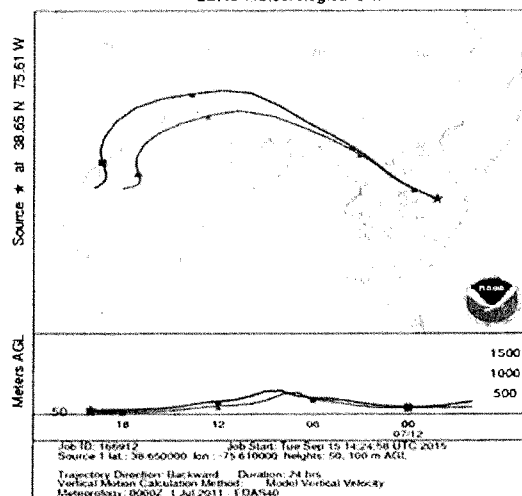
**Table 7**  
**Conemaugh Generating Station**  
**STI Modeling Calculated Impact on Delaware Air Monitors**  
**July 12, 2011**

Monitoring Station					Date			Source					Modeled Apportionment	
AQS Site ID		State	County	Local Site Name	Designated Nonattainment Area or CBSA	Year	Month	Day	Starting Hour of Peak 8-hour Total Concentration (hhmmss)	Tag Name	FIPS State	Plant Name	Notes	8-hour Ave O3 (ppb)
1E+08 DE		Kent		STATE_RO	Dover, DE	2011	7	12	120000	15	42063 PA	Conemaugh		0.81
1E+08 DE		Sussex		350_VIRG	Seaford, DE	2011	7	12	130000	15	42063 PA	Conemaugh		0.94

In order to estimate the timing relationship between the Conemaugh Generating Station's NOx emissions and the STI modeled significant impact on Delaware's ambient ozone on July 12, 2011, NOAA Hysplit Models were run utilizing the meteorological data for that date. Figure 4 below shows the graphical Hysplit model output for July 12, 2011.

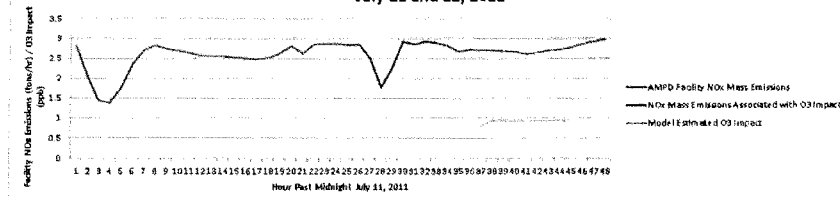


**Figure 4**  
NOAA HYSPLIT MODEL  
Backward trajectories ending at 2000 UTC 12 Jul 11  
EDAS Meteorological Data



It can be seen in Figure 4 above that on July 12, 2011 there was an approximate 12-hour path from the Conemaugh Generating Station location (Long 79.0611) to the STI model's impacted Delaware ozone monitor. Using this time delay and the STI model output's estimated start of the individual 8-hour ozone impact events, AMPD data was collected to show the Conemaugh Generating Station's facility NO<sub>x</sub> emissions that coincided with the STI model's estimated ozone impact events. This information is shown below in Figure 5.

**Figure 5**  
Conemaugh Facility NO<sub>x</sub> Emissions and Ozone Impact on Delaware  
July 11 and 12, 2011



In comparing the information in Figures 3 and 5, it can be seen that there is a varying relationship between the timing and magnitude of the Conemaugh Generating Station's NOx emissions and its estimated impact on Delaware's ambient ozone. Many variables impact this relationship, including wind speed, ambient temperature, humidity, intensity of sunlight, availability of other pollutants that contribute to ozone formation, etc. These factors are generally outside the control of the upwind emitting facility, and to a certain extent outside the ability to accurately predict the emissions' potential impact ahead of time. Because of this, the emissions from the Conemaugh Generating Station may significantly impact Delaware's ambient ozone on any particular ozone season day and only control of those emissions below significant impact threshold levels can ensure that Delaware's ambient ozone is not significantly impacted on any given ozone season day.

#### Conemaugh Generating Station

The Conemaugh Generating Station is located near New Florence, in Indiana County, Pennsylvania. The Energy Information Administration (EIA) database indicates that the Conemaugh Generating Station includes two coal fired steam electric generating units. (19) The following table provides some technical information regarding the Conemaugh Generating Station's coal-fired electric generating units:

**Table 8**  
**Conemaugh Generating Station's Electric Generating Units**

	EIA Nameplate Rating (MW)	AMPD Heat Input Rating (MMBTU/hr)	Commercial Operation Year	AMPD NOx Controls
Unit 1	936	9100	1970	LNB, CC/SOFA, SCR (SCR added 11/2014)
Unit 2	936	8985	1971	LNB, CC/SOFA, SCR (SCR added 11/2014)

The Conemaugh Generating Station Units 1 and 2 incorporate supercritical Combustion Engineering tangential steam generators. Both of the Conemaugh Generating Station steam generators fire bituminous coal as their primary fuel, with EIA information indicating that the bituminous coal fuel is sourced primarily from Pennsylvania mines. As noted in the above table, SCR NOx controls were added to the two Conemaugh coal-fired steam generators in late 2014.

EIA information indicates that the Conemaugh Generating Station is operated by GenOn Northeast Management Company, which merged with NRG in 2012. The Conemaugh Generating Station operates as an independent power producer and provides capacity, energy, and energy related services to the PJM regional transmission organization (RTO).

### Conemaugh Generating Station NOx Emissions Limitations and Performance

As noted in Table 8 above, the Conemaugh Generating Station Units 1 and 2 are currently equipped with low NOx burners (LNBs), close-coupled and separated overfire air (CC/SOFA), and selective catalytic reduction systems (SCR) for control of NOx emissions. The LNBs and CC/SOFA NOx combustion controls were installed on the Conemaugh Generating Station EGUs in the mid-1990s for compliance with the state of Pennsylvania's NOx RACT requirements. In accordance with Pennsylvania's previous NOx RACT requirements (see discussion of Pennsylvania's 2016 revision to its NOx RACT regulation requirement below), the Conemaugh Generating Station EGU's were subject to NOx emission rate limits of 0.45 lb/MMBTU, on a 30-day rolling average. AMPD data indicates that the Conemaugh Generating Station coal-fired EGUs have consistently been in compliance with these NOx RACT limits.

Also as indicated in Table 8 above, the Conemaugh Generating Station Units 1 and 2 are both equipped with SCR for control of NOx emissions. AMPD data indicates that the SCRs for both Conemaugh Generating Station coal-fired EGUs were installed in November, 2014. The following table consists of AMPD data that shows the ozone season average NOx emissions rate for the Conemaugh Generating Station before and after the installation of the SCRs on the Conemaugh electric generating units after the 2014 ozone season.

**Table 9**  
**Conemaugh Generating Station NOx Emissions**  
**2011 – 2016 Ozone Seasons**

Ozone Season Year	Ozone Season Average NOx Rate (lb/MMBTU)	Highest Daily NOx Mass Emissions (tons/day)	Highest Hourly NOx Mass Emissions (lb/hr)
2011	0.3313	67.908	8061.8
2012	0.3113	62.211	5835.6
2013	0.3228	63.056	5963.3
2014	0.3211	72.946	6906.1
2015	0.1935	41.354	6313.4
2016*	0.1402	32.837	5171.7

\*Preliminary Data for 2016

It can be seen in the above Table 9, that while subsequent to the late 2014 installation of the Conemaugh generating unit SCRs there has been a significant reduction in ozone season average NOx emissions rate, the highest ozone season hourly NOx mass emissions remain relatively high after installation of the generating unit SCRs. In fact, the Conemaugh Generating Station's

ozone season peak hourly NO<sub>x</sub> mass emissions after SCR installation (5171.7 lb/hr in 2016) falls within the range of NO<sub>x</sub> mass emissions shown by STI modeling to have significant impact on Delaware's ambient ozone, as shown in the following table:

**Table 10**  
**Conemaugh Generating Station NO<sub>x</sub> Emissions and STI Modeled Impact**  
**Associated with Delaware 2011 8-hr Ozone NAAQS Exceedance**

Date of Delaware 8-hour Ozone NAAQS Exceedance	STI Model Peak Ozone Impact (ppb)	Range of Hourly NO <sub>x</sub> Mass Emissions Estimated to be Associated with Ozone Exceedance (tons/hr)
June 8, 2011	1.91	5818.7 - 6083.5
June 9, 2011	1.28	5008.4 - 5792.3
July 12, 2011	0.94	3540.9 - 5839.8
July 22, 2011	0.77	4847.0 - 5451.2

Pennsylvania has recently finalized a revision to its NO<sub>x</sub> RACT regulation, *Title 25. Environmental Protection/ Part I. Department of Environmental Protection/ Subpart C. Protection of Natural Resources, Article III Air Resources/ Chapter 129. Standards for Sources, Additional RACT Requirements for Major Sources of NO<sub>x</sub> and VOCs. (20)* The revisions to Pennsylvania's NO<sub>x</sub> RACT regulation become effective in 2017. The revision to Pennsylvania's NO<sub>x</sub> RACT regulation revises the NO<sub>x</sub> RACT provisions that are applicable to the Conemaugh Generating Station Units 1 and 2.

The steam generators associated with the Conemaugh Generating Station Units 1 and 2 are both coal-fueled, tangential-furnace configuration combustion units with heat input ratings of greater than 250 MMBTU/hr and are both equipped with SCR NO<sub>x</sub> emission controls. In accordance with the requirements of §129.97 of the revised Pennsylvania NO<sub>x</sub> RACT regulation, the presumptive NO<sub>x</sub> RACT emission rate limitation for the Conemaugh Generating Station's coal-fired EGUs, with a SCR system flue gas inlet temperature equal to or greater than 600°F, is 0.12 lb/MMBTU, and compliance with this limit is also required in the event of SCR system by-pass, as follows:

*§129.97(g)(viii) For a coal-fired combustion unit with a selective catalytic reduction system operating with an inlet temperature equal to or greater than 600°F, 0.12 lb NO<sub>x</sub>/million Btu heat input. Compliance with this emission limit is also required when by-passing the selective catalytic reduction system.*

In accordance with §129.100 of the revised Pennsylvania NO<sub>x</sub> RACT regulation, compliance with the revised regulation's emission rate limit provisions of §129.97(g)(viii) are on a rolling 30-day average.

Additionally, under §129.98 of the revised Pennsylvania NO<sub>x</sub> RACT regulation, the owner or operator of a major NO<sub>x</sub> emitting facility subject to the regulation with at least one air contamination source subject to a NO<sub>x</sub> RACT emission limitation in §129.97 of the regulation that can not meet the applicable limitation may elect to meet the limitation by averaging NO<sub>x</sub> emissions on either a facility-wide or system wide basis using a 30-day rolling average. The regulation requires that system-wide averaging must be among sources under the common control of the same owner or operator within the same ozone non-attainment area of Pennsylvania.

*§129.98(a) The owner or operator of a major NO<sub>x</sub> emitting facility subject to § 129.96 (relating to applicability) that includes at least one air contamination source subject to a NO<sub>x</sub> RACT emission limitation in § 129.97 (relating to presumptive RACT requirements, RACT emission limitations and petition for alternative compliance schedule) that cannot meet the applicable NO<sub>x</sub> RACT emission limitation may elect to meet the applicable NO<sub>x</sub> RACT emission limitation in § 129.97 by averaging NO<sub>x</sub> emissions on either a facility-wide or system-wide basis using a 30-day rolling average. System-wide emissions averaging must be among sources under common control of the same owner or operator within the same ozone nonattainment area in this Commonwealth.*

Compliance with the averaging provisions of the revised Pennsylvania NO<sub>x</sub> RACT regulation is determined as follows:

*§129.98(e) The owner or operator shall calculate the alternative facility-wide or system-wide NO<sub>x</sub> RACT emissions limitation using a 30-day rolling average for the air contamination sources included in the application for the operating permit modification or plan approval, if otherwise required, submitted under subsection (b) by using the following equation to sum the emissions for all of the sources included in the NO<sub>x</sub> emissions averaging plan:*

$$\left[ \sum_{i=1}^n E_{i_{\text{actual}}} \right] \leq \left[ \sum_{i=1}^n E_{i_{\text{allowable}}} \right]$$

*Where:*

*E<sub>i<sub>actual</sub></sub> = The actual NO<sub>x</sub> mass emissions, including emissions during start-ups, shutdowns and malfunctions, for air contamination source i on a 30-day rolling basis.*

*E<sub>i<sub>allowable</sub></sub> = The allowable NO<sub>x</sub> mass emissions computed using the allowable emission rate limitations for air contamination source i on a 30-day rolling basis specified in § 129.97. If an air contamination source included in an averaging plan is subject to a numerical emission rate limit that is more stringent than the applicable allowable emission rate limitation in §*

*129.97, then the numerical emission rate limit shall be used for the calculation of the allowable NO<sub>x</sub> mass emissions.*

*n = The number of air contamination sources included in the NO<sub>x</sub> emissions averaging plan.*

Additionally, the Conemaugh Generating Station is subject to the EPA's CSAPR Update requirements as part of a federal CSAPR Update Federal Implementation Plan (FIP). Under the CSAPR Update, the Conemaugh Generating Station Unit 1 will have an ozone season NO<sub>x</sub> mass emissions allocation of 859 tons/allowances, and Unit 2 will have an ozone season NO<sub>x</sub> mass emissions allocation of 878 tons/allowances. However, these values are not hard caps; the values only represent the unit allocations. The units/facility may exceed these ozone season allocations by obtaining and surrendering allowances equal to their actual ozone season NO<sub>x</sub> emissions. Additional penalties are applied only in the event that the state consumption of allowances exceeds the state allocation. Under the CSAPR Update FIP, in the event that a state exceeds its allocation and variability limit, the units responsible for the exceedance are to be identified and penalized by application of a higher allowance surrender ratio for those exceedances. The ozone season provisions of the CSAPR Update have no provisions regarding control of short term (hourly, daily, 30-day, etc) NO<sub>x</sub> emission rates or mass emissions, and therefore offer little protection from the impact of short term events of high NO<sub>x</sub> mass emissions.

There are a number of conditions that could occur during the operation of a large EGU facility where a facility owner/operator may find it advantageous to operate (or continue operation) for a limited period of time with the SCR NO<sub>x</sub> emission controls out of service or operating at low efficiency levels. This assumes that the owner/operator has the ability to comply with NO<sub>x</sub> emissions caps by acquiring the sufficient allowances and can meet long term NO<sub>x</sub> emission rate limits through utilization of averaging provisions. Problems with the SCR (including damage, pluggage, etc), SCR ancillary support systems and controls, and boiler draft systems could impact the EGU operation to the point that the SCR must be taken out of service in order to continue EGU operation at load. There may also be some economic incentive to continue operation in this manner, as the economic impact of taking a forced outage (and associated fees) and/or replacement power costs could make the purchase of additional NO<sub>x</sub> compliance allowances a relative bargain.

Additionally, there are times in the eastern United States during the summer months where the grid energy costs are in the multi-hundred dollar per megawatt-hour range for a number of consecutive hours. Under certain conditions, these periods of very high grid energy costs (when combined with relatively low cost NO<sub>x</sub> compliance allowance costs) may provide economic incentive to operate with the SCR controls out of service. (Again, this assumes that the owner/operator has the ability to comply with NO<sub>x</sub> emissions caps by acquiring sufficient allowances and can meet long term NO<sub>x</sub> emission rate limits through utilization of averaging

provisions.) The economic incentive could potentially be realized by eliminating SCR reagent and atomizing media usage and costs with the SCR out of service, along with realizing an incremental reduction in EGU auxiliary loads (resulting in a net increase in EGU output for sale due to a reduction in unit draft fan loading for EGUs equipped with SCR bypass, reduction in reagent pump loading, etc). During periods of high energy costs on the grid, the combined reduction in reagent and atomizing media consumption and incremental increase in energy sales may more than offset the need to surrender additional NOx compliance allowances.

#### **Potential Impact of the Absence of Short Term NOx Emission Rate Averaging Times**

Unlike the EPA's CSAPR Update rules, Pennsylvania's revised NOx RACT regulation established a presumptive NOx RACT rate of 0.12 lb/MMBTU for SCR-equipped coal-fired EGUs beginning in 2017. However, Pennsylvania's new RACT regulation permits compliance with the 0.12 lb/MMBTU NOx rate limit by averaging NOx emissions among units at a common facility (or other facilities if under control of a common owner or operator, and the subject facilities are located in the same nonattainment zone) on a 30-day rolling average compliance basis.

If both of the Conemaugh Generating Station coal-fired EGUs (or the Conemaugh facility's NOx emission rate average) met a 0.12 lb/MMBTU limit on an hourly basis, and each operated at its maximum rated heat input, the hourly NOx mass emissions from the Conemaugh Generating Station would be approximately 2,170 lb/hr. As shown in Table 10, this 2,170 lb/hr rate of NOx mass emissions from Conemaugh is lower than the range of hourly NOx emissions values associated with the events shown by STI modeling to have a significant impact on Delaware's ambient ozone. However, as noted above, the revised Pennsylvania NOx RACT regulation provides for a 0.12 lb/MMBTU limit on a 30-day averaging period, not an hourly averaging period.

When taken in conjunction with Pennsylvania's NOx RACT regulations provisions under §129.98 which allows averaging of unit emissions at a common facility, it is possible that the Conemaugh Generating Station could emit NOx at rates well above 2,170 lb/hr for one or more days and still maintain compliance with the 0.12 lb/MMBTU, 30-day rolling average. This means the Conemaugh Generating Station can emit NOx mass emissions in the upper range of values of hourly NOx mass emissions associated with the events shown by STI modeling to have a significant impact on Delaware's ambient ozone, while still maintaining compliance with the 0.12 lb/MMBTU, 30-day rolling average, NOx emission rate limit.

The following is an example addressing a worst case situation, where the total 30-day heat input was low in conjunction with a single 24-hour day where the NOx mass emissions were at their

potential highest values. For the example, it is assumed that the Conemaugh Generating Station would emit NOx at rates representative of no SCR control operation for a 24-hour period during an ozone season while still remaining in compliance with Pennsylvania's revised RACT regulation. The AMPD preliminary 2016 ozone season operating heat input data was selected to form the basis for this example, as it is anticipated that it would be most representative of the Conemaugh Generating Station facility and unit operations in the near future. For the purposes of this example, it is assumed that the Conemaugh Generating Station owner/operator chooses to comply with the Pennsylvania NOx RACT limits using the facility averaging the provisions of the RACT regulation.

- To estimate a high daily NOx mass emission for Conemaugh, the 2011 ozone season average NOx emission rate (0.3313 lb/MMBTU) was selected as representative of facility operation without SCR NOx controls. Operation of both coal-fired EGUs at maximum hourly heat input capacity (18,085 MMBTU/hr) for 24 hours (for a total of 434,040 MMBTU) was also assumed. This gives an estimated high daily NOx mass emissions of 71.9 tons/day.
- For the 2016 ozone season, the AMPD data for the Conemaugh Generating Station indicated that the lowest 30-day total heat input was 5,085,049 MMBTU. (It should be noted that the heat input value of 5,085,049 MMBTU for 30 days represents a heat input capacity factor of 39%). The estimated NOx emissions that would have been emitted combusting 5,085,049 MMBTU at an average NOx emission rate of 0.12 lb/MMBTU is 305.1 tons. (This is the allowable NOx mass emissions for the 30-day average in accordance with the provisions of the Pennsylvania NOx RACT for compliance purposes.)
- The required Conemaugh Generating Station facility average NOx emission rate required to comply with the 0.12 lb/MMBTU 30-day average and accounting for the high daily NOx mass emissions value of 71.9 tons/day for one day is estimated to be:  

$$\frac{(305.1 \text{ tons} - 71.9 \text{ tons}) * 2000 \text{ lb/ton}}{(5,085,049 \text{ MMBTU} - 434,040 \text{ MMBTU})}$$

$$= 0.1003 \text{ lb/MMBTU}$$
- The estimated required average NOx emission rate of 0.1003 lb/MMBTU, 30-day average, appears to be within the capabilities of most coal-fired EGUs equipped with SCR NOx controls when those controls are consistently operated in accordance with good pollution control practices.

Another example would be to base the highest daily NOx mass emissions on the highest actual daily heat input for the 2016 ozone season instead of using a maximum potential heat input. As with the previous example, the highest NOx daily NOx mass emissions would be estimated assuming no SCR operation for determining the NOx emission rate (in lb/MMBTU), but the maximum daily heat input would be based on actual AMPD 2016 ozone season operating heat input data. It is again assumed that the AMPD 2016 ozone season operating heat input data is most representative of future operation and the Conemaugh Generating Station owner/operator chooses to comply with the Pennsylvania NOx RACT limits using the facility averaging provisions of the RACT regulation.



- To estimate a high daily NOx mass emission for Conemaugh, the 2011 ozone season average NOx emission rate (0.3313 lb/MMBTU) was selected as representative of facility operation without SCR NOx controls. Preliminary AMPD data for the 2016 ozone season indicated that the highest daily heat input for the Conemaugh Generating Station occurred on August 8, 2016 with a value of 403,169 MMBTU. A heat input of 403,169 MMBTU and a NOx emission rate of 0.3313 lb/MMBTU gives an estimated high daily NOx mass emissions of 66.8 tons/day.
- For the 2016 ozone season, the AMPD data for the Conemaugh Generating Station indicated that the lowest 30-day total heat input was 5,085,049 MMBTU. (It should be noted that the heat input value of 5,085,049 MMBTU for 30 days represents a heat input capacity factor of 39%). The estimated NOx emissions that would have been emitted combusting 5,085,049 MMBTU at an average NOx emission rate of 0.12 lb/MMBTU is 305.1 tons. (This is the allowable NOx mass emissions for the 30-day average in accordance with the provisions of the Pennsylvania NOx RACT for compliance purposes.)
- The required Conemaugh Generating Station facility average NOx emission rate required to comply with the 0.12 lb/MMBTU 30-day average and accounting for the high daily NOx mass emissions value of 66.8 tons/day for one day is estimated to be:
 
$$\frac{(305.1 \text{ tons} - 66.8 \text{ tons}) * 2000 \text{ lb/ton}}{(5,085,049 \text{ MMBTU} - 403,169 \text{ MMBTU})} = 0.1018 \text{ lb/MMBTU}$$
- The estimated required average NOx emission rate of 0.1018 lb/MMBTU, 30-day average, also appears to be within the capabilities of most coal-fired EGUs equipped with SCR NOx controls when those controls are consistently operated in accordance with good pollution control practices.

Another example is to assume that the Conemaugh Generating Station emits NOx at rates representative of no post-combustion controls for an 8-hour duration, a period of time of high NOx emissions previously discussed to coincide with significant impact on downwind 8-hour ozone NAAQS compliance. For this example, the Conemaugh Generating Station was assumed to operate for an 8 hour period at the maximum heat input capacity and at a NOx emissions rate representative of no post-combustion control operation. As in the previous examples, it is again assumed that the AMPD 2016 ozone season operating heat input data is most representative of future operation and the Conemaugh Generating Station owner/operator chooses to comply with the Pennsylvania NOx RACT limits using the facility averaging provisions of the RACT regulation.

- To estimate a high 8-hour potential NOx mass emission for Conemaugh, the 2011 ozone season average NOx emission rate (0.3313 lb/MMBTU) was selected as representative of facility operation without SCR NOx controls. The highest heat input for an 8-hour period was calculated by multiplying the facility's heat input capacity by 8, for a total heat input of 144,680 MMBTU. Multiplying heat input of 144,680 MMBTU and a NOx emission rate of 0.3313 lb/MMBTU gives an estimated 8 hour NOx mass emissions of 24.0 tons.

- For the 2016 ozone season, the AMPD data for the Conemaugh Generating Station indicated that the lowest 30-day total heat input was 5,085,049 MMBTU. (It should be noted that the heat input value of 5,085,049 MMBTU for 30 days represents a heat input capacity factor of 39%). The estimated NOx emissions that would have been emitted combusting 5,085,049 MMBTU at an average NOx emission rate of 0.12 lb/MMBTU is 305.1 tons. (This is the allowable NOx mass emissions for the 30-day average in accordance with the provisions of the Pennsylvania NOx RACT for compliance purposes.)
- The required Conemaugh Generating Station facility average NOx emission rate required to comply with the 0.12 lb/MMBTU 30-day average and accounting for the high daily NOx mass emissions value of 66.8 tons/day for one day is estimated to be:  

$$\frac{(305.1 \text{ tons} - 24.0 \text{ tons}) * 2000 \text{ lb/ton}}{(5,085,049 \text{ MMBTU} - 144,680 \text{ MMBTU})} = 0.1138 \text{ lb/MMBTU}$$
- The estimated required average NOx emission rate of 0.1138 lb/MMBTU, 30-day average, also appears to be within the capabilities of most coal-fired EGUs equipped with SCR NOx controls when those controls are consistently operated in accordance with good pollution control practices. The preliminary AMPD data for the 2016 ozone season indicated that the Conemaugh Generating Station had 27 occasions with a facility 30-day average NOx emission rate less than 0.1138 lb/MMBTU. It should be recalled that the 0.12 lb/MMBTU NOx emission rate limit provisions of the revised Pennsylvania RACT regulation do not take effect until 2017 and that the Conemaugh facility was not required to meet such stringent NOx emission rate requirements.

These examples for the Conemaugh Generating Station demonstrate that it is likely that the facility has the ability to exhibit periods of relatively high NOx emissions (NOx emission levels shown by the STI modeling as significantly contributing to Delaware's ambient ozone) while still being able to remain in compliance with the NOx emission rate and facility averaging provisions of Pennsylvania's new NOx RACT regulation, *Title 25. Environmental Protection/ Part I. Department of Environmental Protection/ Subpart C. Protection of Natural Resources, Article III Air Resources/ Chapter 129. Standards for Sources, Additional RACT Requirements for Major Sources of NOx and VOCs.*

Delaware does not agree that a 30-day averaging period, as provided for in Pennsylvania's revised NOx RACT regulation, is appropriate in conjunction with the 0.12 lb/MMBTU NOx rate limit to protect downwind areas with regards to the 2015 8-hour ozone NAAQS. It is Delaware's opinion that the use of a 30-day rolling average for an emissions limitation is not sufficient to be protective of short term NAAQS such as the 2008 and 2015 8-hour ozone NAAQS, and can potentially have a negative impact on Delaware's ability to be in compliance with the short term air quality standards of the 2008 and 2015 8-hour ozone NAAQS.

**Short Term NOx Emission Limits Are Required To Assist in Reducing the Downwind Impact of Conemaugh Generating Station NOx Emissions**

The information discussed above indicates that currently applicable NOx emission rate limits and applicable EGU cap-and-trade NOx control programs, that were designed to limit annual and seasonal NOx emissions, have not served to limit the Conemaugh Generating Station's NOx emissions to levels such that those emissions do not significantly contribute to downwind exceedances of short term air quality standards, thereby imperiling the public health and welfare in downwind states. The modeling performed by STI tends to support this conclusion by quantifying the impact of the Conemaugh Generating Station's NOx emissions on ozone levels measured at Delaware's monitoring locations.

Pennsylvania has recently revised its NOx RACT regulation. In accordance with the provisions of the revised NOx RACT regulation, beginning in 2017, the Conemaugh Generating Station coal-fired EGUs will be subject to a NOx emission rate limit of 0.12 lb/MMBTU, and in accordance with provisions of the revised NOx RACT regulation may elect to comply with the limit by averaging the emissions of the two coal-fired EGUs at the facility and on a 30-day rolling average basis. However, as discussed earlier, the 30-day averaging provisions of the revised NOx RACT regulation do not ensure that the Conemaugh EGU facility will not emit NOx emissions at levels that have been shown by STI modeling to significantly impact Delaware's ambient ozone while still remaining in compliance with applicable NOx emission limitations. Sufficiently stringent NOx emission rate limits based on shorter term averaging periods (such as 24-hour or less) are needed to help ensure that the Conemaugh Generating Station does not significantly impact downwind jurisdictions' ability to comply with the 8-hour ozone NAAQS.

It is interesting to note that since the installation of the SCR NOx controls at the Conemaugh Generating Station in late-2014, AMPD data does not appear to indicate that the SCRs have consistently been operated reflective of good pollution control practices in the subsequent 2015 and 2016 ozone seasons. While it is uncertain why the Conemaugh Generating Station owners/operators have chosen to operate their SCR controls in this fashion, it is suspected that for some facilities in similar circumstances that changing conditions in the power generation industry have resulted in conditions where NOx cap-and-trade compliance allowances are available at prices that make it uneconomic to operate existing NOx controls for compliance with cap-and-trade NOx control programs. Additional regulatory incentive is required to ensure that the existing EGU NOx controls are consistently operated in accordance with good pollution control practices for all such facilities.

Delaware is concerned that the NOx mass emission limits associated with CSAPR Update will be ineffective in properly protecting the public health and welfare in downwind states at all times with regards to the 8-hour ozone NAAQS. It is recognized that the provisions of the CSAPR Update provide for more restrictive annual and seasonal NOx mass emissions than previous

rules, and that the CSAPR Update program also provides more restrictive allowance trading provisions than previous rules. However, the provisions of the CSAPR Update do not provide any limitations on the Conemaugh Generating Station's NOx mass emissions for any period shorter than seasonal (such as hourly or daily). The lack of sufficiently stringent short term NOx emission rates facilitates the continued operation of the Conemaugh Generating Station's coal-fired EGUs with inadequate NOx emission control and resulting high NOx emissions over short periods of time. The lack of sufficiently stringent short term emissions limitations will therefore help facilitate the Conemaugh Generating Station's NOx mass emissions at levels that will continue to support non-compliance with the 8-hour ozone NAAQS in Delaware, and thereby continue to impact the health and welfare of Delaware's citizens.

In order to be protective of short term air quality standards, such as the 8-hour ozone NAAQS, it is Delaware's opinion that it is necessary to establish emissions limits with appropriate magnitudes and averaging periods for the Conemaugh Generating Station that ensure that the NOx emissions are adequately controlled during any particular time period. It is Delaware's opinion that selection of a short term NOx emission rate limit averaging period of no greater than 24 hours is also appropriate to address the short term aspects of compliance with a short term NAAQS, such as the 8-hour ozone NAAQS.

#### **Requested EPA Action**

Even with extensive reduction of NOx emissions from EGU and other sources located in the state of Delaware, Delaware continues to experience exceedances of the 8-hour ozone NAAQS. Modeling conducted by the EPA indicates that emissions from EGUs located in upwind states, including the state of Pennsylvania, are major contributors to Delaware's ongoing 8-hour ozone NAAQS compliance issues. Modeling performed for Delaware by Sonoma Technologies Inc, (STI) indicates that the Conemaugh Generating Station, located in the upwind state of Pennsylvania, itself significantly impacts the level of ozone in Delaware's ambient air.

The Conemaugh Generating Station's impact on Delaware's 8-hour ozone NAAQS compliance has been estimated to occur even though the Conemaugh Generating Station's coal-fired EGUs have been in compliance with their permit NOx emissions rate limits and applicable cap-and-trade NOx emission control programs. These permit NOx emission rate limits and long term (annual, seasonal) cap-and-trade NOx control programs have not provided the level of short term NOx emission limits necessary to be supportive of the short term, 8-hour ozone NAAQS. Because the CSAPR Update will continue to attempt to control NOx mass emissions on an annual and seasonal basis, these programs are also expected to permit an EGU facility such as the Conemaugh Generating Station to emit NOx at high levels over any given short term period while the subject EGU facility remains in overall compliance with the annual and seasonal programs.

The historic compliance flexibility provided to the Conemaugh Generating Station by applicable NOx cap-and-trade programs and relatively high, long term NOx emission rate limitations have permitted the Conemaugh Generating Station owner/operator the flexibility to operate without the installation of post-combustion NOx controls similar to those that have been in place for a number of years at other coal-fired EGUs. In fact, even after the installation of SCR NOx controls on the Conemaugh Generating Station coal-fired EGUs in late 2014, the compliance flexibility appears to have allowed the owner/operator to remain in compliance with applicable NOx emission rate and cap-and-trade NOx mass emission limitations without the need to operate the SCR controls at their best NOx control capacity in subsequent ozone seasons.

Pennsylvania has recently revised its NOx RACT regulation, *Title 25. Environmental Protection/ Part I. Department of Environmental Protection/ Subpart C. Protection of Natural Resources, Article III Air Resources/ Chapter 129. Standards for Sources, Additional RACT Requirements for Major Sources of NOx and VOCs*. The revision to Pennsylvania's NOx RACT regulation will be effective beginning in 2017, and includes NOx emissions rate limits that will be applicable to the Conemaugh Generating Station coal-fired EGUs. This includes a NOx emission rate limit of 0.12 lb/MMBTU, provisions to allow averaging among all of the units at the facility, and provisions to have compliance based on a rolling 30-day average basis. As discussed earlier in this petition, the 30-day averaging provisions of the regulation give the Conemaugh Generating Station the ability to emit NOx at a level shown by STI modeling to significantly impact Delaware's ambient ozone while remaining in compliance with the provisions of the revised Pennsylvania NOx RACT regulation.

In order to be protective of short term air quality standards, such as the 8-hour ozone NAAQS, it is Delaware's opinion that it will be necessary to establish NOx emissions limits with appropriate magnitudes and averaging periods that ensure that the NOx emissions are adequately controlled during any particular time period. Therefore, Delaware is hereby petitioning the EPA under section 126(b) of the Clean Air Act to find that the Conemaugh Generating Station, located in Pennsylvania, emits air pollutants in violation of the prohibition of section 110(a)(2)(D)(i) of the Clean Air Act, and to require the Conemaugh Generating Station to limit short term NOx emissions to levels that are protective of the 8-hour ozone NAAQS in downwind areas such as Delaware.

#### References

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  - 9) Overview of the Ozone Transport Commission (OTC) NO<sub>x</sub> Budget Program, <http://www.epa.gov/airmarkets/progsregs/nox/otc-overview.html>
  - 10) NO<sub>x</sub> Budget Trading Program/NO<sub>x</sub> SIP Call, 2003-2008, <http://www.epa.gov/airmarkets/progsregs/nox/sip.html>
  - 11) Clean Air Interstate Rule (CAIR), <http://www.epa.gov/cair/>
  - 12) Cross-State Air Pollution Rule (CSAPR), <http://www.epa.gov/crossstaterule/>
  - 13) 40 CFR Parts 52, 78, and 97, Cross-State Air Pollution Rule Update for the 2008 Ozone NAAQS; Proposed Rules, Federal Register Vol. 80, No. 232, Thursday December 3, 2015, <https://www.gpo.gov/fdsys/pkg/FR-2015-12-03/pdf/2015-29796.pdf>
  - 14) 40 CFR Parts 52, 78, and 97, Final Rule – Cross-State Air Pollution Rule Update for the 2008 Ozone NAAQS, <https://www3.epa.gov/airmarkets/CSAPRU/Cross-State%20Air%20Pollution%20Rule%20Update%20for%20the%202008%20Ozone%20NAAQS%202060%20AS05%20FRM.pdf>
  - 15) United States Environmental Protection Agency's Air Markets Program Data (EPA's AMPD) – EGU emissions data extracted from the EPA's AMPD using various search criteria as required. <http://ampd.epa.gov/ampd/QueryToolie.html>
  - 16) United States Environmental Protection Agency Cross-State Air Pollution Rule, Technical Information and Support Documents, Air Quality Modeling Final Rule TSD, Contributions of the 8-hour ozone and 24-hour PM<sub>2.5</sub> from each state to each monitoring site, [http://www.epa.gov/crossstaterule/pdfs/CSAPR\\_Ozone%20and%20PM2.5\\_Contributions.xls](http://www.epa.gov/crossstaterule/pdfs/CSAPR_Ozone%20and%20PM2.5_Contributions.xls)
  - 17) Technical Support Document (TSD) for the Transport Rule, Docket ID No. EPA-HQ-OAR-2009-0491, Analysis to Quantify Significant Contribution, [http://www.epa.gov/crossstaterule/pdfs/TSD\\_analysis\\_to\\_quantify\\_significant\\_contribution\\_7-8-10.pdf](http://www.epa.gov/crossstaterule/pdfs/TSD_analysis_to_quantify_significant_contribution_7-8-10.pdf)
  - 18) CAMx Modeling Documentation, Sonoma Technology Inc., October 24, 2016 letter from Kenneth Craig to Ronald Amirikian, with attachment

- 19) U.S. Energy Information Administration, <http://www.eia.gov/electricity/data/detail-data.html>
- 20) Pennsylvania Bulletin/46 Pa. B. 2036/ Saturday April 23, 2016/ Rules and Regulations/ Title 25 – Environmental Protection/ Environmental Quality Board/ 25 PA. Code CHS. 121 and 129 <http://www.pabulletin.com/secure/data/vol46/46-17/694.html>

**United States Senate**  
WASHINGTON, DC 20510

March 12, 2018

The Honorable Scott Pruitt  
Administrator  
Environmental Protection Agency (EPA)  
1200 Pennsylvania Ave., NW  
Washington, DC 20004

Dear Administrator Pruitt:

We write to request information about EPA's November 16, 2017 proposal to repeal air emission standards for some of the dirtiest heavy-duty trucks on the road.<sup>1</sup> Glider trucks, also known as "zombie trucks,"<sup>2</sup> look like new trucks on the outside—and are advertised and sold as new—but are equipped with old, high-polluting diesel engines on the inside. According to internal agency research not released until *after* EPA published this proposal, a new 2017 glider truck can emit up to 450 times the particulate matter (PM) pollution, and up to 43 times the nitrous oxide (NO<sub>x</sub>) pollution, of model year 2014 and 2015 trucks.<sup>3</sup> Other EPA analyses concluded that, if left unregulated, glider vehicle emissions could prematurely kill thousands of people, and increase instances of lung cancer, chronic lung disease, heart disease, and severe asthma attacks.<sup>4</sup> We are also deeply troubled that this proposal, which appears to largely benefit a single company, was influenced by an industry-funded "study" that is currently the subject of an official investigation into research misconduct for failing to adhere to basic scientific standards.<sup>5</sup> We urge you to withdraw this dangerous, legally questionable proposal immediately.

EPA and the National Highway Traffic Safety Administration (NHTSA) have worked closely with states, vehicle manufacturers, environmental groups, and other interested stakeholders to develop federal standards that reduce vehicle pollution and improve fuel-economy. An important focus of these regulations has been medium- and heavy-duty vehicles, which, despite constituting only 5% of the domestic vehicle fleet, produce 20% of all transportation-sector emissions. EPA and NHTSA finalized an initial round of greenhouse gas and fuel economy standards for these vehicles in 2011, avoiding 270 million tons of CO<sub>2</sub> emissions and saving consumers \$50 billion at the pump.<sup>6</sup> In 2016, the agencies completed the second round of regulations ("Phase 2"), setting standards for these highly-polluting vehicles out to model year 2027. These carefully crafted rulemakings were the result of "more than 400 meetings with

<sup>1</sup> 82 Fed. Reg. 53,442 (Nov. 16, 2017).

<sup>2</sup> See Rachel Muncrief & Josh Miller, "Scott Pruitt's EPA wants to resurrect the dirty diesel," INT'L. COUNCIL ON CLEAN TRANSP., Dec. 1, 2017, <https://www.theicct.org/blog/staff/glider-proposal-means-resurrecting-dirty-diesel>.

<sup>3</sup> EPA NAT'L. VEHICLE & FUEL EMISSIONS LAB., "Chassis Dynamometer Testing of Two Recent Model Year Heavy-Duty On-Highway Diesel Glider Vehicles" (Nov. 20, 2017) at 3 [hereinafter "OTAQ Study"], <https://www.regulations.gov/document?D=EPA-HQ-OAR-2014-0827-2417>.

<sup>4</sup> Response to Comments at 1877, <https://nepis.epa.gov/Exe/ZyPDF.cgi/P100P8IS.PDF?Dockey=P100P8IS.PDF>.

<sup>5</sup> <https://www.washingtonpost.com/news/energy-environment/wp/2018/02/21/tennessee-tech-withdraws-industry-funded-study-used-to-back-controversial-epa-truck-rule/>.

<sup>6</sup> 76 Fed. Reg. 57,106 (Sept. 15, 2011).



manufacturers, suppliers, trucking fleets, dealerships, state air quality agencies, non-governmental organizations . . . and other stakeholders,” as well as feedback received from over 200,000 public comments, including in two public hearings.<sup>7</sup> In contrast, EPA’s proposal, which exempts some of the worst-polluting trucks from being subject to air pollution limits, was reportedly developed at the behest of politically well-connected representatives of glider manufacturers.<sup>8</sup>

Glider trucks used to be a niche industry, with less than a thousand vehicles produced each year—primarily for engine-salvage purposes when relatively new trucks got in collisions. By 2015, however, “significantly over 10,000” glider vehicles were being sold, and almost every engine used to complete a glider truck is a rebuilt diesel engine originally manufactured between 1998 and 2002.<sup>9</sup> These engines are so dirty that, during EPA testing conducted in late 2017, the black soot belching from glider trucks clogged the filters of EPA’s testing equipment, triggering a “PM equipment alarm” that prevented your technical staff from proceeding under normal testing conditions.<sup>10</sup>

EPA soon realized that, if left unregulated, by 2025 glider vehicles would create one-third of all NO<sub>x</sub> and PM emissions from heavy-duty trucks, even though they would only comprise 5% of the heavy-duty tractor fleet. In its 2016 “Phase 2” medium and heavy-duty rule, after taking two rounds of public comment on whether and how to address glider vehicles, EPA finalized regulations that ensured the emissions from glider trucks would be reduced while minimizing disruption to the few companies that manufacture glider kits and vehicles.<sup>11</sup>

Although no one from the glider industry challenged the final glider provisions in court, on May 8, 2017, you personally met with representatives of Fitzgerald Glider Kits, LLC (Fitzgerald),<sup>12</sup> the self-proclaimed, “largest glider kit dealer in the country”<sup>13</sup> and a political supporter of President Trump.<sup>14</sup> Two months after meeting with you, on July 10, 2017, Fitzgerald and two other glider kit dealers sent you a petition seeking reconsideration of the glider requirements.<sup>15</sup> You also spoke later that month with Congresswoman Diane Black, who has vocally supported the Fitzgerald Petition.<sup>16</sup>

<sup>7</sup> 81 Fed. Reg. 73,478, 73,481 (Oct. 25, 2016).

<sup>8</sup> See, e.g., Eric Lipton, “How \$225,000 Can Help Secure a Pollution Loophole at Trump’s E.P.A.,” N.Y. TIMES, Feb. 15, 2018, <https://www.nytimes.com/2018/02/15/us/politics/epa-pollution-loophole-glider-trucks.html>.

<sup>9</sup> See EPA memorandum from Charles Moulis to William Charnley, “Summary of Glider Production Data” (Nov. 15, 2017) at 1–3, [https://www.eenews.net/assets/2017/11/21/document\\_gw\\_05.pdf](https://www.eenews.net/assets/2017/11/21/document_gw_05.pdf).

<sup>10</sup> OTAQ Study, *supra* note 3, at 14–15.

<sup>11</sup> See 81 Fed. Reg. at 73,941–46.

<sup>12</sup> “EPA Administrator Scott Pruitt’s schedule, from April 3, 2017 to Sept. 8, 2017,” WASH. POST, Sept. 22, 2017, <https://www.washingtonpost.com/apps/g/page/politics/epa-administrator-scott-pruitts-schedule-from-april-3-2017-to-sept-8-2017/2241/>.

<sup>13</sup> See “About Fitzgerald,” FITZGERALD GLIDER KITS, <https://www.fitzgeraldgliderkits.com/about-fitzgerald/>.

<sup>14</sup> See, e.g., Eric Lipton, “How \$225,000 Can Help Secure a Pollution Loophole at Trump’s E.P.A.,” N.Y. TIMES, Feb. 15, 2018, <https://www.nytimes.com/2018/02/15/us/politics/epa-pollution-loophole-glider-trucks.html>.

<sup>15</sup> Fitzgerald Glider Kits, LLC, et al., “Petition for Reconsideration” July 10, 2017 [hereinafter “Fitzgerald Petition”], <https://www.epa.gov/sites/production/files/2017-07/documents/hd-ghg-fr-fitzgerald-recons-petition-2017-07-10.pdf>.

<sup>16</sup> <https://black.house.gov/media/press-releases/epa-intends-roll-back-job-killing-regulation-hurting-small-business-owners>.

The Fitzgerald Petition lists three reasons why the glider truck industry should be exempt from modern pollution controls, most significantly that (1) EPA lacks statutory authority to regulate them; and that (2) a “recent study by Tennessee Technological University,” as well as other factors, demonstrate that EPA based its conclusions about glider vehicle emissions on “unsupported assumptions,” because glider vehicles actually performed as well or better from an emissions perspective than trucks with newer engines.<sup>17</sup>

On August 17, 2017, you sent letters to Fitzgerald and the other petitioners, saying that the petition raised “significant questions” about EPA’s legal authority “as well as the soundness of the EPA’s technical analysis” regarding glider emissions. You told the petitioners that EPA had, for both legal and technical reasons, “decided to revisit” the glider rules.<sup>18</sup>

On November 9, 2017, you signed the proposal to repeal emission standards for glider vehicles, glider engines, and glider kits, and it was published on November 16, 2017. The EPA proposal states that the basis for repeal would be a legal reinterpretation of Clean Air Act (CAA) definitions, even though you appeared to acknowledge that your reinterpretation would be contrary to the CAA’s plain language.<sup>19</sup> As support for this strained interpretation of the law (which conflicts with Supreme Court precedent<sup>20</sup>), EPA cites no legislative history or judicial precedent discussing congressional intent under the Clean Air Act. Instead, EPA’s legal case rests entirely on the Automobile Information Disclosure Act of 1958, a sixty-year-old law regulating the placement of stickers on automobile windows, which has nothing to do with either air pollution or heavy-duty trucks.<sup>21</sup>

Moreover, since EPA issued the proposal, serious questions have been raised about the Tennessee Tech study that had caused you to question “the soundness of the EPA’s technical analysis” and thus decide to revisit the glider rules.<sup>22</sup> Whereas the technical information underlying the 2016 rule that EPA proposes to partially repeal was “based on a vast body of existing peer-reviewed work,” the only “science” cited by EPA’s proposal is the Tennessee Tech study, which claims that glider vehicles perform just as well—if not *better* than—vehicles with newer engines.

<sup>17</sup> Fitzgerald Petition, *supra* note 15, at 3–4.

<sup>18</sup> <https://www.epa.gov/sites/production/files/2017-08/documents/hd-ghg-phase2-fitzgerald-glders-ltr-2017-08-17.pdf>.

<sup>19</sup> 82 Fed. Reg. at 53,444–45 (citing CAA section 216(3)) (“Focusing solely on that portion of the statutory definition that provides that a motor vehicle is considered ‘new’ prior to the time its ‘equitable or legal title’ has been ‘transferred to an ultimate purchaser,’ a glider vehicle would appear to qualify as ‘new.’”).

<sup>20</sup> See, e.g., *Massachusetts v. EPA*, 549 U.S. 497, 532 (2007) (rejecting EPA’s narrow interpretation of “pollutant,” because Congress used broad definitional language in an “intentional effort to confer the flexibility necessary to forestall [ ] obsolescence,” so that EPA could apply overarching congressional intent to “changing circumstances and scientific developments,” including those Congress “might not have appreciated” specifically at the time).

<sup>21</sup> 82 Fed. Reg. at 53,445–46.

<sup>22</sup> <https://www.epa.gov/sites/production/files/2017-08/documents/hd-ghg-phase2-fitzgerald-glders-ltr-2017-08-17.pdf>.

On February 16, 2018, the interim dean of the College of Engineering at Tennessee Tech lambasted the study's conclusions as "farfetched" and "scientifically implausible,"<sup>23</sup> and faculty called for an investigation into research misconduct.<sup>24</sup> It has since come to light that the study was not subject to peer review and was paid for by Fitzgerald Glider Kits.<sup>25</sup> Tennessee Tech has suspended its relationship with Fitzgerald, has launched an official investigation into research misconduct, and has asked you to disregard the study pending the outcome of that investigation.

There are ample reasons why EPA should suspect that the Tennessee Tech research was not conducted appropriately. The study was advertised as a product of Tennessee Tech's "Department of Civil and Environmental Engineering,"<sup>26</sup> despite the fact that it was apparently not overseen, written, reviewed, or verified by any "qualified, credentialed engineering faculty member."<sup>27</sup> And although the university president wrote a letter saying that all glider trucks "met the standard" for particulate matter,<sup>28</sup> study participants spoke by phone with EPA technical staff on November 7, 2017 and admitted they had taken no numerical measurements of PM emissions—in fact, *they had not collected PM samples at all.*<sup>29</sup>

The College of Engineering's interim dean also highlighted a "devastating" critique of the study by the Environmental Defense Fund,<sup>30</sup> which noted among other things that the research was conducted at a Fitzgerald-owned facility that does not appear to even have emissions-testing equipment that meets standard EPA testing procedures.<sup>31</sup>

Absent from EPA's proposal is any mention of the agency estimates that every 10,000 glider trucks can lead to the premature deaths of 1,600 people.<sup>32</sup> Absent is the fact that a *single year* of glider vehicle sales produces more than 10 times the NO<sub>x</sub> emissions of Volkswagen's entire criminal defeat-device scheme.<sup>33</sup> Absent is a November 2017 study by EPA technical staff, which found that glider trucks with Fitzgerald-rebuilt engines emitted up to 450 times the PM

<sup>23</sup> Memorandum from Darrel Hoy, Interim Dean, College of Engineering (Feb. 16, 2018) at 2 [hereinafter "Hoy Memorandum"], available at <https://www.documentcloud.org/documents/4378485-Combating-Pollution-in-Diesel-Trucks-and-the.html#document/p217/a405776>.

<sup>24</sup> TENN. TECH. FACULTY SENATE, "Faculty Senate Resolution on Fitzgerald Research Study" (Jan. 30, 2018), [https://www.tntech.edu/assets/usermedia/facultysenate/resolutions/Resolution\\_on\\_Fitzgerald\\_Study\\_1-30-2018.pdf](https://www.tntech.edu/assets/usermedia/facultysenate/resolutions/Resolution_on_Fitzgerald_Study_1-30-2018.pdf).

<sup>25</sup> Kate Cook, "TTU investigating Fitzgerald study," HERALD-CITIZEN, Feb. 11, 2018, <http://herald-citizen.com/stories/ttu-investigating-fitzgerald-study.25943>.

<sup>26</sup> Letter from Phillip B. Oldham, President, Tenn. Tech. Univ., to Scott Pruitt, EPA Admin'r (Feb. 19, 2018) at 1.

<sup>27</sup> Hoy Memorandum, *supra* note 23, at 1–2.

<sup>28</sup> Letter from Phillip B. Oldham, *supra* note 26, at 1.

<sup>29</sup> Memorandum from George Mitchell, Mechanical Eng'r, Assessments & Standards Div., EPA Office of Transp. & Air Quality, "EPA Teleconference with Tennessee Tech University Regarding Glider Test Report Summarized in June 2017 Letter; Tennessee Tech University – Summary of Heavy Duty Truck Study and Evaluation of the Phase II Heavy Duty Truck Rule," Nov. 13, 2017 at 2–3, available at <https://www.regulations.gov/document?D=EPA-HQ-OAR-2014-0827-2416>.

<sup>30</sup> Hoy Memorandum, *supra* note 23, at 2.

<sup>31</sup> See generally Comments of EDF, ELPC, and WE ACT (Jan. 5, 2018) at 17–24, <https://www.edf.org/sites/default/files/content/EDF%20ELPC%20WE%20ACT%20Comments%20on%20Glider%20Proposed%20Repeal%20final.pdf> [hereinafter "EDF Comment"].

<sup>32</sup> Response to Comments at 1877, <https://nepis.epa.gov/Exe/ZyPDF.cgi/P100P8IS.PDF?Dockey=P100P8IS.PDF>.

<sup>33</sup> Muncrief & Miller, *supra* note 2.

pollution and 43 times the NO<sub>x</sub> pollution of modern trucks.<sup>34</sup> Absent is the fact that, by 2025, EPA's proposal would undo—four times over—the interstate NO<sub>x</sub> reductions achieved by power plants under the Cross-State Air Pollution Rule.<sup>35</sup> Absent are the economic costs that unrestricted glider vehicles impose on society, which EPA estimates at \$6 to \$14 billion *every year*.<sup>36</sup>

In light of the severe adverse health effects of this rule, as well as the fact that EPA's decision-making relied on a study that was withdrawn pending the outcome of an official investigation into research misconduct, we ask that you immediately announce plans to withdraw this proposal. We additionally request that you please provide us with responses to the following questions and requests for information:

1. Please provide us with non-redacted copies of all documents (including but not limited to emails, memos, meeting notes and correspondence) regarding the November 16, 2017 proposed repeal of emission standards and other requirements for heavy-duty glider vehicles, glider engines, and glider kits. This request includes, *but is not limited to*:
  - a. all documents concerning any and all EPA scientific analysis conducted in relation to the proposed repeal;
  - b. all documents concerning any and all EPA legal analysis conducted in relation to the proposed repeal; and
  - c. any documents submitted by EPA to OMB in 2017 that describe the costs and benefits associated with the proposed repeal.
2. Please provide us with non-redacted copies of all documents (including but not limited to emails, memos, meeting notes and correspondence) between EPA representatives and representatives of Fitzgerald Glider Kits, LLC, Harrison Truck Centers, Inc., and/or Indiana Phoenix, Inc. since January 20, 2017. For the May 8, 2017 meeting with Administrator Pruitt and representatives of Fitzgerald Glider Kits, please provide me with a list of all people who attended that meeting (including by telephone) and with copies of any materials sent in advance or left behind with EPA personnel.
3. Please provide us with non-redacted copies of all documents written or received by EPA (including but not limited to emails, memos, meeting notes and correspondence) that relate to the Tennessee Tech's study on glider vehicle emissions, including, *but not limited to*, documents received from persons outside of EPA; any underlying data from the study;<sup>37</sup> and any concerns about the study raised by EPA technical staff.

<sup>34</sup> OTAQ Study, *supra* note 3, at 14–15.

<sup>35</sup> EDF Comment, *supra* note 31, at 11 & n.41.

<sup>36</sup> 81 Fed. Reg. at 73,943.

<sup>37</sup> See, e.g., Email from William Charmley to Tom Brewer, "Re: TTU Follow-Up 11-28-2017," Dec. 1, 2017 (indicating EPA's possession of "more detailed emissions data" from Tennessee Tech, and ongoing EPA analyses), available at <https://www.regulations.gov/document?D=EPA-HQ-OAR-2014-0827-4272>.

4. Please provide us with non-redacted records of all meetings that EPA political appointees have taken with all individuals and corporations regarding the glider provisions of the Phase 2 Rule since January 20, 2017.
5. In October and November of 2017, EPA technical staff in the Office of Transportation and Air Quality (OTAQ) were conducting emissions testing on heavy-duty glider vehicles containing engines rebuilt by Fitzgerald.<sup>38</sup> The ultimate results of that research showed extraordinary levels of PM and NO<sub>x</sub> pollution from those vehicles—directly contradicting the purported results of the Tennessee Tech study. Your proposal mentions the Tennessee Tech study, but makes no mention of the EPA technical study contradicting it. Your proposal was also published on November 16, 2017—four days before the OTAQ study was purportedly finalized (November 20), and six days before it was released to the public (November 22). Did you or any other political appointees know that OTAQ was conducting this study before it was finalized? If so, when were those political appointees aware of any final or preliminary results of the study?
6. Your August 17, 2017 letter to Fitzgerald Glider Kits states that Fitzgerald’s petition “raises concerns that the EPA relied upon ‘unsupported assumptions rather than data’ with regard to the emission impacts of glider vehicles” and that, “In light of these issues, the EPA has decided to revisit the provisions in the Phase 2 Rule that relate to gliders.” On what date on or before August 17, 2017, had EPA “decided to revisit” those provisions, and on what specific bases were those decisions made?
7. EPA concluded in 2016 that, if left unrestricted, emissions from heavy-duty glider tractors would represent “about one third of all NO<sub>x</sub> and PM emissions from heavy-duty tractors in 2025.” Those excess emissions impose \$6 to \$14 billion in annual costs to society, and “removing even a fraction of these glider vehicles with high polluting engines from the road will yield substantial health benefits.”<sup>39</sup> Do you have any reason to doubt the veracity of these figures? If you do, please explain the reason(s) why, and provide supporting documentation.
8. Clean Air Act section 216(3) defines “new motor vehicle” as “a motor vehicle the equitable or legal title to which has never been transferred to an ultimate purchaser.”
  - a. As an initial matter, are glider vehicles motor vehicles? If no, please explain your answer and cite any provisions of the CAA upon which your answer relies.
  - b. If a glider vehicle has not been sold to any ultimate purchaser, has the equitable or legal title of that unsold glider vehicle been transferred to an ultimate purchaser?<sup>40</sup> If yes, please explain your answer and cite any provisions of the CAA upon which your answer relies.

<sup>38</sup> See OTAQ Study, *supra* note 3, at 4.

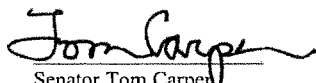
<sup>39</sup> 81 Fed. Reg. at 73,493.


<sup>40</sup> By “ultimate purchaser,” we refer to the definition in CAA section 216(5), 42 U.S.C. § 7550(5).

9. Hypothetically, imagine that a new Volvo dealer sells a brand new Volvo VNL heavy-duty truck<sup>41</sup> to the vehicle's first ultimate purchaser. The Volvo VNL is straight off the assembly line, including with a brand new powertrain.
  - a. Would that Volvo VNL be a "new motor vehicle" under CAA section 216(3)? If your answer is anything other than "yes," please explain your answer and cite any provisions of the CAA upon which your answer relies.
  - b. Would the same Volvo VNL be a "new motor vehicle" under CAA section 216(3) if all characteristics from the hypothetical vehicle were the same, except that at the time of the sale the truck had i) pre-owned, refurbished tires salvaged from an older truck, or ii) a pre-owned, refurbished windshield installed?
10. Does the Automobile Information Disclosure Act of 1958, Pub. L. 85-506, contain any requirements applicable in any way to either air pollution or to heavy-duty commercial trucks? If yes, please provide a citation to those provisions.
11. Are the degree of emissions from glider trucks relevant in determining whether Congress intended to allow EPA to regulate emissions from new glider vehicles, glider kits, or rebuilt glider engines under the Clean Air Act? If yes, explain how emissions data influenced the proposal.
12. Are the human health consequences of glider truck emissions at all relevant in determining whether Congress intended to allow EPA to regulate emissions from new glider vehicles, glider kits, or rebuilt glider engines under the Clean Air Act? If yes, explain how human health considerations influenced the proposal.

Thank you very much for your attention to this important matter. Please provide your response no later than April 2, 2018. If you or members of your staff have further questions, please feel free to ask them to contact Michal Freedhoff at the Committee on Environment and Public Works at (202) 224-8832, or Jonathan Black with Senator Udall's office at (202) 224-6621.

Sincerely,

  
 Senator Tom Carper  
 Ranking Member  
 U.S. Senate Committee on  
 Environment and Public Works

  
 Senator Tom Udall  
 Ranking Member  
 U.S. Senate Subcommittee on the  
 Department of the Interior,  
 Environment, and Related Agencies

<sup>41</sup> See "New VNL | Volvo Trucks USA," VOLVO, <https://www.volvotrucks.us/trucks/vnl/>.

Senator CARPER. Thanks very much to the witnesses and Secretary Garvin for getting up early and putting up with a balky train schedule to be here with all of us.

You were joined by at least one member of your staff over your left shoulder. She looks so familiar. Introduce her.

Mr. GARVIN. I have my Chief of Staff, Kristin Barnekov-Short, as well as my Acting Air Director, David Fees.

Senator CAPITO. Thank you.

If there are no more questions, I will thank the panel for today.

Members may submit follow up written questions for the record by the close of business on Tuesday, April 24.

For our witnesses, Committee staff will forward any questions from Committee members. Please respond to those written questions by close of business Tuesday, May 8.

Again, thank you so much.

This hearing is adjourned.

[Whereupon, at 11:28 a.m., the Subcommittee was adjourned.]

[Additional material submitted for the record follows:]

JOHN BARRASSO, WYOMING, CHAIRMAN  
 JAMES M. INHORN, OKLAHOMA  
 SHELLEY MOORE CAPITO, WEST VIRGINIA  
 JOHN BOGZEMAN, ARKANSAS  
 FRED W. ALDER, MISSISSIPPI  
 GUY F. FRISCH, NEBRASKA  
 JEFF MORAN, KANSAS  
 MIKE ROUNDELL, SOUTH DAKOTA  
 JON ERIKST, IOWA  
 DAVE SUNDHOLM, ALABAMA  
 RICHARD NIELSEN, ALABAMA  
 THOMAS H. CARPIS, DELAWARE  
 BENJAMIN L. CARDIN, MARYLAND  
 DENARD S. GORDON, VERMONT  
 SHELLEY WHITEHOUSE, RHODE ISLAND  
 JEFF MERBLEY, OREGON  
 FRISTIA C. HARRIS, NEW YORK  
 LOU A. BROWN, NEW JERSEY  
 EDWARD J. MARLEY, MASSACHUSETTS  
 TERRY VERGARDEN, RHODE ISLAND  
 KATHA D. HARRIS, CALIFORNIA

## United States Senate

COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS

WASHINGTON, DC 20510-6175

RICHARD M. RUSSELL, MAJOR STAFF DIRECTOR  
 CHRISTELLE BATHON, MINORITY STAFF DIRECTOR

January 9, 2018

The Honorable Scott Pruitt  
 Administrator  
 Environmental Protection Agency  
 1200 Pennsylvania Avenue NW  
 Washington, DC 20460


Dear Administrator Pruitt:


We write to request that you rescind a current EPA policy that disincentivizes air emissions reductions. On November 15, 2017, the Committee held a hearing entitled, "Promoting American Leadership in Reducing Air Emissions Through Innovation." In testimony during that hearing, the so-called "once-in-always-in" policy under the Clean Air Act was identified as a policy that discourages emissions reductions.

The 1995 policy requires a source to comply with stringent emissions standards even if the source later lowers its emissions below the "major source" thresholds that triggered the standards in the first place. In the enclosed submissions to the November 15<sup>th</sup> hearing record, the National Association of Manufacturers and the American Coatings Association (ACA) highlighted the practical effects of the policy. As ACA explains, "resources spent on compliance could be used instead for [research and development], or modernization activities."

EPA can rescind this policy, which was issued under Section 112 of the Clean Air Act, without any legislative changes. As the Chairmen of the Committee and Subcommittee of jurisdiction over the Clean Air Act, we request that you incentivize additional hazardous air pollutant emissions reductions by promptly withdrawing this policy. If you have additional questions about the Committee's hearing that reviewed this issue, please contact Elizabeth Horner of the Committee's staff at 202-224-6176.

Sincerely,

  
 John Barrasso, M.D.  
 Chairman

  
 Shelley Moore Capito  
 Chairman  
 Subcommittee on Clean Air and  
 Nuclear Safety

Enclosures



JOHN BARRASSO (WYOMING), CHAIRMAN  
 JAMES M. INHOFE, OKLAHOMA  
 SHELLEY MOORE CAPITO, WEST VIRGINIA  
 JIMMY HATCHMAN, ARKANSAS  
 ROBERT MENON, MISSISSIPPI  
 DICK DURBIN, NEBRASKA  
 STEVE MCCARTHY, KANSAS  
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## United States Senate

COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS  
 WASHINGTON, DC 20510-6175

ARTHUR M. RUSSELL, MAJORITY STAFF DIRECTOR  
 CASPER L. BARNES, MINORITY STAFF DIRECTOR

January 12, 2018

Dear Administrator Pruitt:

We write in support of EPA's proposal to repeal the so-called "Clean Power Plan" (CPP), published in the Federal Register on October 16, 2017.<sup>i</sup> When President Obama finalized the CPP in 2015, we opposed it because of the pervasive, negative effects it would have had on Americans across the country. The CPP would have driven up energy prices, eliminated American jobs, and hurt local communities that depend on coal. As the figures in your proposed repeal demonstrate, the costs of the CPP would have been substantial. By repealing the rule, EPA eliminates up to \$33 billion in costs in the year 2030 alone.

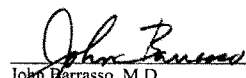
Not only is the CPP bad policy, it is unlawful. Congress did not give EPA the authority to transform our energy sector. The CPP would force coal plant closures and artificially shift electricity generation to other sources. As the Supreme Court has stated, EPA cannot "bring about an enormous and transformative expansion in EPA's regulatory authority without clear Congressional authorization."<sup>ii</sup> The Supreme Court "expect[s] Congress to speak clearly if it wishes to assign to an agency decisions of vast 'economic and political significance.'"<sup>iii</sup>

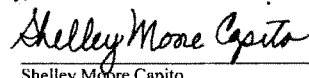
When EPA issued the CPP in 2015, the Agency asserted novel and over-reaching authority to force states into making energy choices that disadvantaged some energy sources over others. As a result, 27 states challenged the CPP in court. EPA's assertion of authority went against the basic tenets of the Clean Air Act, which gives "primary responsibility" to states in implementing the Act.<sup>iv</sup> Then, in 2016, the Supreme Court halted implementation of the CPP while litigation over the rule proceeded.

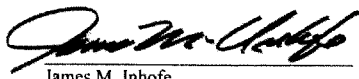
As you work to repeal the CPP, we support EPA's willingness to examine broader questions about how the federal government measures the costs and benefits of EPA regulations. According to a 2016 report by the Office of Management and Budget,<sup>v</sup> approximately 95% of the total costs of EPA regulations are the result of regulations developed by EPA's Office of Air and Radiation (OAR). The prior administration employed accounting policies that generated outsized benefits and minimized costs to justify costly OAR rules, such as the CPP. As you have done in this proposal to repeal the CPP, EPA should continue to examine and correct those issues so that future policies are grounded on sound cost-benefit analyses.

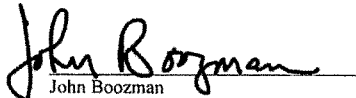
We stand ready to assist you as you restore EPA's implementation of the Clean Air Act to its intended purpose: "to protect and enhance the quality of the Nation's air resources so as to promote the public health and welfare and the productive capacity of the population."<sup>vi</sup>

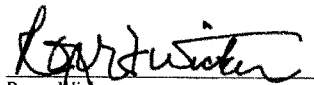
Sincerely,


  
 John Barrasso, M.D.  
 Chairman

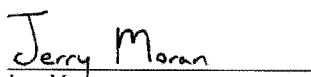
  
 Shelley Moore Capito  
 Chairman  
 Subcommittee on Clean Air and Nuclear Safety

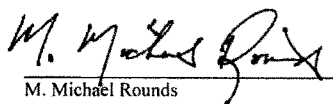
  
James M. Inhofe  
U.S. Senator

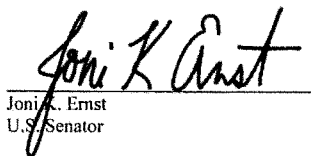
  
John Boozman  
U.S. Senator

  
Roger Wicker  
U.S. Senator

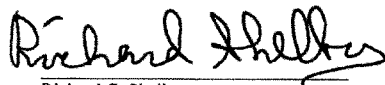
  
Deb Fischer  
U.S. Senator

  
Jerry Moran  
U.S. Senator

  
M. Michael Rounds  
U.S. Senator

  
Joni K. Ernst  
U.S. Senator

  
Dan Sullivan  
U.S. Senator

  
Richard C. Shelby  
U.S. Senator

<sup>1</sup> 82 Fed. Reg. 48035 (Oct. 16, 2017).

<sup>21</sup> *Utility Air Regulatory Group v. EPA*, 134 S. Ct. 2427, 2444 (2014).

<sup>22</sup> *Id.*

<sup>23</sup> Clean Air Act § 101(a)(3).

<sup>24</sup> Office of Management and Budget, "2016 Draft Report to Congress on the Benefits and Costs of Federal Regulations and Agency Compliance with the Unfunded Mandates Reform Act" (2016).

<sup>25</sup> Clean Air Act § 101(b)(1).

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## United States Senate

COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS

WASHINGTON, DC 20510-6175

January 19, 2018

The Honorable Scott Pruitt  
 Administrator  
 Environmental Protection Agency  
 1200 Pennsylvania Avenue NW  
 Washington, DC 20460

Dear Administrator Pruitt:

I write to request your attention to two challenges associated with National Ambient Air Quality Standards (NAAQS) implementation across the country, including in my home State of Wyoming: exceptional events determinations and interstate transport of ozone.

First, EPA has not worked in full partnership with States in addressing “exceptional events” in the past. In 2016, EPA refused to act on a number of Wyoming’s pending requests related to unique air quality events, as explained in the enclosed correspondence between Wyoming and EPA. Under Section 319 of the Clean Air Act (CAA), Congress created a process for addressing how “exceptional events” such as wildfires should be evaluated in air quality monitoring data. Wyoming’s experience with the program illustrates the need for a shift in EPA’s implementation approach. As a rural state with areas of high elevation and low population density, Wyoming faces issues different from many other parts of the country.

Second, EPA needs to revisit the methodology it has used to address interstate ozone transport, that is, whether and how emissions in one part of the country affect air quality elsewhere. On February 10, 2017, I raised concerns with EPA’s treatment of ozone transport in the enclosed letter addressed to Reince Priebus. Despite a clear directive at the beginning of this Administration to freeze issuance of new regulations, EPA found that Wyoming had not adequately addressed ozone transport issues. In reaching that conclusion, EPA applied a methodology designed for eastern States to allege that emissions in Wyoming posed air quality problems in Colorado.

By January 30, 2018, please provide a status update on both of the issues above. First, what are the Agency’s plans to act on pending exceptional events requests filed by Wyoming? Second, what are EPA’s plans to address the February 2017 ozone transport finding?


I also request that you outline current or planned activities of the Ozone Cooperative Compliance Task Force, which was mentioned in an October 25, 2017 EPA report.<sup>1</sup> According to the report, the Task Force will address NAAQS implementation issues of national importance in the future.

<sup>1</sup> U.S. EPA, “Final Report on Review of Agency Actions that Potentially Burden the Safe, Efficient Development of Domestic Energy Resources Under Executive Order 13783” (Oct. 25, 2017), <https://www.epa.gov/sites/production/files/2017-10/documents/eo-13783-final-report-10-25-2017.pdf>.

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Your consideration of these requests is greatly appreciated. If you or your staff require additional information, please contact Elizabeth Horner of the Committee on Environment and Public Works (Majority) staff at 202-224-6176.

Sincerely,

  
John Barrasso, M.D.  
Chairman

*Enclosures*

COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS  
WASHINGTON, DC 20515-6175

附註：本報社址：台北市中山路100號。電話：(02) 2311-1111。傳真：(02) 2311-1112。E-mail: [news@tw.com](mailto:news@tw.com)。Web: <http://www.tw.com>。

The Honorable Reince Priebus  
Assistant to the President & Chief of Staff  
The White House  
1600 Pennsylvania Avenue, N.W.  
Washington, DC 20500

Thank you for your January 20, 2017, Executive Memorandum entitled "Regulatory Freeze Pending Review" (hereinafter "Priebus Memo"). This type of memo is a routine, but important step during a transition to allow an incoming President and his designees to review and assess any pending administrative actions. The Priebus Memo established a regulatory freeze on almost all pending matters as of noon on January 20, 2017.

It is our understanding that EPA told Wyoming officials that this rule was exempt from the Priebus Memo because the agency was acting pursuant to a judicial deadline of January 17, 2017. However, EPA is under no judicial deadline relating to this matter. EPA and the Sierra Club have *proposed* a consent decree to resolve a pending lawsuit relating to EPA approval of a number of state plans. The court has not yet entered that decree. Accordingly, EPA's disapproval of Wyoming's state implementation plan should have been subject to the Trump Administration's regulatory freeze, as provided under the Priebus Memo.

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such as wildfires. In November 2016, EPA proposed to disapprove Wyoming's plan to address the 2008 ozone standard. After sitting on Wyoming's submission for over two and a half years, EPA gave Wyoming only 30 days to comment. Wyoming asked for a 90-day extension to address EPA's new methodology. EPA denied that request, stating that it could not agree because the Sierra Club did not concur. This sequence of events left Wyoming with no opportunity to develop an approvable plan.

The actions described above took place during the Obama Administration. However, EPA continues to disregard Wyoming's legitimate concerns. EPA chose to violate the Pribus Memo by finalizing the disapproval of Wyoming's implementation plan instead of using its lawful discretion to work cooperatively with the state.

It is important that agencies such as the EPA follow the Pribus Memo and its strictures, to ensure that states such as Wyoming are not harmed by ill-conceived actions set in motion during the Obama Administration.

Sincerely,



John Barrasso, M.D.  
Chairman  
Committee on Environment and Public Works  
United States Senate

cc: Don Benton, Senior White House Advisor, EPA



Matthew H. Mead, Governor

## Department of Environmental Quality

*To protect, conserve and enhance the quality of Wyoming's  
environment for the benefit of current and future generations.*



Todd Parfitt, Director

May 23, 2016

Monica Morales  
Acting Director  
Air Program  
U.S. Environmental Protection Agency  
Region 8  
1595 Wynkoop Street  
Denver, CO 80202-1129

**RE: Wyoming Department of Environmental Quality (WDEQ) Exceptional Events  
Demonstration Packages; 2011-2014**

Dear Ms. Morales:

The State of Wyoming, Department of Environmental Quality – Air Quality Division (AQD) has reviewed your letter, and offers the following comments, regarding the Environmental Protection Agency (EPA) Region 8's preliminary review of, and decision to not act upon, WDEQ's exceptional event demonstration submittals for calendar years 2011-2014. The AQD appreciates EPA Region 8's notification of preliminary review, but ultimately finds the EPA's proposed inaction on WDEQ's request for concurrence on monitoring data flagged as influenced by exceptional events to be very disappointing. The AQD renews its requests for EPA Region 8 action.

The EPA's inaction – to shelve Wyoming's exceptional event submissions until the EPA views them as the subject of an attainment demonstration or other EPA regulatory decision – signals the EPA's general disregard for the significant time and staff resources committed by the AQD for each individual exceptional event demonstration. The EPA's response to Wyoming's submittals may discourage other state regulatory agencies from performing thorough, meticulous work on future exceptional event demonstrations under the presupposition that these demonstrations will be merely shelved once they reach federal review. This does not align with the objectives of the EPA or WDEQ, as both entities should be wholly committed to providing outstanding responsiveness on environmental policy issues.

Furthermore, the EPA's justification for inaction is also problematic. Although certain exceptional event demonstrations that appear on the enclosed table of WDEQ's 2011-2014 packages may not directly pertain to a specific pending regulatory decision – such as whether an area will be considered nonattainment – they nevertheless represent exceedances of the National Ambient Air Quality Standards (NAAQS) that the AQD has determined were caused by circumstances beyond regulatory control. Unless these flagged data demonstrations are approved by the EPA, they are ultimately considered to be "violations" – regardless of whether such a "violation" is warranted – and Wyoming is left with possible

undue consequences of delays to New Source Review permitting actions, performing follow-up casework with stakeholders, as well as the abiding perceptions of the general public. Additionally, the AQD and other state agencies face the burden of implementing federal policies that are developed on the basis of elevated monitored data – data that should have been excluded from emission inventories as a result of being properly classified as exceptional events – and therefore, exceptional event demonstrations that are not acted upon by the EPA still influence regulatory decisions that directly impact states. Whereas in the past, EPA Region 8 had conferred with the AQD in compiling this list of shelved exceptional event demonstrations, there was no two-way dialogue in this instance. The AQD does not believe this is a reasonable or efficient practice. The AQD respectfully requests that the EPA acts on WDEQ's concurrence requests or reopens its dialogue with WDEQ regarding which flagged monitored data will be considered for the EPA's full review.

#### **Prior State Involvement in Demonstration Selection**

As previously noted, the April 2016 letter from EPA Region 8 runs contrary to prior discussions between the EPA and the AQD regarding whether flagged data would be fully considered and reviewed by the EPA. The EPA's guidance on exceptional event demonstrations acknowledges that states should highlight the significance of each flagged event, and Wyoming has consistently followed this guidance by detailing the importance of certain demonstrations in its cover letter to the EPA. In this most recent instance, however, the AQD was merely informed that a series of 46 exceptional events – event demonstrations that AQD staff had invested significant time, resources, and analysis into compiling – would not be acted upon by the EPA unless the demonstrations became the subject of a future attainment demonstration or other specific EPA regulatory decision.

The EPA's practice is troublesome for the AQD on several fronts. It disregards a significant analytical and laborious effort undertaken by the AQD over the years – an effort that Wyoming undertook with the full expectation that the EPA would ultimately consider and act on the flagged data. The EPA's failure to act wastes state agency resources. The AQD maintains that, if it has technically demonstrable justification to compile an exceptional event demonstration, and if it has undertaken the effort in compiling that demonstration, then the EPA should fulfill its responsibility to take action. The EPA should honor the work undertaken by state agencies by providing its full consideration.

#### **Concerns Regarding State-Level Regulatory Decisions**

The AQD is in the unique position of having several industrial ambient monitors required through New Source Review permits that must meet EPA requirements, and therefore, data that are currently eligible for treatment under the Exceptional Event Rule. There have been several instances where data have been influenced by exceptional events at these monitors. In these instances, the AQD has demonstrated the regulatory significance of these events and has submitted demonstrations for review by the Region. The EPA's follow-through on the regulatory review process would lessen regulatory uncertainty by allowing a regulatory mechanism to demonstrate the effect of exceptional events upon ambient data used for permitting and regulatory decisions at the state level. This would benefit all regulatory entities involved, as it would allow for the AQD to operate as efficiently and decisively as possible in acting upon ambient monitored data.



### Placing Undue Accountability on State Agencies

The EPA's approach is further problematic to the AQD because the state agency is ultimately left to deal with the lingering consequences of NAAQS "violations" that were entirely beyond the control of any regulatory entity. These consequences are not necessarily limited to specific EPA attainment or other regulatory determinations. The notion that only such pending regulatory determinations are relevant in evaluating flagged monitoring data is a significant misconception on the EPA's behalf.

While the EPA's evaluation of a certain exceptional event demonstration may not have specific bearing on whether or not a certain area is able to attain the NAAQS, these monitored data are nevertheless included in conjunction with national emission inventories and modeling exercises that are ultimately considered by the EPA in establishing policy and developing federal regulations. Exceptional event demonstrations make compelling cases that certain elevated monitored data should be disregarded when creating regulatory policy. When the EPA disregards and fails to act on these demonstrations, however, the consequence is the inclusion of inflated monitored data that misrepresents the prevailing air quality conditions. For example, the shelved data on Wyoming's exceptional event demonstration list from the 2012 summer is attributable to the omnipresence of wildfire emissions in the state, or transported into the state, due to an extraordinarily active wildfire season. The EPA's reluctance to act on Wyoming's exceptional event demonstration submissions ultimately means that these exceedances represent "violations" of the NAAQS – from a regulatory standpoint, and in the eyes of the public – even though these events were beyond regulatory control. This is simply an unfair and unsound practice and is ultimately counterproductive to the state, the EPA, and the public.

Additionally, the EPA's inaction is problematic because there are many circumstances where the consideration of exceptional event-influenced data would impact regulatory domains beyond NAAQS attainment. One such example is regional haze, where a wildfire-heavy summer – including wildfires burning in other states – would contribute significantly to pollutant levels in Wyoming and impact the presence of regional haze, despite the State of Wyoming having no capacity to control those emissions. This was, again, the case in 2012, where levels of  $PM_{2.5}$  in Wyoming increased dramatically between June and September because of the omnipresence of wildfires – largely attributable to the extraordinarily dry meteorological conditions.

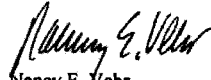
Although Wyoming still attained the primary annual arithmetic mean and the primary 24-hour average for both the 2006 and 2012  $PM_{2.5}$  NAAQS, the elevated  $PM_{2.5}$  levels attributable to exceptional events still impacted the state's capacity to demonstrate that the state's overall marginal levels of  $PM_{2.5}$  did not contribute significantly to regional haze. These exceptional events were significant in number (there were several multi-day wildfires throughout the summer) and had impacts beyond the State's regulatory capacity. Ultimately, the EPA's consideration of monitored data, bereft of exceptional event demonstrations results in a misrepresentation of the adequacy of existing state regulations and shifts state resources from addressing areas of concern to addressing situations that are not problematic.

**Conclusion**

The AQD hopes that its request and suggestions ensure that the EPA fully considers these exceptional event demonstrations. The EPA's action is extremely beneficial for the planning and submittal of regulatory documents that may be influenced – both in scope and in details – by the classification of exceptional events that impact monitored data, and consequentially impact the regulatory decisions that air agencies must make. It is important to the State of Wyoming that the EPA honors its commitment to act on these exceptional event demonstrations.

Thank you for the opportunity to reply to your letter. As always, the AQD is available to discuss any of the concerns outlined in this letter. Please feel free to contact the AQD at 307-777-7391.

Sincerely,



Nancy E. Wehr  
AQD Administrator

Cc: Adam Clark, EPA Region 8  
Cara Keslar, AQD  
Amber Potts, AQD  
Mike Morris, AQD



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

## REGION 8

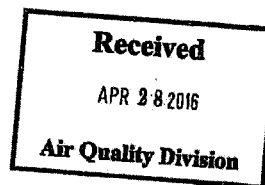
1595 Wynkoop Street  
 Denver, CO 80202-1129  
 Phone 800-227-8917  
 www.epa.gov/region08

APR 27 2016

Ref: 8P-AR

Nancy Vehr, Administrator  
 Air Quality Division  
 Wyoming Department of Environmental Quality  
 200 West 17<sup>th</sup> Street  
 Cheyenne, Wyoming 82002

Re: Wyoming Department of Environmental Quality  
 (WDEQ) Exceptional Events Documentation  
 Packages; 2011-2014



Dear Ms. Vehr:

This letter is in response to WDEQ's submittals of demonstrations of exceptional event influence on PM<sub>2.5</sub>, PM<sub>10</sub>, and ozone monitoring data for calendar years 2011-2014. The demonstration documents contain information regarding monitoring data flagged by WDEQ to indicate that PM<sub>10</sub> National Ambient Air Quality Standards (NAAQS) exceedances were affected by high winds, PM<sub>2.5</sub> NAAQS exceedances were affected by wildfires, and ozone NAAQS exceedances were affected by stratospheric intrusions.

A preliminary review of the demonstrations submitted indicates that the flagged PM and ozone data may have been influenced by exceptional events; however, at this time the EPA will not take action on WDEQ's request for concurrence on the referenced data flags. The data are not anticipated to be involved in any pending regulatory decision by the EPA, therefore, the EPA is not making a concurrence decision on the demonstrations submitted. If at some point in the future the flagged data would be included in an attainment demonstration or involved in other regulatory decisions, the EPA would then undertake a full review of the submitted demonstrations to allow a concurrence decision at that time.

The enclosed table provides a summary of the flagged PM<sub>2.5</sub>, PM<sub>10</sub>, and ozone monitoring data WDEQ provided for the calendar years 2011-2014 subject to this letter. With this letter, the EPA is determining our review of the WDEQ 2011-2014 packages listed in the enclosed table to be complete. As always, the EPA staff are available to answer any questions your staff may have and to provide help where needed. For additional information, please feel free to contact me, or your staff may contact Kyle Olson, of my staff, at (303) 312-6002.

Sincerely,

*Monica Morales*  
 Monica Morales, Acting Director  
 Air Program



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EE Date	Year	Location	Monitor ID	Parameter	Monitored Value
5/30/2011	2011	South Pass	56-013-0099-1	O <sub>3</sub>	81 ppb
1/11/2012	2012	Naughton	56-023-0820-2	PM <sub>10</sub>	312 µg/m <sup>3</sup>
1/12/2012	2012	Naughton	56-023-0820-2	PM <sub>10</sub>	167 µg/m <sup>3</sup>
1/13/2012	2012	Naughton	56-023-0820-2	PM <sub>10</sub>	325 µg/m <sup>3</sup>
1/16/2012	2012	Naughton	56-023-0820-2	PM <sub>10</sub>	179 µg/m <sup>3</sup>
1/18/2012	2012	Naughton Mountain Cement	56-023-0820-2 56-001-0800-3	PM <sub>10</sub> PM <sub>10</sub>	174 µg/m <sup>3</sup> 170 µg/m <sup>3</sup>
1/21/2012	2012	School Creek - 3	56-005-0086-1	PM <sub>10</sub>	226 µg/m <sup>3</sup>
		School Creek - 2	56-005-0087-1	PM <sub>10</sub>	223 µg/m <sup>3</sup>
		N Antelope/ Rochelle RO-1	56-005-0869-2	PM <sub>10</sub>	200 µg/m <sup>3</sup>
3/26/2012	2012	Mountain Cement	56-001-0800-3	PM <sub>10</sub>	204 µg/m <sup>3</sup>
4/12/2012	2012	Buckskin Mine N	56-005-1899-1	PM <sub>10</sub>	180 µg/m <sup>3</sup>
6/5/2012	2012	Wyodak	56-005-0901-1	PM <sub>10</sub>	237 µg/m <sup>3</sup>
		Bridger Coal JB-4	56-037-0860-1	PM <sub>10</sub>	215 µg/m <sup>3</sup>
6/6/2012	2012	Thunder Basin	56-005-0123-1	O <sub>3</sub>	88 ppb
6/26/2012	2012	Pinedale	56-035-0101-1	PM <sub>2.5</sub>	47.0 µg/m <sup>3</sup>
6/28/2012	2012	Big Piney	56-035-0700-1	PM <sub>2.5</sub>	53.8 µg/m <sup>3</sup>
6/29/2012	2012	Lander	56-013-1003-1	PM <sub>2.5</sub>	41.8 µg/m <sup>3</sup>
		Casper	56-025-0001-1	PM <sub>2.5</sub>	36.5 µg/m <sup>3</sup>
		Big Piney	56-035-0700-1	PM <sub>2.5</sub>	110.6 µg/m <sup>3</sup>
6/30/2012	2012	Big Piney	56-035-0700-1	PM <sub>10</sub>	190 µg/m <sup>3</sup>
		Big Piney	56-035-0700-1	PM <sub>2.5</sub>	143.7 µg/m <sup>3</sup>
7/1/2012	2012	Big Piney	56-035-0700-1	PM <sub>2.5</sub>	85.4 µg/m <sup>3</sup>
7/2/2012	2012	Big Piney	56-035-0700-1	PM <sub>2.5</sub>	97.4 µg/m <sup>3</sup>
7/3/2012	2012	Big Piney	56-035-0700-1	PM <sub>2.5</sub>	74.7 µg/m <sup>3</sup>
7/4/2012	2012	Gillette Col.	56-005-0800-1	PM <sub>2.5</sub>	56.5 µg/m <sup>3</sup>
		Belle Ayr BA- 4	56-005-0892-1	PM <sub>2.5</sub>	55.3 µg/m <sup>3</sup>
		Antelope 3	56-009-0819-1	PM <sub>2.5</sub>	47.0 µg/m <sup>3</sup>
		Big Piney	56-035-0700-1	PM <sub>2.5</sub>	68.4 µg/m <sup>3</sup>
7/5/2012	2012	Big Piney	56-035-0700-1	PM <sub>2.5</sub>	38.6 µg/m <sup>3</sup>
9/18/2012	2012	Wyoming Range	56-035-0097-1	PM <sub>2.5</sub>	39.1 µg/m <sup>3</sup>
9/20/2012	2012	Wyoming Range	56-035-0097-1	PM <sub>2.5</sub>	52.3 µg/m <sup>3</sup>

EE Date	Year	Location	Monitor ID	Parameter	Monitored Value
		Pinedale	56-035-0101-1	PM <sub>2.5</sub>	44.8 µg/m <sup>3</sup>
9/21/2012	2012	Rock Springs	56-037-0007-1	PM <sub>2.5</sub>	37.6 µg/m <sup>3</sup>
		Jackson Hole	56-039-1006-1	PM <sub>2.5</sub>	39.2 µg/m <sup>3</sup>
12/2/2012	2012	Buckskin Mine N	56-005-1899-1	PM <sub>10</sub>	167 µg/m <sup>3</sup>
12/20/2012	2012	N Antelope/ Rochelle RO-1	56-005-0869-2	PM <sub>10</sub>	188 µg/m <sup>3</sup>
3/4/2013	2013	Black Thunder	56-005-0891-2	PM <sub>10</sub>	166 µg/m <sup>3</sup>
3/17/2013	2013	Black Butte #10	56-037-0868-2	PM <sub>10</sub>	261 µg/m <sup>3</sup>
		Black Butte I- 80	56-037-1868-1	PM <sub>10</sub>	432 µg/m <sup>3</sup>
6/13/2013	2013	Kemmerer Mine	56-023-0800-1	PM <sub>10</sub>	273 µg/m <sup>3</sup>
1/13/2014	2014	Black Butte #10	56-037-0868-2	PM <sub>10</sub>	166 µg/m <sup>3</sup>
2/21/2014	2014	Black Butte Lucite Hills	56-037-0852-1	PM <sub>10</sub>	204 µg/m <sup>3</sup>
3/17/2014	2014	Black Butte #10	56-037-0868-2	PM <sub>10</sub>	202 µg/m <sup>3</sup>
		Black Butte Lucite Hills	56-037-0852-1	PM <sub>10</sub>	242 µg/m <sup>3</sup>
4/28/2014	2014	Black Butte Lucite Hills	56-037-0852-1	PM <sub>10</sub>	219 µg/m <sup>3</sup>
7/14/2014	2014	Black Butte Lucite Hills	56-037-0852-1	PM <sub>10</sub>	294 µg/m <sup>3</sup>



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

January 29, 2018

OFFICE OF  
AIR AND RADIATION

The Honorable John Barrasso, M.D.  
Chairman  
Committee on Environment and Public Works  
United States Senate  
Washington, D.C. 20510

Dear Chairman Barrasso:

Thank you for your letter of January 9, 2018, to the U.S. Environmental Protection Agency Administrator Scott Pruitt, regarding the 1995 "once-in-always-in" policy under section 112 of the Clean Air Act (CAA).

On January 25, 2018, EPA issued a guidance memorandum withdrawing the 1995 "once in always in" policy for the classification of major sources of hazardous air pollutants. With the new guidance, sources of hazardous air pollutants previously classified as "major sources" may be reclassified as "area" sources when the facility limits its potential to emit toxic air pollution below major source thresholds. The memo is another step by which EPA is reducing unnecessary regulatory burdens that deterred innovative efforts to improve the environment.

This guidance is based on a plain language reading of the statute that is in line with EPA's guidance for other provisions of the CAA. It will reduce regulatory burden for industries and the states, while continuing to ensure stringent and effective controls on hazardous air pollutants.

For more than 20 years, many stakeholders have expressed concerns similar to yours about this policy. It was a longstanding disincentive for sources to implement voluntary pollution abatement and prevention efforts, or to pursue technological innovations that would reduce hazardous air pollution emissions. States, state organizations and industries have frequently requested rescission of this policy, which was one of the most commonly cited requests in response to President Trump's Executive Order 13777. EPA's action is an important step in furtherance of the President's regulatory reform agenda while providing a meaningful incentive for investment in hazardous air pollutant reduction activities and technologies.

Again, thank you for your letter. If you have further questions, please contact me or your staff may contact Matthew Davis in the EPA's Office of Congressional and Intergovernmental Relations at [davis.matthew@epa.gov](mailto:davis.matthew@epa.gov) or (202) 564-1267.

Sincerely,

A handwritten signature in black ink, appearing to read "W L Wehrum", with a long, sweeping horizontal stroke extending to the right.

William L. Wehrum  
Assistant Administrator



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

February 1, 2018

OFFICE OF  
AIR AND RADIATION

The Honorable John Barrasso, M.D.  
Chairman  
Committee on Environment and Public Works  
United States Senate  
Washington, D.C. 20510

Dear Chairman Barrasso:

I am writing in response to your January 19, 2018, letter requesting attention to various National Ambient Air Quality Standards (NAAQS) implementation issues, including exceptional events determinations and interstate transport of ozone.

The U.S. Environmental Protection Agency's October 2017 *Final Report on Review of Agency Actions that Potentially Burden the Safe, Efficient Development of Domestic Energy Resources Under Executive Order 13783* outlined a variety of concerns identified by commenters regarding NAAQS implementation issues.<sup>1</sup> In order to address issues related to the ozone NAAQS, I formed the Ozone Cooperative Compliance Task Force. The Task Force is reviewing administrative options to enable states to enter into cooperative agreements with the EPA to provide regulatory relief and meaningfully improve ozone air quality. The Task Force is focused on: fully understanding the role of background ozone levels; appropriately accounting for international transport; and timely consideration of exceptional events demonstrations. Moreover, the EPA plans to work to streamline state implementation plan (SIP) approvals through a nationally consistent process. On January 8, the EPA provided a status report to the U.S. Court of Appeals for the D.C. Circuit indicating that the agency is continuing to review the 2015 ozone NAAQS to determine whether the standards should be maintained, modified, or otherwise reconsidered.

The EPA is committed to working with states like Wyoming to address challenges with exceptional event demonstrations under section 319(b) of the Clean Air Act (CAA). In September 2016, the EPA finalized revisions to the Exceptional Events Rule in an attempt to improve administrative efficiency and reduce burdens for the demonstration process. Under the new rule, the EPA has concurred on several ozone-related demonstrations in 2017 and looks forward to working closely with the Committee and the state of Wyoming to facilitate implementation in a manner consistent with cooperative federalism. The updated rule includes an initial notification process to enable early engagement as well as intended response timelines for an initial review of submitted demonstrations within 120 days and a complete review of final demonstrations within 12 months. The EPA has recently posted submitted materials and EPA reviews for successful

<sup>1</sup> <https://www.epa.gov/sites/production/files/2017-10/documents/ea-13783-final-report-10-25-2017.pdf>.



demonstrations under the revised rule,<sup>2</sup> as well as several tools which should improve the process (including a June 2017 Mitigation Plan checklist and an April 2017 *Best Practices for Preparation of Multi-Agency Exceptional Events Demonstrations*).<sup>3</sup> The EPA also intends to transition to a national electronic tracking system for exceptional events as well as develop additional implementation materials related to alternate paths for data exclusion (including for air quality data that may influence regulatory determinations or actions typically outside the scope of the exceptional events rule), stratospheric ozone intrusions, high wind events, and prescribed fires.

We look forward to working with the Committee and the state of Wyoming to ensure that the “Good Neighbor” provisions of the CAA’s section 110 reflect regional differences. I intend to engage in a transparent process that will allow states to have a meaningful opportunity to understand their obligations with regard to reducing emissions that cause or contribute to nonattainment or interference with maintenance in other states through the SIP process. In October 2017, a memorandum from EPA’s Office of Air Quality Planning and Standards provided supplemental information to states for development of Good Neighbor SIPs under the 2008 ozone NAAQS.<sup>4</sup> This updated modeling “indicates that there are no monitoring sites, outside of California, that are projected to have nonattainment or maintenance problems with respect to the 2008 ozone NAAQS of 75 ppb in 2023.” The EPA also intends to work closely with states early this year to provide more information and flexibility as they look to address interstate transport issues under the 2015 ozone NAAQS.

Again, thank you for your letter. If you have further questions, please contact me or your staff may contact Matthew Davis in the EPA’s Office of Congressional and Intergovernmental Relations at [davis.matthew@epa.gov](mailto:davis.matthew@epa.gov) or at (202) 564-1267.

Sincerely,



William L. Wehrum  
Assistant Administrator

<sup>2</sup> <https://www.epa.gov/air-quality-analysis/exceptional-events-submissions-table-2016-rule>.

<sup>3</sup> <https://www.epa.gov/air-quality-analysis/exceptional-events-implementation-tools-templates-and-links>.

<sup>4</sup> [https://www.epa.gov/sites/production/files/2017-10/documents/final\\_2008\\_o3\\_naaqs\\_transport\\_memo\\_10-27-17b.pdf](https://www.epa.gov/sites/production/files/2017-10/documents/final_2008_o3_naaqs_transport_memo_10-27-17b.pdf).



March 16, 2018

The Honorable Scott Pruitt  
Office of the Administrator  
U.S. Environmental Protection Agency  
1200 Pennsylvania Ave. NW  
Washington, DC 20460



Re: EPA Response to D.C. Circuit Decision in *South Coast Air Quality Management District v. EPA*, Case No. 15-1115

Dear Administrator Pruitt:

The American Association of State Highway and Transportation Officials (AASHTO) and the Association of Metropolitan Planning Organizations (AMPO) jointly request that the Environmental Protection Agency (EPA) file a petition for rehearing and request for stay of the February 16, 2018 decision in *South Coast Air Quality Management District v. EPA*, Case No. 15-1115 in the U.S. Court of Appeals for the District of Columbia. This letter sets forth the reasons for this urgent request.

In the *South Coast* decision, the court vacated major portions of a 2015 final rule that established procedures for transitioning from the 1997 National Ambient Air Quality Standard (NAAQS) for ozone to the stricter 2008 NAAQS for the same pollutant.<sup>1</sup> The 2015 rule included several important provisions to avoid imposing duplicative and unnecessary regulatory burdens. Of most importance to transportation agencies, the 2015 rule ensured that areas designated as nonattainment or maintenance for the 1997 standard would not be subject to air quality conformity requirements if those areas are in attainment for the stricter 2008 standard.

The court decision overturned this common-sense provision in the 2015 rule, holding that areas designated as nonattainment or maintenance for the 1997 standard—but as attainment for the 2008 standard—must remain subject to conformity requirements for the 1997 standard to avoid “backsliding” on efforts to meet that standard. But the court also *agreed* with EPA’s finding that the “measures that achieved attainment of both the 1997 NAAQS and the 2008 NAAQS should be adequate to maintain the same 2008 NAAQS that has already been attained.” The contradiction is clear: on one hand, the court finds that conformity must continue to apply for the 1997 standard to avoid backsliding; but on the other, the court agreed that the measures already in effect in those areas should be sufficient to maintain compliance with the stricter 2008 standard.

<sup>1</sup> See “Implementation of the 2008 National Ambient Air Quality Standards for Ozone: State Implementation Plan Review Requirements,” 80 Fed. Reg. 12,264 (Mar. 6, 2015).

The court also vacated several other provisions in the rule that provided flexibility in transitioning to the 2008 ozone standard, and appears to have invalidated EPA's revocation of the 1997 standard. If the revocation of the 1997 standard is invalidated, the implications of this decision are even broader: it would mean that areas designated as nonattainment or maintenance for the 2008 standard must make conformity determinations for the 1997 standard, in addition to making conformity determinations for the stricter 2008 standard for the same pollutant.

The practical effects of this decision on transportation agencies will be severe. As of February 16, 2018, air quality conformity requirements for the 1997 ozone standard have been re-imposed on dozens of areas around the country that have fully attained the stricter 2008 ozone standard, and possibly on dozens of additional areas that are in nonattainment or maintenance for the 2008 standard. The immediate re-imposition of conformity requirements will prevent States and metropolitan planning organizations (MPOs) from approving transportation plans and transportation improvement programs (TIPs) until the necessary air quality analysis and conformity determinations can be completed. Without an approved plan and TIP, the flow of federal funds for highway and transit projects in many areas will be halted.

Moreover, the invalidation of EPA's 2015 rule potentially calls into question the validity of *existing* every plan and TIP approvals made in reliance on that rule. MPOs across the country have approved plans and TIPs since March 2015 without making conformity determinations with respect to the revoked 1997 ozone standard. If EPA were to conclude that those previous plan and TIP approvals are now invalid, given the lack of a conformity determination for the 1997 standard, the effects of this decision would be even more immediate and far-reaching, potentially including a halt to ongoing construction projects.

As an indication of the potential magnitude of the problem, there were 35 nonattainment areas and 80 maintenance areas for the 1997 standard at the time the 1997 standard was revoked. These 115 areas are located in 32 states and 434 counties.<sup>2</sup> The immediate re-imposition of conformity requirements for the 1997 standard could disrupt transportation projects in all of those counties. In Atlanta alone, the MPO has approximately \$1.5 billion of projects in its TIP; in Houston, the MPO has approximately \$4.37 billion of projects in its TIP; in Hampton Roads, Virginia, the TIP includes \$4.89 billion of projects. The re-imposition of the 1997 standard threatens the ability of these and other MPOs to continue moving forward with billions of dollars in projects.

To avoid immediate and far-reaching disruption to transportation projects, it is critical to seek every available means to obtain relief from this court decision. We therefore request that EPA file a petition for rehearing in the D.C. Circuit and seek a stay of the court's decision within the 45-day period allowed for such a petition (by April 2, 2018). If EPA files a petition for rehearing, our organizations intend to seek the court's permission to file an amicus brief in support of the rehearing request.

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<sup>2</sup> See EPA website, <https://www3.epa.gov/airquality/greenbook/gbtc.html>.

In addition, we request that EPA issue interim guidance as soon as possible regarding implementation of the court decision, and that any such guidance provide maximum flexibility and minimize disruption to ongoing projects. Specifically, we ask EPA to confirm that:

- In nonattainment or maintenance areas where the 1997 ozone standard was revoked and no other conformity determinations for other pollutants or standards were required, all existing transportation plans, TIPs and projects are valid for twelve months from the date of the Court decision; at the end of the twelve-month period, a conformity determination for the 1997 ozone standard would be required.
- In areas where the 1997 ozone standard was revoked and conformity requirements for other pollutants or standards apply, all currently approved conformity determinations are valid until the next required conformity determination is made in each such nonattainment or maintenance area. At the time of the next required determination, the nonattainment or maintenance area would meet the conformity requirements for the 1997 ozone standard and any other pollutants or standards for which conformity is required.

While not a complete solution, such guidance may provide some relief from the regulatory burdens and project delays caused by this decision.

We also note that this court decision highlights the need for a permanent legislative solution to resolve the uncertainty about what the Clean Air Act requires when EPA issues a new, stricter NAAQS to replace a previous one for the same pollutant. In its recent infrastructure reform proposal, the White House specifically recommended “[a]mending the Clean Air Act to clarify that conformity requirements apply only to the latest NAAQS for the same pollutant.”<sup>3</sup> We strongly support this recommendation for legislative change.

We appreciate your attention to this urgent request. We would welcome the opportunity to meet with you and your staff to discuss these issues. Should you have any questions, please contact: Melissa Savage from AASHTO at (202) 624-3638, or Bill Keyrouze from AMPO at (202) 624-3683.

Sincerely,



Bud Wright  
Executive Director  
AASHTO



DeLania Hardy  
Executive Director  
AMPO

<sup>3</sup> “Legislative Outline for Rebuilding Infrastructure in America,” (Feb. 12, 2018), p. 44.

cc:

Brandye Hendrickson, Acting Administrator, Federal Highway Administration, U.S. Department of Transportation

K. Jane Williams, Acting Administrator, Federal Transit Administration, U.S. Department of Transportation

Jeffrey Wood, Acting Assistant Attorney General, Environment and Natural Resources Division, U.S. Department of Justice

D.J. Gribbin, Special Assistant to the President for Infrastructure, The White House

Alex Herrgott, Associate Director for Infrastructure, Council for Environmental Quality, The White House



September 15, 2017

Administrator Scott Pruitt  
 U.S. Environmental Protection Agency  
 William Jefferson Clinton Building  
 1200 Pennsylvania Avenue, NW  
 Washington, DC 20460

**Subject: Principles for Addressing Interstate and International Ozone Transport**

Dear Administrator Pruitt:

The Association of Air Pollution Control Agencies (AAPCA)<sup>1</sup> appreciates the opportunity to provide additional feedback to the U.S. Environmental Protection Agency (EPA) on consensus principles for the Agency to address interstate and international ozone transport as it relates to the 2008 and 2015 National Ambient Air Quality Standards (NAAQS) for ground-level ozone. This communication lays out principles to facilitate approvable Good Neighbor State Implementation Plans (SIPs) under Clean Air Act (CAA) Section 110(a)(2)(D)(i)(I) for the 2008 and 2015 ozone NAAQS and is grounded in state and local air agency comments on a number of recent EPA actions.<sup>2</sup>

AAPCA applauds the efforts of EPA, through the Office of Air Quality Planning and Standards and Office of Atmospheric Programs, to conduct more credible modeling for interstate transport in 2023 for the purposes of Good Neighbor SIP development. Based on comments from EPA officials on calls in August, we understand that EPA intends to complete updated national modeling this month that continues to use a 2011 base year and 2023 as a future year. This modeling will update emissions inventories, remove the Clean Power Plan assumptions, and incorporate Reasonably Available Control Technology (RACT) regulations for Pennsylvania and Connecticut for 2023.

Now is the time for EPA to make meaningful updates to its approach to address interstate transport for the ozone NAAQS. Recent state and local comments highlight the need for EPA action on the following issues:

- Re-evaluate the 1 percent threshold for significant contribution, including the assessment for the 2015 ozone NAAQS
- Determine that states should not be required to offset international or non-anthropogenic emissions through interstate transport requirements

<sup>1</sup> AAPCA is a national, non-profit, consensus-driven organization focused on assisting state and local air quality agencies and personnel with implementation and technical issues associated with the federal Clean Air Act. AAPCA represents more than 40 state and local air agencies, and senior officials from 20 state environmental agencies currently sit on the AAPCA Board of Directors. You can find more information about AAPCA at: <http://www.cleanairact.org>.

<sup>2</sup> See compiled comments on: Executive Order (EO) 13777 on Enforcing the Regulatory Reform Agenda (AAPCA also released a July 2017 report, *The State of Regulatory Reform: Navigating State Perspectives on Clean Air Act Regulations Under Executive Order 13777*); Preliminary Interstate Ozone Transport Modeling Data for the 2015 Ozone NAAQS (herein "2017 NODA"); Cross-State Air Pollution Rule Update for the 2008 Ozone NAAQS and related Notice of Data Availability (herein "CSAPR Update"); Implementation of the 2015 NAAQS Standards for Ozone: Nonattainment Area Classifications and SIP Requirements (herein "proposed SIP Requirements Rule"); and the proposed revision to the ozone NAAQS in 2015 (AAPCA reports on state environmental agency perspectives on timely NAAQS implementation and background ozone & regulatory relief provide additional information).



ASSOCIATION OF AIR POLLUTION CONTROL AGENCIES

- Embrace a state-driven process to address interstate transport, including EPA action on timely and relevant SIPs and a re-assessment of expectations for Infrastructure SIPs
- Adjust EPA's methodology for cost-effective nitrogen oxide (NO<sub>x</sub>) controls
- Reassess its approach to identifying downwind maintenance and nonattainment receptors
- Address controls on in-state sources first
- Abandon non-transparent and unreliable modeling platforms
- Pursue other provisions for regulatory relief for international transport

Similarly, tools available to provide regulatory relief to air agencies for significant international contributions of ozone and its precursors have not kept pace with the state of the science and the needs of state and local governments. As discussed in AAPCA's 2017 report, *The Greatest Story Seldom Told: Profiles and Success Stories in Air Pollution Control*,<sup>3</sup> and U.S. EPA's 2017 air trends report, *Our Nation's Air: Status and Trends Through 2016*,<sup>4</sup> tremendous air quality improvements have been made in the U.S., far exceeding international trends, in virtually every measure of air pollution control over the last several decades. EPA's own modeling for interstate transport rules, as well as a series of recent studies – including research from experts at U.S. EPA, the National Aeronautics and Space Administration (NASA), and the National Oceanic and Atmospheric Administration (NOAA) – suggests the challenge of international and non-North American transport has grown substantially with more stringent NAAQS revisions.

To ensure state and local agencies are not inappropriately burdened by ozone concentrations outside their control, additional flexibilities are necessary. The experience of AAPCA members suggests that EPA can take steps to animate policy decisions and statutory provisions to address international ozone transport – including not requiring states to offset international contributions through the Good Neighbor SIP process, applying CAA Section 179B to address international transport and excluding exceptional event data from international sources under CAA Section 319 – and that these moves may have a greater impact on NAAQS attainment than the level of the standard.

Thank you for the attention to the enclosed comments, *Principles for Addressing Interstate and International Ozone Transport*. AAPCA and its members look forward to working with EPA to help carry out these principles to address interstate and international ozone transport under the 2008 and 2015 ozone NAAQS. If you have any questions, please contact Mr. Clint Woods, Executive Director, at [cwoods@csg.org](mailto:cwoods@csg.org) or (859) 244-8040.

Sincerely,

Sean Alteri  
Director, Kentucky Division for Air Quality  
2017 President, AAPCA

Stuart Spencer  
Associate Director, Office of Air Quality  
Arkansas Department of Environmental Quality  
2018 President, AAPCA

<sup>3</sup> [http://www.csg.org/aapca\\_site/documents/GreatestStory4-17-17.pdf](http://www.csg.org/aapca_site/documents/GreatestStory4-17-17.pdf).

<sup>4</sup> <https://www.epa.gov/newsreleases/air-quality-continues-improve-while-us-economy-continues-grow>.



### Principles for Addressing Interstate and International Ozone Transport

U.S. EPA has an opportunity to establish a revised, transparent, state-driven framework for addressing interstate transport as well as to animate provisions to provide regulatory relief for state and local air agencies affected by international ozone contributions. These key decisions (which could be facilitated by the Agency's recently created Task Forces on Regulatory Reform and Ozone Cooperative Compliance<sup>5</sup>) can help address CAA responsibilities in a manner consistent with cooperative federalism, Executive Orders (EOs) on Promoting Energy Independence and Economic Growth<sup>6</sup> and Enforcing the Regulatory Reform Agenda,<sup>7</sup> and the Administration's America First Energy Plan and Foreign Policy. These changes would also be consistent with Administrator Pruitt's belief "in states working collaboratively to address crossborder environmental challenges," and intention to "engage in a transparent process that will allow states to have a meaningful opportunity to understand their obligations with regard to reducing emissions that cause or contribute to nonattainment or interference with maintenance in other states through the SIP process."<sup>8</sup>

Updated EPA modeling efforts are a critical first step. However, these technical changes are inextricably linked to the overall EPA framework which could ensure approvable SIPs – rather than Federal Implementation Plans (FIPs) which may not even provide a full remedy – address interstate transport. Court-ordered FIPs may be issued to 21 states for interstate transport obligations that were not addressed under the CSAPR Update,<sup>9</sup> and EPA has received a number of petitions for administrative reconsideration of the underlying rule.<sup>10</sup> Regardless of the timing of EPA's issuance of initial area designations, air agencies must meet an October 2018 deadline for Good Neighbor SIPs under the 2015 ozone NAAQS. In addition to being of interest to air agencies that have been impacted directly by prior interstate transport rules, EPA's modeling data may also affect other states as the Agency has relied on past transport modeling to disapprove interstate transport elements of SIP submissions.<sup>11</sup>

#### EPA should re-evaluate the 1 percent threshold for significant contribution

In CSAPR, the CSAPR Update, and its 2017 NODA, EPA has relied upon a "contribution screening threshold"<sup>12</sup> of 1 percent to identify upwind states that may significantly contribute to downwind nonattainment and/or maintenance receptors. Although EPA has "historically found that the 1 percent threshold is appropriate,"<sup>13</sup> this approach is not preordained and EPA has also used several alternative metrics for previous significance assessments. The U.S. Supreme Court has noted delegation to EPA to "select among reasonable options" in allocating upwind state contributions to downwind pollution.<sup>14</sup>

<sup>5</sup> [https://www.epa.gov/sites/production/files/2017-06/documents/az\\_ducey\\_6-6-17.pdf](https://www.epa.gov/sites/production/files/2017-06/documents/az_ducey_6-6-17.pdf).

<sup>6</sup> 82 FR 16093.

<sup>7</sup> 82 FR 12285.

<sup>8</sup> [https://www.epw.senate.gov/public/\\_cache/files/6d95005c-bd1a-4779-af7e-be831db6866a/scott-pruitt-qfr-responses-01.18.2017.pdf](https://www.epw.senate.gov/public/_cache/files/6d95005c-bd1a-4779-af7e-be831db6866a/scott-pruitt-qfr-responses-01.18.2017.pdf).

<sup>9</sup> The U.S. District Court for the Northern District Court of California has ordered EPA to issue a FIP for Kentucky no later than June 30, 2018. For more information, see CASE NO. 3:15-CV-04328-JD, "EPA'S OPP. & CROSS-MOTION," filed December 15, 2016, page 17 ("However, EPA could not conclude that the reductions required by the CSAPR Update represent the full amounts of emission reductions necessary for Kentucky (or 20 other states) to satisfy the requirements of the good neighbor provision.")

<sup>10</sup> <https://www.epa.gov/airmarkets/petitions-reconsideration-received-csapr-update>.

<sup>11</sup> For example, see 82 FR 9142.

<sup>12</sup> 81 FR 54573.

<sup>13</sup> 82 FR 1740.

<sup>14</sup> *EPA v. EME Homer City Generation, L.P.*, (2014).





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While EPA characterizes this 1 percent threshold as a screening mechanism, in practice it is used as a black-and-white test for significant contribution.

AAPCA noted in its March 13, 2017 comments on EPA's preliminary transport modeling for the 2015 ozone NAAQS that: "EPA should consider whether an alternative threshold above 0.7 ppb is appropriate, particularly as this preliminary modeling includes complex, uncertain, six-year projections for linkages across long distances for contributions virtually undetectable by monitors." The need to evaluate alternative thresholds is even more important due to increasingly stringent NAAQS. As Ohio EPA stated in their comments on EO 13777: "The lower standards get with each subsequent review by U.S. EPA, approaching background concentrations, the more meaningful this 1 percent threshold becomes and the more insurmountable the task of finding reductions to eliminate the contribution. U.S. EPA must reevaluate this process and raise this threshold if it intends to continue this framework."<sup>15</sup>

These concerns were reiterated in NODA comments from a dozen AAPCA state members,<sup>16</sup> as well as in comments on EPA regulatory reform.<sup>17</sup> A number of state comments discussed EPA's inconsistency in continuing to use this 0.7 ppb threshold after recommending a Significant Impact Level value of 1.0 ppb in its 2016 draft Guidance on Significant Impact Levels for Ozone and Fine Particles in the Prevention of Significant Deterioration Permitting Program.<sup>18</sup> Kentucky cites past EPA practice related to a Section 126 petition in which cross-border emissions of approximately three percent of a NAAQS in a nonattainment area was not considered to cause or contribute to violations.<sup>19</sup>

EPA should allow the use of Anthropogenic Precursor Culpability Assessment (APCA), Ozone Source Apportionment Technology (OSAT), Decoupled Direct Method (DDM), and zero-out brute force (BF) sensitivity runs to determine contribution from upwind states to downwind receptors. EPA should also consider a transition from a 3x3 array to a 1x1 array over some coastal monitors and develop emissions data files to support finer-grid (e.g., 4 kilometer) modeling domain.

EPA should not require states to offset international or non-anthropogenic emissions through interstate transport requirements

U.S. EPA modeling, state agency comments, and recent peer-reviewed science indicate that international emissions and background ozone contribute significantly to downwind nonattainment and maintenance areas. EPA recognized in its proposed SIP Requirements Rule that "contributions to U.S. ozone concentrations from sources outside of the U.S., which can be from nearby sources in a bordering country or from sources many thousands of miles away, can affect to varying degrees the ability of some areas to attain and maintain the 2015 ozone NAAQS."<sup>20</sup> In the memorandum, "Tools for Addressing Background Ozone," which accompanied the October 2015 revision to the ozone NAAQS, EPA noted that: "Under

<sup>15</sup> Ohio Environmental Protection Agency, comments on U.S. EPA's Evaluation of Existing Regulations, May 15, 2017 (pg. 2).

<sup>16</sup> See related comments from: Alabama (pg. 1); Arkansas (pg. 1); Georgia (pg. 1, 6 – 7); Kentucky (pg. 3 – 4); Nevada (pg. 1); North Carolina (pg. 5 – 6); Ohio (pg. 1); South Carolina (pg. 2); Texas (pg. 7); West Virginia (pg. 3 – 4); Wyoming (pg. 4).

<sup>17</sup> See related comments from North Carolina (Attachment, pg. 2 – 3) and Ohio (pg. 1).

<sup>18</sup> Draft Guidance on Significant Impact Levels for Ozone and Fine Particles in the Prevention of Significant Deterioration Permitting Program. In the accompanying legal document, EPA states it has "often equated an insignificant impact with one that is trivial or *de minimis* in nature."

<sup>19</sup> Kentucky DAQ, April 6, 2017, pg. 3 – 4.

<sup>20</sup> 81 FR 81303.



the Clean Air Act, states are not responsible for reducing emissions from background sources.”<sup>21</sup> Despite these acknowledgements, the failure to account for these contributions in the interstate transport process, upwind states are being “required to offset compensate for international emissions.”<sup>22</sup>

U.S. EPA’s August 14 *Report to Congress on Administrative Options to Enable States to Enter into Cooperative Agreements to Provide Regulatory Relief for Implementing Ozone Standards* highlights “understanding the role of background ozone levels” and “appropriately accounting for international transport” as two of the complex issues the Agency and its Ozone Cooperative Compliance Task Force will be evaluating.<sup>23</sup> AAPCA encourages EPA to examine these factors in the interstate transport context as well. In their comments on the proposed revisions to the ozone NAAQS in 2015, more than half of state environmental agencies from across the country identified background ozone or international transport as an achievability or implementation challenge under a revised standard.<sup>24</sup> Recent comments suggest that these contributions are significant and that EPA’s failure to address these concentrations penalizes upwind states for international contributions:

- “Because the modeling domain only includes small fractions of Canada and Mexico, it is very likely that no monitor east of the Rockies would be classified as ‘nonattainment’ or ‘maintenance’ were it not for ‘emissions emanating from outside of the United States’. A rational interpretation of Section 818 of the Federal Clean Air Act (42 U.S. Code, §7509a), therefore, is that while some monitors still may not attain the 2015 ozone standard by 2023, upwind states should not be held responsible for making extraordinary emission reduction to compensate for international emissions.” - Texas Commission on Environmental Quality (CEQ), comments on U.S. EPA’s 2017 NODA, April 5, 2017 (pg. 10)
- “EPA’s modeling identified six counties in four western states, none of which adjoin international borders, with contributions to the 2017 DV from manmade state sources of less than 12 percent and contributions from manmade U.S. sources less than 25 percent, including one with contributions from manmade U.S. sources of 10 percent... Moreover, EPA’s modeling for the 2008 Ozone NAAQS transport assessment demonstrates that in 2017, there are 36 monitor locations in 28 counties in 8 states that will be affected by international contributions of greater than 75 percent of their design values. Further, there are 55 monitors in 38 counties that are modeled to be affected by international contributions greater than 70 percent of the monitors’ design values.” - Western States Air Resources Council (WESTAR), comments on U.S. EPA’s proposed SIP Requirements Rule, February 13, 2017 (Attachment, pg. 1)
- “The latest research estimates ozone transported from Asia range from a few ppb to more than 15 ppb under certain conditions. The science and understanding of international ozone transport is still growing, and to prematurely prevent its use would be in conflict with the intent of the Act.” - San Joaquin Valley Air Pollution Control District, comments on U.S. EPA’s proposed SIP Requirements Rule, February 13, 2017 (pg. 7)
- “For example, the NODA shows 32 sites in Ohio show a significant contribution (up to 3.33 ppb) from Canada/Mexico, including many in counties that are not adjoining the Canadian border.” - Ohio EPA, comments on U.S. EPA’s proposed SIP Requirements Rule, February 13, 2017 (pg. 11)

<sup>21</sup> [https://www.epa.gov/sites/production/files/2015-10/documents/20151001\\_background\\_ozone.pdf](https://www.epa.gov/sites/production/files/2015-10/documents/20151001_background_ozone.pdf).

<sup>22</sup> Texas Commission on Environmental Quality, comments on U.S. EPA’s Preliminary Interstate Ozone Transport Modeling Data for the 2015 Ozone National Ambient Air Quality Standard, April 5, 2017 (pg. 9).

<sup>23</sup> [http://www.csg.org/aapca\\_site/news/documents/FY17OzoneRRR.PDF](http://www.csg.org/aapca_site/news/documents/FY17OzoneRRR.PDF).

<sup>24</sup> AAPCA, *State Environmental Agency Perspectives on Background Ozone & Regulatory Relief*, June 2015.



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- Several recent, peer-reviewed studies suggest international emissions are a major driver of ozone concentrations through the U.S. and have offset as much as half of nitrogen oxide emission controls in the western U.S.<sup>25</sup>
- Other analyses indicate that, based on EPA's transport modeling, but for international transport (through the identification of boundary conditions, initial conditions, Canadian, and Mexican emissions from 2011), no monitor in the country would have an ozone design value greater than 66 ppb in 2017 or 57 ppb in 2023.<sup>26</sup>

EPA should consistently apply the same approach to identifying and addressing interstate and international ozone transport, and the failure to do so subjects states to an overcontrol of emissions as a result of international and background contributions. The inconsistency is highlighted by EPA's proposal in the SIP Requirements Rule to limit the applicability of Section 179B to only allow areas directly adjoining an international border to make international transport demonstrations. As Texas CEQ stated, "EPA has routinely linked upwind states to downwind receptors that are significantly distant from the upwind state. For example, in the EPA's recent Cross State Air Pollution Rule Update, the EPA identified Texas as significantly contributing to ozone nonattainment in Sheboygan County, Wisconsin, approximately 900 miles from the Texas border. It is irrational for the EPA to apply one geographic standard for interstate transport and another far more restrictive standard for international transport of the same criteria pollutant."<sup>27</sup> Similarly, EPA also proposed requiring that areas seeking relief under Section 179B to show that all Reasonably Available Control Measures (RACM) are implemented, even though such a requirement does not exist for downwind areas under recent interstate transport rules.<sup>28</sup>

EPA should embrace a state-driven process to address interstate transport, including EPA action on timely and relevant SIPs and a re-assessment of expectations for Infrastructure SIPs

U.S. EPA's August 2017 *Report to Congress on Administrative Options to Enable States to Enter into Cooperative Agreements to Provide Regulatory Relief for Implementing Ozone Standards*, notes that "all states must submit an 'infrastructure' plan, which addresses basic air quality management provisions of Section 110 of the Act."<sup>29</sup> AAPCA's May 15, 2017 comments on EPA regulatory reform described the shifting expectations for infrastructure/Good Neighbor SIPs: "Historically, states were required to generally demonstrate that they had the adequate authorities and resources in place to comply with each requirement in Section 110(a)(1) and (2). This was commonly achieved by submitting relevant state-level rules that provided these authorities and resources to the state. Over the past several years, however, much more has been asked of the states to fulfill the requirements of these Infrastructure SIPs (iSIPs) for

<sup>25</sup> Lin, M., Horowitz, L. W., Payton, R., Fiore, A. M., and Tonnese, G.: US surface ozone trends and extremes from 1980 to 2014: quantifying the roles of rising Asian emissions, domestic controls, wildfires, and climate, *Atmos. Chem. Phys.*, 17, 2943-2970.

Nopmongkol, U., Liu, Z., Stoeckenius, T., and Yarwood, G.: Modeling intercontinental transport of ozone in North America with CAMx for the Air Quality Model Evaluation International Initiative (AQMEII) Phase 3, *Atmos. Chem. Phys.*, 17, 9931-9943.

Verstraeten, W., Neu, J., Williams, J., Bowman, K., Worden, J., and Boersmal, K., Rapid increases in tropospheric ozone production and export from China, *Nature Geoscience*, August 2015, 1-6.

Cooper, O., Langford, A., Parrish, D., and Fahey, D., Challenges of a lowered U.S. ozone standard, *Science*, June 2015, 1096-1097.

<sup>26</sup> Midwest Ozone Group, "Assessment of International Transport and Improved Ozone Air Quality," (June 22, 2017) and comments on Proposed Denial of 176A Petition.

<sup>27</sup> Texas CEQ, comments on U.S. EPA's 2017 NODA, April 5, 2017 (pg. 7).

<sup>28</sup> Ohio EPA, comments on U.S. EPA's proposed SIP Requirements Rule, February 13, 2017 (pg. 11).

<sup>29</sup> [http://www.csg.org/aapca\\_site/news/documents/FY17OzoneRRR.PDF](http://www.csg.org/aapca_site/news/documents/FY17OzoneRRR.PDF).



promulgations and revisions of various NAAQS. In fact, the states are now asked to submit information for iSIPs that is more appropriate for inclusion into full SIPs or attainment demonstrations. This process has become overly burdensome and requires far too many resources.”<sup>30</sup>

As Ohio EPA indicated in their comments, “U.S. EPA has set a standard for implementation that no State could realistically perform on their own in order to fulfill their obligation to address the good neighbor provision in their infrastructure SIPs, or at least not without significant resource burdens to all the individual States. Therefore, States are repeatedly subject to the FIP process and deterred from their right to try to address the obligation in the first instance with a SIP.”<sup>31</sup> Previous interstate transport rules have involved U.S. EPA issuing a FIP “before even proposing action on relevant and timely submitted SIPs.”<sup>32</sup> States should not be bound by the contribution assessed by U.S. EPA and should be given discretion to craft individualized approaches to address interstate transport.<sup>33</sup>

EPA should adjust its methodology for cost-effective NO<sub>x</sub> controls

EO 13783 on Promoting Energy Independence and Economic Growth states that “...necessary and appropriate environmental regulations...are of greater benefit than cost...”<sup>34</sup> Under CSAPR, the CSAPR Update, and the 2017 NODA, states have repeatedly highlighted concerns about EPA’s methodology for determining cost-effective NO<sub>x</sub> controls. As Kentucky explained in their comments on the 2017 NODA, “EPA’s explanation of the non-linear relationship between emissions reductions of NO<sub>x</sub> and the reduction of ozone concentrations measured at downwind receptors further highlights the technical limitations of interstate transport modeling and questions whether its use is appropriate in determining cost-effective control scenarios.”<sup>35</sup>

EPA should reassess its approach to identifying downwind maintenance and nonattainment receptors

EPA should base its identification of downwind receptors of interest on monitoring data and consider only receptors located in areas designated nonattainment for the applicable standards in its transport analysis. EPA should stop treating projected maintenance areas as identical to projected nonattainment areas when identifying receptors and quantifying upwind emission reductions. This approach is inconsistent with CAA Section 107(a) and results in upwind state NO<sub>x</sub> budgets that control emissions more than the level necessary to maintain attainment with the NAAQS. If EPA continues including maintenance receptors that were never designated nonattainment in their framework, the Agency needs to adopt a more realistic scenario for calculating future design values. Prior to CSAPR, U.S. EPA used a “monitored-plus-modeled” approach to assess interstate transport and determine remedies.<sup>36</sup>

<sup>30</sup> [http://www.csg.org/aapca\\_site/documents/AAPCA-EPARegulatoryReform-DocketIDEPA-HQ-OA-2017-0190-5-15-17.pdf](http://www.csg.org/aapca_site/documents/AAPCA-EPARegulatoryReform-DocketIDEPA-HQ-OA-2017-0190-5-15-17.pdf).

<sup>31</sup> Ohio EPA, comments on U.S. EPA’s Evaluation of Existing Regulations, May 15, 2017 (pg. 2).

<sup>32</sup> Texas CEQ, comments on CSAPR Update (pg. 1).

<sup>33</sup> See related comments: Arizona Department of Environmental Quality, comments on U.S. EPA’s regulatory reform, May 15, 2017 (Attachment 1, pg. 1); Texas CEQ, comments on 2017 NODA, April 5, 2017 (pg. 3); Ohio EPA, comments on 2017 NODA (cover letter, pg. 2).

<sup>34</sup> 82 FR 16093.

<sup>35</sup> Kentucky Division for Air Quality, comments on 2017 NODA, April 6, 2017 (pg. 5). See similar comments on CSAPR Update by Arkansas (pg. 1 - 2), Indiana (pg. 1), Kentucky (pg. 2) Mississippi (pg. 2), Ohio (pg. 1), Tennessee (pg. 1), Iowa, and Michigan.

<sup>36</sup> 62 FR 60324 – 60325; 69 FR 4581.

<sup>36</sup> 62 FR 60324 – 60325; 69 FR 4581.



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The Wyoming Department of Environmental Quality (DEQ) argued in comments on the 2017 NODA that “EPA’s recent actions on transport SIPs have departed from previous approaches to determining adequacy by using the results of a single model rather than weighing all available evidence as it did prior to using CSAPR thresholds.”<sup>37</sup> EPA should differentiate nonattainment and maintenance areas, utilize monitoring data, and account for air quality trends when identifying affected receptors.<sup>38</sup>

EPA needs to address controls on in-state sources first

Section 107(a) of the Clean Air Act states: “Each State shall have the primary responsibility for assuring air quality within the entire geographic area comprising such State by submitting an implementation plan for such State which will specify the manner in which national primary and secondary ambient air quality standards will be achieved and maintained within each air quality control region in such State.” In order to avoid disproportionate emission reductions from upwind states, U.S. EPA should ensure that downwind areas should address local, in-state control strategies for downwind nonattainment or maintenance receptors. Tennessee stated in its comments on the CSAPR Update, “...because the circumstances are such that downwind states are going to need more reductions to attain the NAAQS than is represented by the upwind states contribution, EPA should first identify reasonable reductions available within the downwind nonattainment areas and exhaust those opportunities first.”<sup>39</sup>

EPA should abandon non-transparent and unreliable modeling platforms

AAPCA agencies have continued concern about EPA’s reliance on the Integrated Planning Model (IPM), and appreciate Agency moves to shift to more transparent platforms. Air agencies have catalogued a series of unit-level errors, including inaccurate retirements, in IPM runs used to support prior interstate transport rules.<sup>40</sup> IPM is a proprietary model that often forces air agencies to guess about key inputs and assumptions. As such, its use by EPA is inconsistent with provisions of EO 13777 (requiring Regulatory Reform Task Forces to identify regulations that “rely in whole or in part on data, information, or methods that are not publicly available or that are insufficiently transparent to meet the standard for reproducibility”) and EO 13783 (establishing a policy that environmental regulations “are developed through transparent processes that employ the best available, peer-reviewed science and economics”).

The 2017 NODA acknowledges other projection methodologies, such as the approach used by ERTAC,<sup>41</sup> and these alternatives may have advantages of non-proprietary code, the ability to be transferred to air agencies at no cost, and more frequently updated inputs.<sup>42</sup> AAPCA members have expressed concerns about IPM projections that often “include erroneous assumptions about the future use of electric generating units”<sup>43</sup> and “one size fits all assumptions.”<sup>44</sup> Currently, EPA is preparing emissions

<sup>37</sup> Wyoming DEQ, [comments](#) on 2017 NODA, April 6, 2017 (pg. 3).

<sup>38</sup> See related comments from: Arkansas DEQ, [comments](#) on CSAPR Update, pg. 4; Texas CEQ, [comments](#) on 2017 NODA (pg. 8); AAPCA, [comments](#) on 2017 NODA (pg. 4); North Carolina Division of Air Quality, [comments](#) on CSAPR Update (pg. 12).

<sup>39</sup> Tennessee DEC, [comments](#) on CSAPR Update, pg. 4. See also: [North Carolina Division of Air Quality](#), pg. 3 – 4.

<sup>40</sup> See, for example, 2016 comments on the proposed interstate transport rule for the 2008 ozone NAAQS by environmental agencies of [Georgia](#) (pg. 4 -5), [Indiana](#) (pg. 1), [Louisiana](#) (pg. 2-3), [Kentucky](#) (pg. 2), [Mississippi](#) (pg. 1 - 2), [North Carolina](#) (pg. 1), [North Dakota](#) (pg. 1), [Ohio](#) (pg. 2), [South Carolina](#) (pg. 1), [Tennessee](#) (pg. 2 - 3), [Virginia](#) (pg. 5), [Illinois](#), [Iowa](#), [Michigan](#), [Missouri](#), [New York](#), [Wisconsin](#), and [Connecticut](#).

<sup>41</sup> 82 FR 1736.

<sup>42</sup> [http://www.csg.org/aapca\\_site/news/documents/CSAPRModelingwithERTAC-10-24-2016.pdf](http://www.csg.org/aapca_site/news/documents/CSAPRModelingwithERTAC-10-24-2016.pdf).

<sup>43</sup> South Carolina Department of Health and Environmental Control, [comments](#) on 2017 NODA, April 4, 2017 (pg. 1).

<sup>44</sup> Ohio EPA, [comments](#) on 2017 NODA, April 6, 2017 (pg. 5).



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inventories and modeling for 2023 in response to the court-ordered deadline to implement a Federal Implementation Plan for Kentucky. States believe that this is an excellent opportunity to accept and utilize the latest ERTAC modeling results, with specific input provided by state air agencies.

EPA should seek to animate other provisions for regulatory relief for international transport

In light of peer-reviewed science and EPA modeling showing significant contribution to ground-level ozone from international sources, EPA and its Ozone Cooperative Compliance and Regulatory Reform Task Forces should seek to maximize regulatory relief for air agencies. Utilizing provisions in the Clean Air Act to avoid penalizing state and local governments for international ozone should be a key element of the Administration's pursuit of an America First Energy Policy and Foreign Policy. There are a number of provisions designed to provide regulatory relief from international contributions within EPA's existing authority and the Agency should seek to provide maximum flexibility through the final SIP Requirements Rule or other mechanisms.

*Section 179B – International Transport*

According to EPA, Section 179B of the CAA is a "tool for air agencies to address exceedances of an ozone standard potentially caused by background ozone" that "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."<sup>45</sup> However, an AAPCA survey of comments on the 2015 proposed revision to the ozone NAAQS found that more than one-third of state environmental agencies commented on limitations to the use of CAA Section 179B for demonstrating attainment "but for" international emissions. A follow up survey of AAPCA members found that at least half of responding agencies identified a lack of familiarity with this tool, resource and time constraints, low likelihood of EPA approval, and lack of applicability for their state as limitations to the use of Section 179B.<sup>46</sup> As EPA noted in its final revisions to the Exceptional Events Rule, "CAA Section 179B... does not provide a pathway from designation as a nonattainment area."<sup>47</sup>

In order to animate this provision and follow Congress' intent,<sup>48</sup> U.S. EPA should:

- Not limit this relief to areas affected by Mexico or Canada, or areas directly adjoining international borders, as suggested in the proposed SIP Requirements Rule.<sup>49</sup> EPA previously stated that it "does not believe this provision is restricted to areas adjoining international borders."<sup>50</sup> As discussed previously, EPA modeling and recent, peer-reviewed studies suggest significant contributions from non-North American sources and for areas not adjoining international borders.
- Identify a deadline for EPA action on Section 179B demonstrations.<sup>51</sup>

<sup>45</sup> [https://www.epa.gov/sites/production/files/2015-10/documents/20151001\\_background\\_ozone.pdf](https://www.epa.gov/sites/production/files/2015-10/documents/20151001_background_ozone.pdf).

<sup>46</sup> AAPCA, *State Environmental Agency Perspectives on Background Ozone & Regulatory Relief*, June 2015.

<sup>47</sup> 80 FR 72865.

<sup>48</sup> During debates over CAA Amendments of 1990, Senator Gramm of Texas stated: "It is unfair to hold El Paso accountable for pollution that is generated in a foreign country that they have no control over." Senate Debate on S. 1630, March 9, 1990, reprinted in 4 *Environment and Natural Resources Policy Division, Library of Congress, A Legislative History of the Clean Air Act Amendments 5674, 5742* (1998). See related comments from: *Arizona* (pg. 11); and *WESTAR* (pg. 3).

<sup>49</sup> See related comments from: *Arizona* (pg. 8); *Ohio* (pg. 10 – 11); *North Carolina* (pg. 10 – 11); *Texas* (pg. 7 – 8); *Wyoming* (pg. 4 – 5); *San Joaquin Valley APCD* (pg. 6 – 7); and, *WESTAR* (pg. 1 – 2).

<sup>50</sup> 80 FR 12294.

<sup>51</sup> See related comments from: *Arizona* (pg. 8) and *WESTAR* (pg. 2).



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- Avoid requiring that areas making demonstrations under Section 179B implement RACT and RACM<sup>52</sup> before qualifying for relief and, if possible, limit Nonattainment New Source Review requirements.<sup>53</sup>
- Ensure consistency between the handling of interstate and international ozone transport, as discussed above.
- Provide updated guidance or a general framework outlining steps for successful Section 179B demonstrations.<sup>54</sup> EPA's summary of the background ozone workshop in early 2016 identifies a number of areas in which state air agencies have requested clarity.<sup>55</sup> EPA should consolidate and update related guidance.<sup>56</sup>
- Give states maximum discretion regarding international transport demonstrations.<sup>57</sup>

#### *Section 319 – Exceptional Event Exclusions*

Another tool identified by EPA to address exceedances of the ozone NAAQS is the Exceptional Events Rule under CAA Section 319. AAPCA and its members have provided comments on limitations to the use of this tool through comments on the 2015 ozone NAAQS revision and proposed revisions to the Exceptional Events Rule.<sup>58</sup> EPA has been inconsistent on the applicability of this regulatory relief tool for international contributions, as well as to the role of international transport in other CAA programs.<sup>59</sup> In its final revisions to the Exceptional Events Rule, the Agency stated: “routine or long-term international manmade emissions are not exceptional events because they are caused by human activity that is *likely to recur* at a given location...”<sup>60</sup> In 2015, EPA concluded: “Although monitored data cannot be excluded for a determination of whether an area has attained a NAAQS based solely on the fact the data are affected by emissions from outside the U.S., such data may be excluded from consideration if they were significantly influenced by exceptional events as described in CAA section 319(b).”<sup>61</sup>

In comments on EPA regulatory reform, the Clark County Department of Air Quality argued that EPA should use the same approach to excluding monitored data that is influenced by exceptional events as it

<sup>52</sup> See related comments from: Arizona (pg. 8 – 10); Ohio (pg. 11); North Carolina (pg. 11 – 12); Texas (pg. 7 – 8); Wyoming (pg. 4 – 5); and, WESTAR (pg. 3).

<sup>53</sup> See related comments from: Arizona (pg. 1).

<sup>54</sup> See related comments from: Arizona (pg. 8); North Carolina (pg. 12); San Joaquin Valley APCD (pg. 7); and WESTAR (pg. 2). Also see comments on the proposed 2015 ozone NAAQS by Texas (pg. 34 – 35) and Wyoming (pg. 3), as well as the WESTAR comments on background ozone white paper (pg. 2, 10 – 11).

<sup>55</sup> U.S. EPA, “High-Level Summary of Background Ozone Workshop,” March 15, 2016 (pg. 3).

<sup>56</sup> For example, EPA’s Criteria for Assessing the Role of Transported Ozone/Precursors in Ozone Nonattainment Areas was last updated in May 1991.

<sup>57</sup> Arizona DEQ, comments on EPA’s regulatory reform (pg. 1).

<sup>58</sup> Compiled comments here. See also: AAPCA’s June 2015 report, State Environmental Agency Perspectives on Background Ozone & Regulatory Relief.

<sup>59</sup> For example, in EPA’s 1999 revisions to regional haze regulations, the Agency stated: “The EPA agrees that the projected emissions from international sources will in some cases affect the ability of States to meet reasonable progress goals” (64 FR 35736). However, comments from the Alaska Department of Environmental Conservation (DEC) on EPA regulatory reform highlight a related concern: “ADEC supports the ability to deduct emissions originating from anthropogenic, extreme episodic natural events, and international emission sources from our baseline emissions and progress to reaching natural visibility conditions in 2064. However, ADEC is concerned that EPA acted arbitrarily and capriciously, and contrary to the Clean Air Act, by requiring that Alaska quantify international emission impacts on Class I Areas in Alaska without first identifying the methods for doing so and by shifting EPA’s responsibilities under the CAA to quantify and address those international air emissions to the state.”

<sup>60</sup> 81 FR 68228.

<sup>61</sup> 80 FR 12293.



does for monitored data that is influenced by international transport. These comments also stated: “it is important to delay issuance of a final rule on implementation of the 2015 NAAQS for ozone until EPA has had an opportunity to evaluate the extent to which foreign sources of air pollution... impact designations of areas under section 107(d) of the [CAA] as well as attainment and maintenance of NAAQS.”<sup>62</sup> WESTAR encouraged EPA to further characterize contributions from international anthropogenic emissions which “would facilitate the identification of long-range transport events which may qualify for [Exceptional Event Rule] relief under certain meteorological conditions.”<sup>63</sup>

#### *Other Approaches to Regulatory Relief*

In addition to the tools discussed above, EPA’s 2015 White Paper on background ozone identified three other mechanisms – including through revised data handling and designations – to account for background or internationally transported ozone. EPA stated that these mechanisms were not discussed “due to legal or other deficiencies.”<sup>64</sup> EPA should assess the potential for these mechanisms to address international transport. In light of the consensus comments of state environmental agencies raising concerns about internationally transported ozone creating NAAQS implementation and achievability challenges,<sup>65</sup> EPA and the Clean Air Scientific Advisory Committee should consider these contributions in future NAAQS reviews. EPA should also re-examine the findings and recommendations from the 2010 National Research Council report, *Global Sources of Local Pollution: An Assessment of Long-Range Transport of Key Air Pollutants to and from the United States*.<sup>66</sup>

Additionally, WESTAR’s comments on the background ozone white paper identified concepts for further discussion. These included a principal contributor concept, where “where all background contributions, regardless of origin, are excluded by either a change in the form of the standard or via the [Exceptional Events Rule] from attainment/nonattainment designation following a demonstration that background is the principal contributor to monitored exceedances.”<sup>67</sup> As Nevada Division of Environmental Protection (DEP) comments on EPA regulatory reform stated: “Significant sources of ozone in these areas are not controllable by the states, with international transport, inter-state transport, western wildfires, and stratospheric intrusion the principal contributors.”<sup>68</sup>

<sup>62</sup> Clark County Department of Air Quality, comments on U.S. EPA’s regulatory reform, May 15, 2017 (pg. 2).

<sup>63</sup> WESTAR, comments on background ozone white paper (pg. 7).

<sup>64</sup> U.S. EPA, “Implementation of the 2015 Primary Ozone NAAQS: Issues Associated with Background Ozone,” White Paper for Discussion, December 30, 2015 (pg. 12, footnote 41).

<sup>65</sup> AAPCA, State Environmental Agency Perspectives on Background Ozone & Regulatory Relief, June 2015

<sup>66</sup> National Research Council, *Global Sources of Local Pollution: An Assessment of Long-Range Transport of Key Air Pollutants to and from the United States*, 2010.

<sup>67</sup> WESTAR, “Western States Responses Regarding Background Ozone and Recommendations for Additional Efforts in the Western U.S.,” May 11, 2016 (Attachment, pg. 9).

<sup>68</sup> Nevada DEP, comments on EPA regulatory reform (pg. 1).





October 31, 2017

Administrator Scott Pruitt  
 U.S. Environmental Protection Agency  
 William Jefferson Clinton Building  
 1200 Pennsylvania Avenue, NW  
 Washington, DC 20460

**Subject: Draft FY 2018 – 2022 EPA Strategic Plan (Docket ID: EPA-HQ-OA-2017-0533)**

Dear Administrator Pruitt:

The Association of Air Pollution Control Agencies (AAPCA)<sup>1</sup> appreciates the opportunity to provide feedback to the U.S. Environmental Protection Agency (EPA) on the Draft FY 2018 – 2022 EPA Strategic Plan (“Strategic Plan”). The draft Strategic Plan identifies three strategic goals, in addition to short-term priority goals and updated objectives. These strategic goals include:

- **Core Mission:** Deliver real results to provide Americans with clean air, land, and water.
- **Cooperative Federalism:** Rebalance the power between Washington and the states to create tangible environmental results for the American people.
- **Rule of Law and Process:** Administer the law, as Congress intended, to refocus the Agency on its statutory obligations under the law.

AAPCA members appreciate the emphasis on these three strategic goals, and the corresponding comments are grounded in recent consensus comments and reports transmitted from AAPCA since 2015.

#### Goal 1 – Core Mission

Within this goal, EPA’s identifies Objective 1.1 to “Improve Air Quality” and the accompanying strategic measure to reduce the number of non-attainment areas under the National Ambient Air Quality Standards (NAAQS) program. AAPCA members applaud the prioritization of this objective, and related recommendations have been included in a variety of recent Association resources. In April 2017, AAPCA released a new report, *The Greatest Story Seldom Told: Profiles and Success Stories in Air Pollution Control*, which found that, through the Clean Air Act’s (CAA) framework of cooperative federalism, hard-working state and local air agencies have been responsible for tremendous progress in virtually every measure of air quality. This report catalogued these trends through the inclusion of key metrics for air quality, compliance and enforcement activity, and permitting efficiency. We look forward to working with EPA to continue these trends and encourage EPA to examine metrics contained in this report as well as the Environmental Council of the States’ recently launched interactive web tool, ECOS Results, designed to communicate state stories of public health and environmental progress.<sup>2</sup>

Several recent AAPCA resources have identified recommendations to reduce the number of nonattainment areas. In September 2017, AAPCA transmitted *Principles for Addressing Interstate and International Ozone Transport*, which identified an opportunity for U.S. EPA to “establish a revised,

<sup>1</sup> AAPCA is a national, non-profit, consensus-driven organization focused on assisting state and local air quality agencies and personnel with implementation and technical issues associated with the federal Clean Air Act. AAPCA represents more than 40 state and local air agencies, and senior officials from 20 state environmental agencies currently sit on the AAPCA Board of Directors. You can find more information about AAPCA at: <http://www.cleanairect.org>.

<sup>2</sup> ECOS Results can be accessed at [www.ecosresults.org](http://www.ecosresults.org).



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transparent, state-driven framework for addressing interstate transport as well as to animate provisions to provide regulatory relief for state and local air agencies affected by international ozone contributions.”<sup>3</sup> The experience of AAPCA members suggests that addressing international ozone transport – including not requiring states to offset international contributions through the Good Neighbor State Implementation Plan (SIP) process, applying CAA Section 179B to address international transport and excluding exceptional event data from international sources under CAA Section 319 – may have a greater impact on NAAQS attainment than the level of the standard.

AAPCA and many of its member agencies provided comments to EPA on regulations that may be appropriate to repeal, replace, or modify under Executive Order (EO) 13777 on Enforcing the Regulatory Reform Agenda.<sup>4</sup> These comments included general suggestions on improving the NAAQS and SIP process as well as identifying specific regulations, including the Exceptional Events Rule, 2015 ozone NAAQS, interstate transport rules, and data requirements rule for the 2010 1-hour sulfur dioxide primary NAAQS, which could help reduce the number of nonattainment areas. In addition, in 2015, AAPCA released surveys of state environmental agency perspectives on the need for timely NAAQS implementation tools and on background ozone and tools for regulatory relief.<sup>5</sup>

#### Goal 2 – Cooperative Federalism

AAPCA regularly tracks state and local environmental agency comments on EPA rulemakings and Clean Air Act issues, many of which highlight the need for a state-driven air quality planning process. AAPCA has recently compiled feedback, including comments by member agencies, on the following regulations and topics: EPA actions related to ozone and interstate transport;<sup>6</sup> regional haze;<sup>7</sup> exceptional events;<sup>8</sup> EPA’s startup, shutdown, and malfunction state implementation plan call (“SSM SIP Call”);<sup>9</sup> and, permitting.<sup>10</sup> Related comments on EPA regulatory reform include identification of federal implementation plans, guidance documents as de facto rulemaking, the SSM SIP Call, and the Clean Power Plan as other areas affecting state-driven planning.<sup>11</sup>

<sup>3</sup> AAPCA, *Principles for Addressing Interstate and International Ozone Transport*, September 2017.

<sup>4</sup> On May 15, 2017, AAPCA submitted [comments](#) to U.S. EPA on regulations that may be appropriate for repeal, replacement, or modification under Executive Order 13777 on Enforcing the Regulatory Reform Agenda. Links to other state and local agency comments can be found [here](#). On July 19, 2017, AAPCA released a new report, *The State of Regulatory Reform: Navigating State Perspectives on Clean Air Act Regulations Under Executive Order 13777*.

<sup>5</sup> *State Environmental Agency Perspectives on Timely NAAQS Implementation* (September 2015); *State Environmental Agency Perspectives on Background Ozone & Regulatory Relief* (June 2015).

<sup>6</sup> Comments have been compiled on: EPA’s proposed Response to December 9, 2013 CAA Section 176A Petition From Connecticut, Delaware, Maryland, Massachusetts, New Hampshire, New York, Pennsylvania, Rhode Island and Vermont; EPA’s Preliminary Interstate Ozone Transport Modeling Data for the 2015 Ozone National Ambient Air Quality Standard (NAAQS); Implementation of the 2015 NAAQS for Ozone: Nonattainment Area Classifications and State Implementation Plan Requirements; Cross-State Air Pollution Rule Update for the 2008 Ozone National Ambient Air Quality Standards; and the proposed 2015 Ozone NAAQS.

<sup>7</sup> State and local air agency comments on *Protection of Visibility: Amendments to Requirements for State Plans*.

<sup>8</sup> State and local agency comments on *Proposed Exceptional Events Rule Revisions & Draft Wildfire Guidance*.

<sup>9</sup> A compilation of state and local agency comments on the SSM SIP Call can be found [here](#).

<sup>10</sup> State and local agency [comments](#) on EPA’s proposed Revisions to the Title V Permitting Program Regulations to Improve the Petitions Process and proposed Revisions to the Public Notice Provisions in Clean Air Act Permitting Programs.

<sup>11</sup> AAPCA, *Principles for Addressing Interstate and International Ozone Transport*, September 2017.



ASSOCIATION OF AIR POLLUTION CONTROL AGENCIES

In addition to the objectives and strategic measures identified in the Strategic Plan, AAPCA encourages EPA to identify avenues to increase the early participation of state, local, and tribal experts through federal advisory committees. We appreciate recent efforts by the Administrator to encourage nominations and select qualified experts from state and local environmental agencies for service on critical advisory panels like the Clean Air Scientific Advisory Committee (CASAC), Science Advisory Board (SAB), and the Board of Scientific Counselors. In July 2017, AAPCA and The Council of State Governments announced the public release of STATES AT THE TABLE: Engaging Energy and Environmental Opportunities with Federal Advisory Committees, located at [www.cooperativefederalism.org](http://www.cooperativefederalism.org). This resource seeks to get more state officials involved on the front end of the regulatory and scientific development process at agencies like EPA. In September 2017, AAPCA submitted comments on the list of candidates under consideration for U.S. EPA's chartered SAB and chartered CASAC, both arguing that geographically diverse state and local officials have a unique, independent perspective as a result of their on-the-ground experience carrying out the Clean Air Act and other environmental statutes.<sup>12</sup>

Objective 2.1, "Enhance Shared Accountability," promotes the role of joint governance and compliance assistance in improving environmental protection. AAPCA and its members have provided feedback on critical grant programs and the need for stable, adequate resources to enable this shared accountability. In May 2017, AAPCA transmitted testimony to the U.S. House Appropriations Subcommittee on Interior, Environment, and Related Agencies regarding FY 2018 appropriations for U.S. EPA's State and Local Air Quality Management Grants, underscoring the importance of "Grants to state and local air agencies, including under Section 103 and 105 of the [CAA] and funds negotiated by states and U.S. EPA to be taken off the top for critical training needs."<sup>13</sup> Updated feedback from state and local agencies can also be found in comments for the Office of Air and Radiation and Office of Enforcement and Compliance Assurance ahead of EPA's recently finalized FY2018 – 2019 National Program Manager Guidances.<sup>14</sup>

Objective 2.2, "Increase Transparency and Public Participation," seeks to expand stakeholder collaboration and provide effective platforms for engagement. AAPCA members support a strengthening of partnerships with states, tribes, and communities. AAPCA has highlighted transparency concerns in comments on a variety of topics. For example, in September 2016, AAPCA sent a letter to U.S. EPA's Office of Enforcement and Compliance Assurance and Office of Air and Radiation concerning data display issues on Enforcement and Compliance History Online (ECHO).<sup>15</sup> AAPCA agencies have also expressed continued concern about EPA's reliance on the Integrated Planning Model (IPM), and appreciate Agency moves to shift to more transparent platforms. IPM is a proprietary model that often forces air agencies to guess about key inputs and assumptions. As such, its use by EPA is inconsistent with provisions of EO 13777 (requiring Regulatory Reform Task Forces to identify regulations that "rely in whole or in part on data, information, or methods that are not publicly available or that are insufficiently transparent to meet the standard for reproducibility") and EO 13783 (establishing a policy that environmental regulations "are developed through transparent processes that employ the best available, peer-reviewed science and economics").<sup>16</sup>

<sup>12</sup> In September 2017, AAPCA submitted comments on the [list of candidates](#) under consideration for U.S. EPA's chartered SAB as well as [comments on the list of candidates](#) for U.S. EPA's chartered CASAC.

<sup>13</sup> [http://www.csg.org/aapca\\_site/documents/AAPCATestimony-U.S.HouseInteriorAppropriations-5-23-17.pdf](http://www.csg.org/aapca_site/documents/AAPCATestimony-U.S.HouseInteriorAppropriations-5-23-17.pdf).

<sup>14</sup> EPA response to comments for the [Office of Air and Radiation and Office of Enforcement and Compliance Assurance](#) ahead of EPA's recently finalized FY2018 – 2019 National Program Manager Guidances.

<sup>15</sup> [http://www.csg.org/aapca\\_site/documents/AAPCA-ECHODisplayIssues-9-2-2016.pdf](http://www.csg.org/aapca_site/documents/AAPCA-ECHODisplayIssues-9-2-2016.pdf).

<sup>16</sup> AAPCA, [Principles for Addressing Interstate and International Ozone Transport](#), September 2017.



ASSOCIATION OF AIR POLLUTION CONTROL AGENCIES

### Goal 3 – Rule of Law and Process

AAPCA members support a focus on statutory obligations. For example, recent Association comments on candidates for the SAB and CASAC have focused on the statutory requirements for those panels.<sup>17</sup>

Objective 3.1 seeks to enforce environmental laws to correct noncompliance, noting the critical role of state and local agencies in compliance and enforcement activities. According to U.S. EPA's ECHO, states conducted full compliance evaluations related to the Clean Air Act for more than 14,500 facilities in 2016, more than 80 times as many that were conducted by EPA. For the more than 4,000 facilities subjected to formal or informal enforcement actions in 2016, more than 90 percent were carried out by states – 18 times the number carried out by U.S. EPA.<sup>18</sup>

In “External Factors and Emerging Issues” for Objective 3.1 (and echoed in Objective 1.1), EPA discusses advanced monitoring technology and shifting paradigms for air quality data. AAPCA has developed a fact sheet, entitled *Preparing for Personal Air Sensors: Definition, Opportunities, and Data Limitations*, to help air agencies communicate about advanced monitors and low-cost sensors.<sup>19</sup> Assessments of emerging monitoring technologies by AAPCA members informed the contents of this publication. In *The Greatest Story Seldom Told*, AAPCA highlighted the critical role of state and local agencies in communicating and contextualizing air quality information “in a world of social media as well as the advancement of so-called ‘Big Data’ and highly localized measurement technologies including low-cost personal air sensors.”<sup>20</sup> State and local agencies are often the first point of contact for community air quality concerns.

Objective 3.4 seeks to streamline and modernize permitting and reporting systems. AAPCA highlighted in *The Greatest Story Seldom Told* that member states in 2016 averaged only a 15 percent backlog for renewing Title V permits among states with more than 100 Title V sources, compared to the national average of 20.5 percent. AAPCA and member reviews of EPA regulatory reform have identified a number of permitting and reporting requirements ripe for modernization including: Cross-Media Electronic Reporting Rule (CROMERR); Title V permitting requirements; Revisions to the Public Notice Provisions in Clean Air Act Permitting Programs; permitting requirements for wood burning air curtain incinerators; and Prevention of Significant Deterioration (PSD) permit review.<sup>21</sup>

Thank you for the attention to these comments. If you have any questions, please contact Mr. Clint Woods, Executive Director, at [cwoods@csg.org](mailto:cwoods@csg.org) or (859) 244-8040.

Sincerely,

Stuart Spencer  
Associate Director, Arkansas Department of  
Environmental Quality  
President, AAPCA

<sup>17</sup> AAPCA comments on the list of candidates under consideration for EPA's chartered SAB and chartered CASAC.

<sup>18</sup> AAPCA, *The Greatest Story Seldom Told: Profiles and Success Stories in Air Pollution Control*, April 2017.

<sup>19</sup> AAPCA, “Preparing for Personal Air Sensors: Definition, Opportunities, and Data Limitations,” June 2017.

<sup>20</sup> AAPCA, *The Greatest Story Seldom Told: Profiles and Success Stories in Air Pollution Control*, April 2017, pg. 4.

<sup>21</sup> AAPCA, *Principles for Addressing Interstate and International Ozone Transport*, September 2017.



Atlanta Regional Commission

March 8, 2018

The Honorable Scott Pruitt  
Office of the Administrator  
U.S. Environmental Protection Agency  
1200 Pennsylvania Avenue, N.W.  
Washington, DC 20460

**Re: Request for EPA to Seek an Appeal and Stay of the South Coast Air Quality Management District Ruling**

The recent court ruling in the South Coast Air Quality Management District v. EPA et al., No. 15-1115 (D.C. Cir. Feb. 16, 2018) vacated portions of the 2008 Ozone Implementation Rule (80 Fed. Reg. 12,264) revoking transportation conformity for the 1997 ozone standard. This action appears to result in EPA being unable to render conformity determinations for pending transportation plans and programs in areas originally classified as nonattainment for the 1997 standard. The attached summary details the impacts on the Atlanta region as we understand the court ruling.

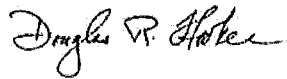
Since Georgia's Metropolitan Planning Organizations (MPOs) have ceased demonstrating conformity to the 1997 ozone standard, per the 2008 Ozone Implementation Rule, several urbanized areas in the state of Georgia are now without a 1997 ozone standard conforming transportation plan, thereby restricting the ability of EPA to approve conformity determinations for amendments to Regional Transportation Plans (RTPs) and Transportation Improvement Programs (TIPs). Currently in Georgia, the Atlanta Regional Commission (ARC) has two RTP/TIP amendments in progress that are impacted by this decision. This court decision threatens the implementation of over \$1.5 billion in federal transportation funds in FY 2018 and FY 2019.

The Atlanta Regional Commission, Georgia Department of Transportation, and Georgia Regional Transportation Authority request that EPA appeal this ruling and request a stay on the previous decision to ensure the transportation planning and project delivery process can continue on schedule. This action will ensure a smooth transition - and prevent delays in the delivery of transportation projects and programs - that will impact the lives of millions of Georgians.

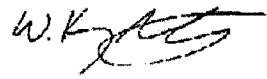
[atlantaregional.org](http://atlantaregional.org)

International Tower  
229 Peachtree St, NE 1 Suite 100  
Atlanta, Georgia 30303

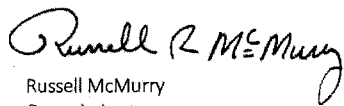
Sincerely,



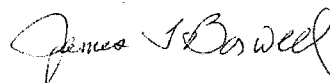
Doug Hooker  
Executive Director  
Atlanta Regional Commission



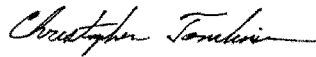
Kerry Armstrong  
Chairman  
Atlanta Regional Commission



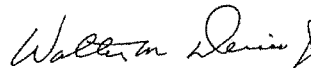
Russell McMurry  
Commissioner  
Georgia Department of Transportation



Jamie Boswell  
Chairman  
Georgia Department of Transportation



Christopher Tomlinson  
Executive Director  
Georgia Regional Transportation Authority &  
State Road and Tollway Authority



Walter M. "Sonny" Deriso, Jr.  
Board Chairman  
Georgia Regional Transportation Authority

C: Ken Wagner, EPA

Attachment: Ozone Implementation Ruling Impacts



DENNIS DAUGAARD  
GOVERNOR OF SOUTH DAKOTA  
CHAIR

DAVID IGE  
GOVERNOR OF HAWAII  
VICE CHAIR

JAMES D. OGSBURY  
EXECUTIVE DIRECTOR

April 9, 2018

Honorable Shelley Capito  
Chair  
Subcommittee on Clean Air and Nuclear Safety  
Committee on Environment and Public Works  
U.S. Senate  
410 Dirksen Senate Office Building  
Washington, D.C. 20510

Honorable Sheldon Whitehouse  
Ranking Member  
Subcommittee on Clean Air and Nuclear Safety  
Committee on Environment and Public Works  
U.S. Senate  
456 Dirksen Senate Office Building  
Washington, D.C. 20510

Dear Chair Capito and Ranking Member Whitehouse:

Western Governors appreciate the attention you are bringing to the issues in your April 10 Subcommittee hearing on Cooperative Federalism Under the Clean Air Act: State Perspectives.

To assist the Subcommittee's consideration of this matter, I request that the following attachments be included in the permanent record for the hearing:

- First, a copy of a February 12, 2018 [letter](#) from Western Governors to the Environmental Protection Agency, Office of Air and Radiation, which sets forth the Governors' priorities for air quality policy and regulation in the West; and
- Second, a copy of WGA Policy Resolution [2017-01, Building a Stronger State-Federal Relationship](#), which provides recommendations for improving cooperative federalism in areas of delegated authority, such as the Clean Air Act.

Please contact me if you have any questions or require further information. In the meantime, with warm regards and best wishes, I am

Sincerely,

James D. Ogsbury  
Executive Director  
Western Governors' Association

Attachments

CALL (303) 633-9378  
VISIT 1600 Broadway  
Suite 1700  
Denver, CO 80202

WESTGOV.ORG



DENNIS DAUGAARD  
GOVERNOR OF SOUTH DAKOTA  
CHAIR

DAVID JOE  
GOVERNOR OF HAWAII  
VICE CHAIR

JAMES D. OGSBURY  
EXECUTIVE DIRECTOR

February 12, 2018

William Wehrum  
Assistant Administrator  
U.S. Environmental Protection Agency  
Office of Air and Radiation (6103A)  
1200 Pennsylvania Avenue, N.W.  
Washington, D.C. 20460

Dear Assistant Administrator Wehrum:

Following up on your discussion with the Western Governors' Association (WGA) executive team last month, this letter provides greater detail regarding the Governors' priorities for air quality policy and regulation in the West. We thank you for your outreach and look forward to working closely with the Office of Air and Radiation (OAR) of the Environmental Protection Agency.

#### **Air Quality Policy and Regulation in the West**

Clean air is essential for strong communities and quality of life. In the West, high elevations, extreme variations in topography, vast landscapes, and vacillating weather patterns influence air quality. The West is also disproportionately impacted by wildfires, high wind dust events, and international transport of pollutants. Pollutant sources, methods of dispersion, and types of impacted areas in the West are very different than those in the eastern United States.

The Clean Air Act (CAA) directs states to reduce emissions from criteria pollutants that states can control – not natural or international sources. Air quality in the West has benefited from significant emissions reductions over the last 20 years, but the number and types of remaining emissions sources controllable by states are somewhat limited.

To address these uniquely western issues, we believe cooperative federalism in air quality management must be strengthened. In some cases, EPA disregards state expertise and authority over air quality. In all cases, EPA should recognize state authority under the CAA and accord states sufficient flexibility to create air quality programs tailored to individual state needs, industries, and economies. WGA Policy Resolution [2017-01, \*Building a Stronger State-Federal Relationship\*](#), has more detail on the Governors' vision for the state-federal relationship.

We are especially focused on improving communications among EPA, federal and state land managers and foresters, and state air quality agencies to address wildfire in the West. Prescribed fire is an essential active management tool to mitigate the threat of catastrophic wildfires. Obstacles to prescribed fire are putting communities and western lands at unnecessary risk. When uncontrolled wildfire does occur, EPA should provide an expedited process to reduce the bureaucratic burden of and efficiently approve exceptional events demonstrations. We ask you to consider how the Agency can promote the responsible use of prescribed fire and implement the other recommendations outlined below.

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Suite 1700  
Denver, CO 80202

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William Wehrum  
February 12, 2018  
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## **Recommendations for Improving Air Quality Policy and Regulation in the West**

### ***Co-Regulation***

- Federal agencies should engage with Governors and state air quality agencies as co-regulators. For example, in the Prevention of Significant Deterioration (PSD) program, EPA should clarify responsibilities and procedures to improve coordination and consultation among state agencies, EPA, and federal land managers, as well as develop guidelines and tools for the program in consultation with states.
- State CAA programs require financial and technical support from EPA and Congress. EPA must also have the resources to perform the research necessary to develop tools, templates, and guidance for states to implement effective and efficient air programs.
- EPA should consult with states prior to any decision on a potential rule or guidance and throughout the drafting process. EPA should also provide states timely implementation guidance when new and revised regulations are published.
- States require certainty and consistency to implement their CAA programs. EPA should maintain the deadline for the New Source Performance Standard (NSPS) for wood stoves and its regulations addressing mobile sources. States are depending on these reductions to comply with their State Implementation Programs (SIPs).
- Under current rules and guidance, states must monitor National Ambient Air Quality Standards (NAAQS) throughout the 20-year maintenance period, even when there is no threat of an exceedance. States should be allowed to reduce monitoring in maintenance areas that demonstrate permanent air quality below the NAAQS, which will free resources to address pollutants that remain a concern.

### ***Ozone***

- Uncontrollable events and conditions such as wildfire, lightning, biogenic emissions, stratospheric ozone intrusion, and transported ozone from international and interstate sources result in elevated levels of background ozone. Western Governors have significant concerns about the lack of CAA tools available to account for ozone exceedances resulting from factors outside state control.
- The West needs additional and ongoing research on background, interstate and international ozone. This research should be transparent, comprehensive and coordinated with state air quality agencies and regional organizations. With this new information, EPA should reconsider the one percent threshold for significant contribution for interstate ozone transport obligations.

### ***Exceptional Events***

- Exceptional event demonstrations are resource-intensive, costly and place a significant burden on strained state resources, especially when EPA does not review these state submissions in a timely manner. EPA should streamline the process for exceptional event demonstrations,

William Wehrum  
February 12, 2018  
Page 3

provide additional technical tools for states, and allocate resources to review state demonstrations.

- Western Governors believe the states and EPA would benefit from the following approaches to exceptional events demonstrations: (1) aggregation of multiple factors contributing to air quality to prove a single exceptional event exceedance demonstration; (2) regional exceptional event demonstrations; and (3) reference to previously submitted and approved exceptional events demonstrations for repeated event types.
- EPA should: create an online submission system for exceptional event demonstrations; develop a database with information on air quality impacts in the West (with special emphasis on wildfires); and provide a clearinghouse with tools that states can use for exceptional events demonstrations.

#### ***Regional Haze***

- Good visibility in the 118 western Regional Haze Program Class 1 Areas, which include many of the crown jewels of the West's national parks and wilderness areas, impacts western states' economies. It is important to address mobile and international emissions sources beyond states' control in the context of western states' regional haze planning processes.
- The profound impacts of fire and smoke on the visibility at Class I areas in the West should be recognized in the Regional Haze Guidance and Rule.
- EPA provided Draft Regional Haze Guidance for the second implementation period of the Rule in July 2016, but has not finalized this guidance. States are beginning work on their SIPs for the second implementation period. Final Regional Haze Guidance is necessary to reduce uncertainty for states as they formulate their SIPs.
- Given the importance of improved visibility in the West, EPA should provide funding and resources to states throughout the planning and implementation process.

#### ***Wildfire and Prescribed Fire***

- More frequent and intense wildfires are steadily reducing the West's gains in air quality improvement. Smoke from wildfires can cause air quality to exceed the NAAQS for particulate matter and ozone, impacting public health, safety and transportation. Prescribed fire, which is managed according to state SIPs and smoke management programs, can reduce these impacts, but is currently underutilized.
- Western Governors support the use of prescribed fire to reduce the air quality impacts from uncharacteristic wildfire in the West. Federal and state land managers should have the ability to use prescribed fires when weather and site conditions are appropriate and air quality impacts are minimized.
- Prescribed fire practices should include smoke management planning coordinated among state land managers, state air agencies, state health departments, EPA, other federal agencies, and

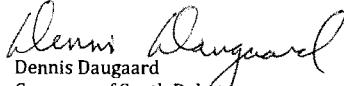
William Wehrum  
February 12, 2018  
Page 4

federal land managers. State or regional prescribed fire councils can help facilitate this coordination.

- Western Governors call on EPA and federal land managers to improve existing tools and create additional tools for states to encourage prescribed fire. These should include an exceptional events guidance for prescribed fire, and tools to address the air quality impacts from wildfire in the West.

We ask for your leadership in implementing the above recommendations at OAR. Please contact us with any questions regarding these or any other issues. We look forward to working with you to improve air quality policy and regulation in the West.

Respectfully,

  
Dennis Daugaard  
Governor of South Dakota  
Chair, WGA

  
David Ige  
Governor of Hawaii  
Vice Chair, WGA



WESTERN  
GOVERNORS'  
ASSOCIATION

**Western Governors' Association  
Policy Resolution 2017-01**

*Building a Stronger State-Federal Relationship*

**A. PREAMBLE**

The Governors of the West are proud of their unique role in governing and serving the citizens of this great nation. They recognize that the position they occupy – the chief elected official of a sovereign state – imposes upon them enormous responsibility and confers upon them tremendous opportunity. Moreover, the faithful discharge of their obligations is central to the success of the Great American Experiment.

It was, after all, the states that confederated to form a more perfect union by creating a national government of limited and defined powers. The grant of specific responsibilities for irreducibly common interests – such as national defense and interstate commerce – was brilliantly designed to make the whole stronger than the sum of its parts.

The genius of American democracy is predicated on the separation of powers among branches of government (*viz.* the legislative, executive and judiciary) and the division of power between the federal and state governments (federalism). Under the American version of federalism, the powers of the federal government are narrow, enumerated and defined. The powers of the states, on the other hand, are vast and indefinite. States are responsible for executing all powers of governance not specifically bestowed to the federal government by the U.S. Constitution. This principle is memorialized in the Tenth Amendment, which states in its entirety, “The powers not delegated to the United States by the Constitution, nor prohibited by it to the States, are reserved to the States respectively, or to the people.”

This reservation of power to the states respects the differences between regions and peoples. It recognizes a right to self-determination at a local level. It rejects the notion that one size fits all, and it provides for a rich tapestry of local cultures, economies and environments.

Because of the Constitutional recognition of state sovereignty, the states have been appropriately regarded as laboratories of democracy. States regularly engage in a kind of cooperative competition in the marketplace of ideas. Western Governors are leaders in innovative governance who employ their influence and executive authority to promote initiatives for improvement of their states’ economies, environments and quality of life.

Despite the foregoing, the balance of power has, over the years, shifted toward the federal government and away from the states. The growth in the size, cost and scope of the federal government attests to this new reality. Increasingly prescriptive regulations infringe on state authority, tie the hands of states and local governments, dampen innovation and impair on-the-ground problem-solving. Failures of the federal government to consult with states reflect a lesser appreciation for local knowledge, preferences and competencies.

The inauguration of a new Administration presents a historic opportunity to realign the state-federal relationship. Western Governors are excited to work in true partnership with the federal government. By operating as authentic collaborators on the development and execution of policy, the states and federal government can demonstrably improve their service to the public. Western Governors are optimistic that the new Administration will be eager to unleash the power and creativity of states for the common advantage of our country. By working cooperatively with the states, the Administration can create a legacy of renewed federalism, resulting in a nation that is stronger, more resilient and more united. Such an outcome will redound to the credit of the Administration and inure to the benefit of the American people.

## **B. BACKGROUND**

1. The relationship between state government authority and federal government authority is complex and multi-dimensional. There are various contexts in which the authorities of these respective levels of U.S. government manifest and intersect. For example:
  - a) **Exclusive Federal Authority** – There are powers that are specifically enumerated by the U.S. Constitution as exclusively within the purview of the federal government.<sup>1</sup>
  - b) **State Primacy** – States derive independent rights and responsibilities under the U.S. Constitution. All powers not specifically delegated to the federal government are reserved for the states; in this instance, the legal authority of states overrides that of that federal government.<sup>2</sup>

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<sup>1</sup> The structure of the government established under the U.S. Constitution is premised upon a system of checks and balances: Article VI (Supremacy Clause); Article I, Section 8 (Congressional); Article II, Section 1 (Executive Branch); Article III, Section 2 (Judicial Branch). State law can be preempted two ways. If Congress evidences an intent to fully occupy a given “field,” then state law falling within the field is preempted. If Congress has not fully displaced state regulation over the matter, then state law is preempted to the extent it *actually* conflicts with federal law.

<sup>2</sup> Amendment 10 of the U.S. Constitution: “*The powers not delegated to the United States by the Constitution, nor prohibited by it to the States, are reserved to the States, respectively, or to the people.*”

Governors have responsibilities for the condition of land, air, forest, wildlife and water resources, as well as energy and minerals development, within their state's borders.

- c) **Shared State-Federal Authority** – In some cases, state and/or federal authority can apply, given a particular fact pattern.<sup>3</sup> Federal preemption of state law is a concern under this scenario. According to the Council on State Governments, the federal government enacted only 29 statutes that pre-empted state law before 1900. Since 1900, however, there have been more than 500 instances of federal preemption of state law.
- d) **State Authority “Delegated” from Federal Agencies by Federal Statute** – The U.S. Congress has, by statute, provided for the delegation to states of authority over certain federal program responsibilities. Many statutory regimes – federal environmental programs, for example – contemplate establishment of federal standards, with delegated authority (permissive) available to states that wish to implement those standards.

According to the Environmental Council of the States (ECOS), states have chosen to accept responsibility for 96 percent of the primary federal environmental programs that are available for delegation to states. States currently execute the vast majority of natural resource regulatory tasks, including 96 percent of the enforcement and compliance actions and collection of more than 94 percent of the environmental quality data currently held by the U.S. Environmental Protection Agency (EPA).

- e) **Other** – Where the federal government has a statutory, historical or “moral” obligation to states.<sup>4</sup>

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<sup>3</sup> The federal government has authority to regulate federal property under Article IV of the Constitution. That authority, however, is limited. General regulatory authority (including regulation of wildlife and land use) is held by the states, unless Congress passes a specific law that conflicts with a state's exercise of authority. This is discussed in detail in U.S. Supreme Court case, *Kleppe v. New Mexico*.

<sup>4</sup> These historic agreements include, but are not limited to: Payments in Lieu of Taxes; shared revenues authorized by the Secure Rural Schools Act; Oregon and California Railroad Revested Lands payments; shared mineral royalties at the historic level of 50% and renewable energy leasing revenues from development on U.S. Forest Service lands, Bureau of Land Management lands and waters off the coasts of the western states; Abandoned Mine Lands grants to states consistent with 2006 Amendments to the Surface Mining Control and Reclamation Act; legally binding agreements and timetables with states to clean up radioactive waste that was generated in connection with nuclear weapons production and that remains on lands managed by the Department of Energy in the West.

2. Over time, the strength of the federal-state partnership in resource management has diminished. Federal agencies are increasingly challenging state decisions, imposing additional federal regulation or oversight and requiring documentation that can be unnecessary and duplicative. In many cases, these federal actions encroach on state legal prerogatives, especially in natural resource management. In addition, these federal actions neglect state expertise and diminish the statutorily-defined role of states in exercising their authority to manage delegated environmental protection programs.
3. The current fiscal environment exacerbates tensions between states and federal agencies. For example, states have a particular interest in improving the active management of federal forest lands. The so-called “fire borrowing” practice employed by the U.S. Forest Service and the Department of the Interior to fund wildfire suppression activities is negatively affecting restoration and wildfire mitigation work in western forests. Changes are needed, as the current funding situation has allowed severe wildfires to burn through crippling amounts of the very funds that should instead be used to prevent and reduce wildfire impacts, costs, and safety risks to firefighters and the public. This also has impacts on local fire protection districts, which often bear the brunt of costs associated with first response to wildfire, and state budgets that are also burdened by the costs of wildfire response. Fire borrowing represents an unacceptable set of outcomes for taxpayers and at-risk communities, and does not reflect responsible stewardship of federal land. In addition, states increasingly are required to expend their limited resources to operate regulatory programs over which they have less and less control. A 2015 report by the White House Office of Management and Budget on the costs of federal regulation and the impact of unfunded mandates notes that federal mandates cost states, cities and the general public between \$57 and \$85 billion every year.
4. States are willing and prepared to more effectively partner with the federal government on the management of natural resources within their borders.
5. The U.S. Advisory Commission on Intergovernmental Relations – established in 1959 and dissolved in 1996 – was the federal government's major platform for addressing broad intergovernmental issues beyond narrow considerations of individual programs and activities.
6. The current Executive Order on Federalism (E.O. 13132) was issued by then-President William Clinton in 1999. That E.O. has not been revisited since and it may be time to consider a new E.O.

## C. GOVERNORS' POLICY STATEMENT

### 1. Review of the Federal-State-Local Relationship

- a) It is time for thoughtful federal-state-local government review of the federal Executive Order on Federalism to identify areas in the policy that can be clarified and improved to increase cooperation and efficiency.
- b) Governors support reestablishment of the U.S. Advisory Commission on Intergovernmental Relations. It is imperative that the President show his commitment to the Constitutional separation of powers by establishing a platform at the highest level to address federalism concerns.

### 2. Avoiding Preemption of States

- a) In the absence of Constitutional delegation of authority to the federal government, state authority should be presumed sovereign. Accordingly, federal departments and agencies should, to the extent permitted by law, construe, in regulations and otherwise, a federal statute to preempt state law only when the statute contains an express preemption provision or there is some other firm evidence compelling the conclusion that Congress intended preemption of state law, consistent with established judicial precedent.
- b) When Congress, acting under authority granted to it by the Constitution, does preempt state environmental laws, federal legislation should:
  - i. Accommodate state actions taken before its enactment;
  - ii. Permit states that have developed stricter standards to continue to enforce them;
  - iii. Permit states that have developed substantially similar standards to continue to adhere to them without change and, where applicable, without consideration to land ownership.

### 3. Defining Meaningful State-Federal Consultation

- a) Each Executive department and agency should be required to have a clear and accountable process to provide each state – through its Governor as the top elected official of the state and other representatives of state and local governments as he or she may designate – with *early, meaningful* and *substantive*



input in the development of regulatory policies that have federalism implications. This includes the development, prioritization and implementation of federal environmental statutes, policies, rules, programs, reviews, budgets and strategic planning.

- b) Consistent with C(2) and C(3)(a), federal agencies should consult with states in a meaningful way, and on a timely basis.
  - i. **Predicate Involvement:** Federal agencies should take into account state data and expertise in development and analysis of underlying science serving as the legal basis for federal regulatory action. States merit greater representation on all relevant committees and panels (such as the EPA Science Advisory Board and related issue panels) advising federal agencies on scientific, technological, social and economic issues that inform federal regulatory processes.
  - ii. **Pre-Publication / Federal Decision-making Stage:** Federal agencies should engage in early (pre-rulemaking) consultation with Governors and state regulators. This should include substantive consultation with states during development of rules or decisions and a review by states of the proposal before a formal rulemaking is launched (i.e., before such proposals are sent to the White House Office of Management and Budget).
  - iii. **Post-Publication / Pre-Finalization Stage:** As they receive additional information from state agencies and non-governmental entities, Governors and designated state officials should have the opportunity to engage with federal agencies on an ongoing basis to seek refinements to proposed federal regulatory actions prior to finalization.

#### 4. State Authority “Delegated” from Federal Agencies Pursuant to Federal Statute

Where states are delegated authority by federal agencies pursuant to legislation:

- a) Federal agencies should treat states as co-regulators, taking into account state views, expertise and science in the development of any federal action impacting state authority.

- b) Federal agencies should grant states the maximum administrative discretion possible. Any federal oversight of such state should not unnecessarily intrude on state and local discretion. Where states take proactive actions, those efforts should be recognized and credited in the federal regulatory process.
- c) When a state is meeting the minimum requirements of a delegated program, the role of a federal department or agency should be limited to the provision of funding, technical assistance and research support. States should be free to develop implementation and enforcement approaches within their respective jurisdictions without intervention by the federal government.
- d) New federal rules and regulations should, to the extent possible, be consistent with existing rules and regulations. The issuing agency should identify elements and requirements common to both the proposed and existing regulations and provide states an opportunity to develop plans addressing the requirements of both in a coordinated fashion. This will achieve economies of scale, saving both time and money.
- e) When a federal department or agency proposes to take adjudicatory actions that impact authority delegated to states, notice should be provided to affected Governors' offices, and co-regulating states should have the opportunity to participate in the proceedings. Where legally permissible, that right should extend to federal agencies' settlement negotiations impacting state environmental and natural resource management prerogatives. Where their roles and responsibilities are impacted, states should be meaningfully consulted during settlement negotiations, including negotiations aimed at avoiding, rather than resolving, litigation (such as negotiations following a notice of intent to sue under the Endangered Species Act, but prior to a formal complaint being filed to initiate legal action).
- f) States' expertise should be recognized by federal agencies and robustly represented on boards and in other mechanisms upon which agencies rely for development of science to support regulatory action.

**5. Other Opportunities for Positive Engagement by the Federal Government with Western States**

- a) **Federalism Reviews** – Federal agencies are required by federal Executive Order 13132 to consider and quantify consequences of federal actions on states. In practice, the current process falls short of its stated goals. Governors call on the President to revisit the executive order to, among other things:

- i. Specifically involve Western Governors on issues (e.g., public lands, water and species issues) that disproportionately impact the West;
  - ii. Work with Governors to develop specific criteria and consultation processes: 1) for the initiation of federalism assessments and 2) that guide the performance of every federal Department and agency federalism assessment;
  - iii. Require federal Departments and agencies to meet the criteria developed under C(5)(a)(ii), rather than simply require the consideration of federalism implications;
  - iv. Provide states, through Governors, an opportunity to comment on federalism assessments before any covered federal action is submitted to the Office of Management and Budget for approval.
- b) **Federal and State Land-Use Planning** – Governors possess primary decision-making authority for management of state resources. Accordingly, it is essential that they have an opportunity to review new, revised and amended federal land management plans for consistency with existing state plans. Governors and their staffs have specific knowledge and experience that can help federal agencies craft effective and beneficial plans. A substantive role in federal agencies' planning processes is vital for Western Governors:
- i. Federal landscape-level planning presents new issues for Governors to consider as they attempt to ensure consistency between state and federal requirements. Agencies should provide Governors sufficient time to ensure a full and complete state review. This is particularly true when agency plans affect multiple planning areas or resources;
  - ii. Agencies should seek to align the review of multiple plans affecting the same resource. This is particularly true for threatened or endangered species that have vast western ranges;
  - iii. When reviewing proposed federal land management plans for consistency with state plans, Governors should be afforded the discretion to determine which state plans are pertinent to the review, including state-endorsed land use plans such as State Wildlife Action Plans, conservation district plans, county plans and multi-state agreements;
  - iv. Governors must retain a right to appeal any rejection of recommendations resulting from a Governor's consistency review.

- c) **Honoring Historic Agreements** – The federal government should honor its historic agreements with states and counties in the West to compensate them for state and local impacts associated with federal land use and nontaxable lands within their borders that are federally-owned.
- d) **Responsible Federal Land Management** – The federal government should be a responsible landowner and neighbor and should work diligently to improve the health of federally-owned lands in the West. Lack of funding and conflicting policies have resulted in large wildfires and the spread of invasive species from federally owned forests and grasslands, negatively impacting adjacent state and privately-owned lands, as well as state-managed natural resources (soils, air and water).
- e) **Recognizing State Contributions to Federal Land Management** – The U.S. Congress and appropriate federal departments and agencies should provide opportunities for expanded cooperation, particularly where states are working to help their federal partners to improve management of federal lands within their states' borders through the contribution of state expertise, manpower and financial resources.
- f) **Avoiding Unfunded Mandates** – The U.S. Congress and federal departments and agencies should avoid the imposition of unfunded federal mandates on states. The federal government increasingly requires states to carry out policy initiatives without providing the funding necessary to pay for implementation. State governments cannot function as full partners if the federal government requires them to devote their limited resources to compliance with unfunded federal mandates.
- g) **Other Considerations in Designing an Effective State-Federal Relationship** – Other important considerations in the design of a stronger state-federal relationship include:
  - i. The U.S. Congress and federal departments and agencies should respect the authority of states to determine the allocation of administrative and financial responsibilities within states in accordance with state constitutions and statutes. Federal action should not encroach on this authority.
  - ii. Federal assistance funds, including funds that will be passed through to local governments, should flow through states according to state laws and procedures.

- iii. States should be given flexibility to transfer a limited amount of funds from one grant program to another, and to administer related grants in a coordinated manner.
- iv. Federal funds should provide maximum state flexibility without specific set-asides.
- v. States should be given broad flexibility in establishing federally-mandated advisory groups, including the ability to combine advisory groups for related programs.
- vi. Governors should be given the authority to require coordination among state executive branch agencies, or between levels or units of government, as a condition of the allocation or pass-through of funds.
- vii. Federal government monitoring should be outcome-oriented.
- viii. Federal reporting requirements should be minimized.
- ix. The federal government should not dictate state or local government organization.

**D. GOVERNORS' MANAGEMENT DIRECTIVE**

- 1. The Governors direct the WGA staff, where appropriate, to work with Congressional committees of jurisdiction and the Executive Branch to achieve the objectives of this resolution.
- 2. Furthermore, the Governors direct WGA staff to develop, as appropriate and timely, detailed annual work plans to advance the policy positions and goals contained in this resolution. Those work plans shall be presented to, and approved by, Western Governors prior to implementation. WGA staff shall keep the Governors informed, on a regular basis, of their progress in implementing approved annual work plans.

*Western Governors enact new policy resolutions and amend existing resolutions on a bi-annual basis. Please consult [www.westgov.org/policies](http://www.westgov.org/policies) for the most current copy of a resolution and a list of all current WGA policy resolutions.*

U.S. SENATE COMMITTEE ON  
**ENVIRONMENT AND PUBLIC WORKS**  
 (/public/index.cfm/home)

## **PRESS RELEASES (/PUBLIC/INDEX.CFM/PRESS-RELEASES-REPUBLICAN)**

### **Barrasso Statement on EPA Advisory Committee Selection of Wyoming's Cara Keslar (/public/index.cfm/press-releases-republican?ID=A2DB577C-8260-4E98-94CC-5105E3582D73)**

**November 3, 2017**

WASHINGTON, D.C. — Today, U.S. Senator John Barrasso (R-WY), chairman of the Senate Committee on Environment and Public Works (EPW), released the following statement on Environmental Protection Agency (EPA) Administrator Scott Pruitt's intention to appoint Wyoming's Cara Keslar to serve on the EPA Board of Scientific Counselors Air, Climate, and Energy Subcommittee. Keslar currently serves as the monitoring section supervisor for the Air Quality Division of the Wyoming Department of Environmental Quality.

"Cara Keslar is an outstanding addition to the Environmental Protection Agency's advisory board," **said Barrasso**. "She brings years of experience serving the people of Wyoming. Her expertise and perspective will ensure that Wyoming and other Western states are part of the EPA's decision making process."

Earlier this week, EPA Administrator Scott Pruitt issued a [directive](https://www.epw.senate.gov/public/index.cfm/press-releases-republican?ID=F978CEAD-A0CB-4383-8AA2-EBD736D1D4B9) (https://www.epw.senate.gov/public/index.cfm/press-releases-republican?ID=F978CEAD-A0CB-4383-8AA2-EBD736D1D4B9) to strengthen advisory committee member independence, increase state and local government participation, and enhance geographic diversity. Key advisory committees at EPA include the Science Advisory Board, the Clean Air Scientific Advisory Committee, and the Board of Scientific Counselors.

#### **Background Information:**

On July 27, 2017, Senator Barrasso [sent a letter](https://www.epw.senate.gov/public/index.cfm/press-releases-republican?ID=3461D7DC-5004-4000-8006-AC36613102B0) (https://www.epw.senate.gov/public/index.cfm/press-releases-republican?ID=3461D7DC-5004-4000-8006-AC36613102B0) to Pruitt regarding needed reforms to the Clean Air Scientific Advisory Committee (CASAC). In the letter, Barrasso called on Pruitt to "revisit past CASAC practices to

4/24/2018 Barrasso Statement on EPA Advisory Committee Selection of Wyoming's Cara Keslar - Press Releases - U.S. Senate Committee on Env...

make them compliant with the statute." CASAC is supposed to provide independent counsel to the administrator on issues specifically listed in the Clean Air Act related to the federal National Ambient Air Quality Standards (NAAQS).

###

Permalink: <https://www.epw.senate.gov/public/index.cfm/2017/11/barrasso-statement-on-epa-advisory-committee-selection-of-wyoming-s-cara-keslar>  
(<https://www.epw.senate.gov/public/index.cfm/2017/11/barrasso-statement-on-epa-advisory-committee-selection-of-wyoming-s-cara-keslar>)



## PRESIDENTIAL MEMORANDA

**Presidential Memorandum for the Administrator of  
the Environmental Protection Agency**

— LAND &amp; AGRICULTURE

Issued on: April 12, 2018



Under the Clean Air Act (CAA), Public Law 88-206, the Environmental Protection Agency (EPA) establishes National Ambient Air Quality Standards (NAAQS) for certain common air pollutants, often referred to as "criteria pollutants," which it must review every 5 years. Over the past four decades, EPA has revised these standards a number of times to increase their stringency, including revisions to the standards for ozone, particulate matter, and four other criteria pollutants. Since 1970, emissions of criteria pollutants have declined dramatically and air quality has improved significantly. At the same time, each new revision of the NAAQS triggers numerous new planning, permitting, and other requirements for affected States, localities, and regulated entities. In addition, each new revision can affect the planning for and availability of Federal funding for certain new transportation projects.

Under the CAA, States with areas that do not meet revised NAAQS must submit for approval to the Administrator of the EPA (Administrator) State Implementation Plans (SIPs) showing how they will comply with the revised standards. States that fail to submit a SIP or that submit an inadequate SIP risk the imposition of a Federal Implementation Plan (FIP) that establishes a path to compliance. In addition, manufacturers and other applicants seeking preconstruction permits for new construction generally must demonstrate compliance with the new standards as soon as they go into effect. As the NAAQS have become more stringent, obtaining the air permits needed to construct new manufacturing and industrial facilities or to expand or modernize existing facilities has become increasingly difficult. In some areas, revised NAAQS are approaching what are considered to be "background levels" of pollution (i.e., levels associated with natural sources or



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emissions originating outside of the United States), leading to significant practical challenges for constructing or expanding manufacturing and industrial facilities. Those challenges range from difficulties in demonstrating compliance to costs and uncertainty associated with permitting delays and emissions-control requirements.

Under the CAA, EPA has also established a Regional Haze Program, which requires States to submit for the Administrator's approval plans that cover 10-year implementation periods and to demonstrate "reasonable progress" toward improving and maintaining visibility in certain national parks and wilderness areas. In recent years, States have spent significant time and resources developing Regional Haze Program SIPs. EPA, however, has rejected several of them, in whole or in part, and issued FIPs in their place, which often impose more costly and burdensome measures.

Given the national importance of successful and efficient implementation of air quality standards to promote public health, welfare, and economic growth, this memorandum directs the Administrator to take specific actions to ensure efficient and cost-effective implementation of the NAAQS program, including with regard to permitting decisions for new and expanded facilities, and with respect to the Regional Haze Program. These actions are intended to ensure that EPA carries out its core missions of protecting the environment and improving air quality in accord with statutory requirements, while reducing unnecessary impediments to new manufacturing and business expansion essential for a growing economy.

Accordingly, by the authority vested in me as President by the Constitution and the laws of the United States of America, it is hereby directed as follows:

Section 1. Timely Processing of State Implementation Plans. The Administrator shall, as practicable and consistent with law, endeavor in all cases to take final action on SIPs within 18 months of the date of the submission of a SIP. This goal applies to all SIPs and SIP revisions submitted pursuant to section 110 of the CAA (42 U.S.C. 7410). The Administrator shall consider the expansion of existing performance goals related to the timely processing of SIPs starting with the Fiscal Year (FY) 2019 performance plan.

Sec. 2. Cooperative Engagement with States to Review Regional Haze Plans. The Administrator shall undertake a process to review all full or partial FIPs issued under the 2007 planning period of the Regional Haze Program and to develop options, at the request of affected States, consistent

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with law, to replace FIPs with approvable SIPs. The Administrator shall consider the expansion of existing performance goals related to the cooperative engagement with States in EPA's review of Regional Haze Plans starting with the FY 2019 performance plan.

Sec. 3. Timely Processing of Preconstruction Permit Applications. The Administrator shall endeavor to take final action on applications for preconstruction permits, as appropriate and consistent with law, within 1 year of the date of receiving a complete application. This 1-year goal applies to all completed applications for preconstruction permits for which EPA is the direct permitting authority under the CAA. The Administrator shall also seek to ensure that determinations relating to the completeness of an application are not unduly delayed. To the extent that a State is the direct permitting authority, EPA shall endeavor to provide prompt technical support, reviews, and determinations, as necessary and consistent with applicable law, in order to assist States in the timely issuance of preconstruction permits. The Administrator shall, starting with the FY 2019 performance plan, develop performance goals related to the timely processing of preconstruction permit applications.

Sec. 4. Demonstrations or Petitions Submitted Pursuant to Sections 319 and 179B of the CAA Relating to Emissions Beyond the Control of State and Local Air Agencies. The Administrator shall take the following actions with regard to demonstrations or petitions submitted pursuant to sections 319 and 179B of the CAA (42 U.S.C. 7619, 7509a), in order to provide relief to State and local air agencies addressing emissions that are beyond their control:

(a) Timely Processing. With respect to all exceptional event demonstrations submitted pursuant to section 319 of the CAA (42 U.S.C. 7619), and all demonstrations or petitions relating to international emissions submitted pursuant to section 179B of the CAA (42 U.S.C. 7509a), the Administrator shall endeavor to take final action within 120 days of a complete submission, as appropriate and consistent with law. The Administrator shall also endeavor to use available monitoring data and modeling tools to assist States in identifying potential exceptional events and international emissions that may affect concentrations of criteria pollutants. The Administrator shall, starting with the FY 2019 performance plan, develop performance goals related to the timely processing of demonstrations or petitions.

(b) Policies Relating to International Emissions. The Administrator shall ensure that EPA continues to take into consideration a State's ability to meet and attain NAAQS that may be affected by international transport of criteria pollutants. With regard to all demonstrations or petitions

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submitted pursuant to section 179B of the CAA, the Administrator shall also seek to ensure, including through rulemakings or guidance and as appropriate and consistent with law, that EPA does not limit its consideration of demonstrations or petitions to those submitted by States located on the borders of the United States with Mexico or Canada, but rather considers section 179B demonstrations or petitions submitted by any State, including but not limited to those located in the Western United States. Additionally, with respect to section 179B demonstrations or petitions, the Administrator shall ensure that EPA does not limit its consideration to emissions emanating from Mexico or Canada, but rather considers, where appropriate, emissions that may emanate from any location outside the United States, including emissions from Asia.

(c) Continuing Assessment. In implementing section 179B of the CAA (42 U.S.C. 7509a), section 319 of the CAA (42 U.S.C. 7619), and section 182(h) of the CAA (42 U.S.C. 7511a(h)), the Administrator shall ensure that EPA continues to assess background concentrations and sources of pollution outside of the control of State and local air agencies that may affect implementation or application of these provisions. Such assessment may include current and future trends in pollution from foreign sources; regional trends in exceptional events, including wildfires, stratospheric ozone intrusions, and volcanic seismic activities; and other events, as appropriate and consistent with law.

Sec. 5. Monitoring and Modeling Data. The Administrator shall take the following actions to ensure that monitoring and modeling data is used appropriately in designations, permitting decisions, and demonstrations:

(a) Designations. Given the significant planning, permitting, and other requirements for affected States, localities, and regulated entities associated with nonattainment designations, the Administrator's goal for future designations should be, to the extent feasible and permitted by law, to rely on data from EPA-approved air quality monitors for such designations.

(b) Permitting Decisions and Demonstrations.

(i) Where modeling is necessary for permitting decisions, for State plans, or for exceptional event or international emissions demonstrations, the Administrator shall seek to ensure that EPA's applicable modeling tools are sufficiently accurate for their intended application; and that the relevant State or local air agency, or permit applicant as applicable, is consulted regarding whether the use of modeling projections in lieu of monitored data is appropriate.

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The Administrator should also seek to streamline EPA's processes for considering and approving inputs to models and updates to modeling techniques, including updates to account for site-specific conditions. Where EPA-approved models are not representative of site conditions or planned activities, the Administrator shall seek, as appropriate and consistent with law, to streamline the process for approving alternative models and to provide for other methods that promote innovative State approaches.

(ii) The Administrator shall, consistent with law, continue to take actions, such as setting significant impact levels and related values, that enable EPA to clearly identify the types or classes of permitting and related decisions that do not require modeling or that can rely on streamlined modeling approaches. This requirement is especially important in areas for which EPA concludes that permits need to demonstrate compliance with NAAQS that have yet to be fully implemented. In developing significant impact levels, EPA should, as appropriate and consistent with law, allow for natural variability in meteorological conditions and industrial processes.

Sec. 6. Offsets. To the extent consistent with law and air quality improvement, the Administrator shall provide flexibility to States with regard to identifying and achieving offsets, including by allowing intrastate and regional inter-precursor trading. These efforts should include development and implementation of flexible offset policies in rural areas where few facilities exist to generate offsets, in order to promote their economic expansion. The Administrator shall examine steps to help regions and States benefit from flexibilities available in the permitting process for new facilities and projects.

Sec. 7. Future NAAQS Reviews. The Administrator shall evaluate whether EPA is complying fully with the requirements of section 109(d)(2)(C) of the CAA (42 U.S.C. 7409(d)(2)(C)) relating to the scope and characterization of advice provided by its Clean Air Act Scientific Advisory Committee, including requirements that the Committee advise the Administrator regarding background concentrations and adverse public health or other effects that may result from implementation of revised air quality standards. In addition, the Administrator shall examine the current NAAQS review process and develop criteria to ensure transparency in the evaluation, assessment, and characterization of scientific evidence in such reviews. The Administrator shall also develop clear guidance for differentiating the role of science and policy considerations in establishing NAAQS.

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Sec. 8. Timely Issuance of Implementing Regulations and Guidance. When issuing any final rule establishing or revising NAAQS, the Administrator shall, where appropriate and consistent with law, concurrently issue regulations and guidance necessary for implementing the new or revised standards. The regulations and guidance shall specify the information that is relevant to the submission and consideration of SIPs and preconstruction permit applications.

Sec. 9. Review of Rules, Guidance, Memoranda, and Procedures Relating to State Implementation Plans and Permitting. The Administrator shall evaluate EPA's existing rules, guidance, memoranda, and other public documents relating to the implementation of NAAQS, including documents that relate to the submission and consideration of preconstruction permit applications. The Administrator shall, consistent with law, determine whether any such documents should be revised or rescinded to ensure more timely permitting decisions under the NAAQS. Any resulting revisions or rescissions should seek, among other things, to provide States with additional implementation flexibility. The Administrator should also evaluate the adequacy of existing internal review procedures to determine whether they can be improved to ensure prompt evaluation and timely action on new and pending SIPs and permit applications.

Sec. 10. General Provisions. (a) Nothing in this memorandum shall be construed to impair or otherwise affect:

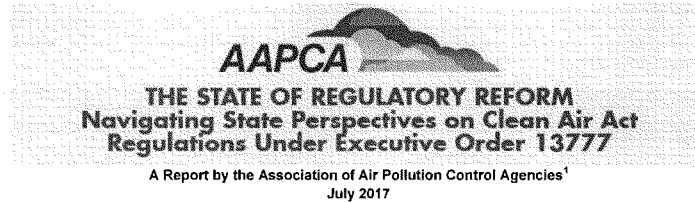
- (i) the authority granted by law to an executive department or agency, or the head thereof; or
- (ii) the functions of the Director of the Office of Management and Budget relating to budgetary, administrative, or legislative proposals.

(b) This memorandum shall be implemented consistent with applicable law and subject to the availability of appropriations.

(c) This memorandum is not intended to, and does not, create any right or benefit, substantive or procedural, enforceable at law or in equity by any party against the United States, its departments, agencies, or entities, its officers, employees, or agents, or any other person.

(d) You are hereby authorized and directed to publish this memorandum in the *Federal Register*.

DONALD J. TRUMP



#### SUMMARY

Following the issuance and publication of Executive Order (EO) 13777 on Enforcing the Regulatory Reform Agenda, the U.S. Environmental Protection Agency (EPA) established a Regulatory Reform Task Force to oversee the evaluation of existing regulations to make recommendations about potential repeal, replacement, or modification. Concurrent with outreach efforts,<sup>2</sup> U.S. EPA accepted public comments on regulations that may be appropriate for repeal, replacement, or modification from April 11 to May 15, 2017. As of July 18, 2017, the docket accompanying this request for comment included more than 467,000 public comments received, with just over 63,000 available.<sup>3</sup>

In order to help navigate these comments and assess intergovernmental priorities for regulatory reform, this report highlights individual Clean Air Act regulations and themes discussed in state environmental agency comments as part of this comment process. In particular, Clean Air Act regulations and themes discussed by at least three state environmental agencies are included, accompanied by links to illustrative comments and excerpts from state and local agencies and associations. The report is designed to help illustrate key priorities, but it does not contain details on individual comments including whether commenters specified whether regulations are appropriate to repeal, replace, modify, or maintain. Inclusion of regulations or concepts in this report does not imply endorsement from AAPCA or its member agencies.

The regulations identified in this report may also be relevant to EO 13783 on Promoting Energy Independence and Economic Growth,<sup>4</sup> EO 13771 on Reducing Regulation and Controlling Regulatory Costs<sup>5</sup> as well as EO 13563 on Improving Regulation and Regulatory Review.<sup>6</sup> For example,

<sup>1</sup> AAPCA is a national, non-profit, consensus-driven organization focused on assisting state and local air quality agencies and personnel with implementation and technical issues associated with the federal Clean Air Act. AAPCA represents more than 40 state and local air agencies, and senior officials from 20 state environmental agencies currently sit on the AAPCA Board of Directors. AAPCA is housed in Lexington, Kentucky as an affiliate of The Council of State Governments. You can find more information about AAPCA at: <http://www.cleanairect.org>. In addition, more information on AAPCA agencies can be found in the recently released report, *The Greatest Story, Seidom Told: Profiles and Success Stories in Air Pollution Control*.

<sup>2</sup> <https://www.epa.gov/laws-regulations/regulatory-reform>.

<sup>3</sup> <https://www.regulations.gov/doccket/70-EPA-HQ-OA-2017-0190>.

<sup>4</sup> <https://www.whitehouse.gov/the-press-office/2017/03/28/presidential-executive-order-promoting-energy-independence-and-economy-1>.

<sup>5</sup> 82 FR 9339 (2/3/2017).

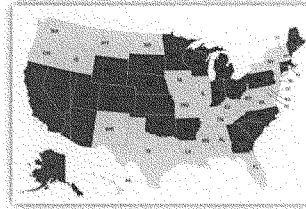
<sup>6</sup> 76 FR 3821 (1/21/2011).

the May 8 memorandum from the Office of Information and Regulatory Affairs to Regulatory Reform Officers and Regulatory Policy Officers<sup>7</sup> encouraged agencies to coordinate compliance with Section 2 of EO 13783 with EO 13777 ahead of submitting a draft final report by July 26, 2017. Additionally, comments related to implementation of National Ambient Air Quality Standards (NAAQS) and ground-level ozone may help inform U.S. EPA's Ozone Cooperative Compliance Task Force.<sup>8</sup>

During the comment period, 24 state environmental agencies provided comments to U.S. EPA related to Clean Air Act or cross-media regulations (states shown in blue in map at right).<sup>9</sup> In addition, a number of state Attorneys General,<sup>10</sup> local air agencies and governments,<sup>11</sup> non-environmental state agencies, and intergovernmental associations and advisory committees<sup>12</sup> also provided feedback to U.S. EPA.

In no particular order, these air quality regulations and themes include:

- *"Once In, Always In" Policy for Major Source Maximum Available Control Technology Standards* (pg. 3)
- *Treatment of Data Influenced by Exceptional Events* (pg. 4)
- *Emission Guidelines and Compliance Times for Municipal Solid Waste Landfills* (pg. 4 – 5)
- *Standards for Stationary Compression Ignition Internal Combustion Engines, Stationary Spark Ignition Internal Combustion Engines, and Reciprocating Internal Combustion Engines* (pg. 5)
- *Startup, Shutdown, and Malfunction State Implementation Plan Call* (pg. 6)
- *Title V Permitting Requirements for Air Curtain Incinerators/Destructors* (pg. 7)
- *Regional Haze* (pg. 7 – 8)
- *Nitrogen Oxides State Implementation Plan Call (NO<sub>x</sub> SIP Call)* (pg. 8)
- *Interstate Ozone Transport* (pg. 9)



<sup>7</sup> Dominic Mancini, Office of Information and Regulatory Affairs, "Guidance for Section 2 of Executive Order 13783, Titled 'Promoting Energy Independence and Economic Growth,'" May 8, 2017 (Memorandum).

<sup>8</sup> Task Force identified in June 6 letters to Governors on extending the deadline for promulgating initial area designations for the 2015 ozone NAAQS by one year.

<sup>9</sup> AAPCA has compiled all state and local environmental comments [here](#).

<sup>10</sup> For example, comments from the [Texas Attorney General](#) and the [Attorneys General of West Virginia, Alabama, Arkansas, Indiana, Louisiana, Michigan, Oklahoma, and South Carolina](#) contained recommendations related to air quality issues.

<sup>11</sup> For example, comments from the [Harris County Pollution Control Services Department](#) (TX), [Maricopa County Air Quality Department](#) (AZ), [Fairbanks North Star Borough Air Quality Division](#) (AK), [Clark County Department of Air Quality](#) (NV), [Bay Area Air Quality Management District](#) (CA), [South Coast Air Quality Management District](#) (CA), and [Cooke County](#) (TX) contained recommendations related to air quality issues.

<sup>12</sup> For example, comments from the [Association of Air Pollution Control Agencies](#), [Environmental Council of the States](#), [Northeast States for Coordinated Air Use Management](#), [National Steering Committee](#), [Small Business Environmental Assistance Program](#), [National Association of Counties](#), [National League of Cities](#), [U.S. Conference of Mayors](#), and [National Association of Regional Councils](#), [National Association of County and City Health Officials](#), [U.S. EPA's Local Government Advisory Committee](#), [Western Governors' Association](#), [National Tribal Air Association](#), and [American Association of State Highway and Transportation Officials](#) contained recommendations related to air quality issues.

- *Clean Power Plan and Standards of Performance for Greenhouse Gas Emissions From New, Modified, and Reconstructed Stationary Sources: Electric Generating Units* (pg. 10)
- *Modeling Issues & Appendix W* (pg. 10 – 11)
- *Implementation of the 2015 NAAQS for Ozone: Nonattainment Area Classifications and State Implementation Plan Requirements* (pg. 11)
- *2015 National Ambient Air Quality Standards for Ground-Level Ozone* (pg. 12)
- *Cross-Media Electronic Reporting Rule and Other Electronic Reporting Requirements* (pg. 13 – 14)
- *Monitoring Requirements* (pg. 14)
- *Other Title V Permit Review/Petition Issues* (pg. 15)
- *Guidance as De Facto Rulemaking* (pg. 15)
- *General National Ambient Air Quality Standards & State Implementation Plan Process Improvements* (pg. 16)

**"Once In, Always In" Policy for Major Source Maximum Available Control Technology Standards (Seltz Memorandum)<sup>13</sup>**

"The EPA 'Once In, Always In' policy is unfair to the regulated community and unrealistic in implementation, and it should be rescinded. This policy is a barrier to achieving greater environmental protection. . . . In the alternative to rescission, the EPA is encouraged to provide clarity, environmental incentives, and national consistency through rulemaking."

**Maine Department of Environmental Protection**

**Illustrative state environmental agency comments:**

- [Arizona Department of Environmental Quality, Attachment](#) (pg. 1)
- [Connecticut Department of Energy and Environmental Protection](#), pg. 2
- [Georgia Environmental Protection Division](#), pg. 1
- [Maine Department of Environmental Protection](#), pg. 1, 3 – 5
- [Minnesota Pollution Control Agency](#), pg. 6
- [North Carolina Division of Air Quality](#), pg. 36
- [Ohio Environmental Protection Agency](#), pg. 6 – 7
- [South Dakota Department of Environment and Natural Resources](#), pg. 4

Other relevant comments: [Environmental Council of the States](#), pg. 2; [Northeast States for Coordinated Air Use Management](#), pg. 2; [National Steering Committee, Small Business Environmental Assistance Program](#), pg. 4 – 5; [Association of Air Pollution Control Agencies](#), pg. 4

<sup>13</sup> Memorandum can be found [here](#).



***Treatment of Data Influenced by Exceptional Events<sup>14</sup>***

"Certain requirements in the Revised Rule are onerous and may result in monitored exceedances due to natural sources influencing national ambient air quality standard (NAAQS) designations of nonattainment. In turn, such nonattainment designations may lead to unnecessary and expensive measures that could have been avoided if more reasonable exceptional events demonstration requirements were in place."

- **Arkansas Department of Environmental Quality**

Illustrative state environmental agency comments:

- Arizona Department of Environmental Quality, Attachment (pg. 2)
- Arkansas Department of Environmental Quality, pg. 7 – 8
- North Carolina Division of Air Quality, pg. 19 – 20
- Utah Division of Air Quality, pg. 3 – 4
- Wyoming Department of Environmental Quality, pg. 6 – 7

Other relevant comments: Clark County Department of Air Quality (NV), pg. 3; American Association of State Highway and Transportation Officials, Attachment; Western Governors Association, pg. 13; Association of Air Pollution Control Agencies, pg. 3

***Emission Guidelines and Compliance Times for Municipal Solid Waste Landfills<sup>15</sup>***

"The rules apply to all landfills that have accepted waste since 1987 and that were constructed on or before July 17, 2014, including landfills previously subject to 40 CFR 60 Subparts Cc and WWW. This has the potential to be duplicative and confusing for regulated sources in Wyoming."

- **Wyoming Department of Environmental Quality**

Illustrative state environmental agency comments:

- Arizona Department of Environmental Quality, Attachment (pg. 1)
- Arkansas Department of Environmental Quality, pg. 6
- Michigan Department of Environmental Quality, pg. 5

<sup>14</sup> 81 FR 68218. More information: <https://www.epa.gov/air-quality-analysis/treatment-air-quality-data-influenced-exceptional-events>.

<sup>15</sup> 81 FR 69276 (08/26/16). More information, including related rules, is available at: <https://www.epa.gov/stationary-sources-air-pollution/municipal-solid-waste-landfills-new-source-performance-standards>.

- [South Carolina Department of Health and Environmental Control](#), pg. 2 – 3
- [Wyoming Department of Environmental Quality](#), pg. 5

Other relevant comments: [Attorneys General of WV, AL, AR, IN, LA, MI, OK, and SC](#), Exhibit A; [Cooke County \(TX\)](#), pg. 1; [Association of Air Pollution Control Agencies](#), pg. 3

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***Standards for Stationary Compression Ignition Internal Combustion Engines (NSPS III),<sup>16</sup> Stationary Spark Ignition Internal Combustion Engines (NSPS JJJJ),<sup>17</sup> and Reciprocating Internal Combustion Engines (RICE NESHAP/GACT ZZZZ)<sup>18</sup>***

"The regulations governing stationary compression and spark ignition internal combustion engines... are overly complicated, confusing, and include references which are recursive. Additionally, these regulations require a significant amount of analysis to determine the correct requirements for owners and operators and include costly requirements for small engines."

**Nevada Division of Environmental Protection**

Illustrative state environmental agency comments:

- [Arkansas Department of Environmental Quality](#), pg. 9
- [Georgia Environmental Protection Division](#), pg. 2
- [Maine Department of Environmental Protection](#), pg. 7
- [Michigan Department of Environmental Quality](#), pg. 6
- [Nevada Division of Environmental Protection](#), pg. 2
- [North Carolina Division of Air Quality](#), pg. 31

Other relevant comments: [Association of Air Pollution Control Agencies](#), pg. 5

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<sup>16</sup> 81 FR 44212 (7/7/2016). More information: <https://www.epa.gov/stationary-engines/new-source-performance-standards-stationary-compression-ignition-internal-combustion>.

<sup>17</sup> 73 FR 3568 (1/18/2008). More information: <https://www.epa.gov/stationary-engines/new-source-performance-standards-stationary-spark-ignition-internal-combustion>.

<sup>18</sup> "National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines, New Source Performance Standards for Stationary Internal Combustion Engines," 78 FR 6874 (01/30/2013). More information: <https://www.epa.gov/stationary-engines/national-emission-standards-hazardous-air-pollutants-reciprocating-internal-combustion>.

**Startup, Shutdown, and Malfunction State Implementation Plan Call (SSM SIP Call)<sup>19</sup>**

"EPA should withdraw its SIP call for 36 States published on June 12, 2015. EPA failed to provide the required finding of substantial inadequacy under the Clean Air Act.... The SIP Calls do not purport to improve air quality. EPA made no findings at all about air-quality effects of the States' SSM regulations in general much less State-specific findings about the specific provisions that EPA has identified as substantially inadequate. Instead, EPA asserted that certain CAA requirements are 'fundamental' such that any SIP provision that failed to satisfy them was substantially inadequate. In the absence of any factual finding of substantial inadequacy, however, EPA's decision is inconsistent with the Act."

**North Carolina Division of Air Quality**

**Illustrative state environmental agency comments:**

- Arizona Department of Environmental Quality, Attachment (pg. 1)
- Maine Department of Environmental Protection, pg. 11 – 12
- North Carolina Division of Air Quality, pg. 32
- South Dakota Department of Environment and Natural Resources, pg. 1
- Wisconsin Department of Natural Resources, pg. 7

Other relevant comments: Attorneys General of WV, AL, AR, IN, LA, MI, OK, and SC (Exhibit A); Texas Attorney General (Attachment 2); Association of Air Pollution Control Agencies, pg. 3

<sup>19</sup> "State Implementation Plans: Response to Petition for Rulemaking; Restatement and Update of EPA's SSM Policy Applicable to SIPs; Findings of Substantial Inadequacy, and SIP Calls To Amend Provisions Applying to Excess Emissions During Periods of Startup, Shutdown and Malfunction," 80 FR 33840 (06/12/2015). More information: <https://www.epa.gov/air-quality-implementation-plans/startup-shutdown-malfunction-ssm-emissions-industrial-facilities>

**Title V Permitting Requirements for Wood Burning Air Curtain Incinerators/Destructors<sup>20</sup>**

"The requirement in 40 CFR 60 Subpart CCCC to subject air curtain destructors (ACD) burning 100% clean wood waste and/or clean lumber to Title V permitting is burdensome. ACDs are typically located at small facilities, such as pallet manufacturers, that lack the resources necessary to comply with the regulatory burden of Title V. Furthermore, there is no environmental benefit."

**Georgia Environmental Protection Division**

Illustrative state environmental agency comments:

- *Arizona Department of Environmental Quality*, Attachment (pg. 1)
- *Georgia Environmental Protection Division*, pg. 1 – 2
- *Kansas Department of Health and Environment*, pg. 1 – 2
- *South Carolina Department of Health and Environmental Control*, pg. 2 – 3

Other relevant comments: *National Steering Committee, Small Business Environmental Assistance Program*, pg. 13 – 14; *Association of Air Pollution Control Agencies*, pg. 4

**Regional Haze, including Protection of Visibility: Amendments to Requirements for State Plans<sup>21</sup> and Federal Implementation Plans for Regional Haze<sup>22</sup>**

"Rule maintains the outdated Reasonably Attributable Visibility Impairment (RAVI) and requires five-year progress reports, seen as unnecessary by states. . . . Benefits cannot be justified by cost associated with implementing. For example, the relative reduction in regional haze at particular Class I area is not considered when evaluating the implementation of additional controls at specific facilities in areas under a Federal Implementation Plan."

**Association of Air Pollution Control Agencies**

Illustrative state environmental agency comments:

<sup>20</sup> Found in EPA's final rule "Standards of Performance for New Stationary Sources and Emission Guidelines for Existing Sources: Commercial and Industrial Solid Waste Incineration Units," 81 FR 40956 (6/23/2016). See also: <https://www.epa.gov/title-v-operating-permits/air-curtain-incinerators-and-title-v-operating-permits>.

<sup>21</sup> 82 FR 3078 (01/10/2017). More information on Regional Haze available at: <https://www.epa.gov/visibility>.

<sup>22</sup> For example, see EPA's *Regional Haze Federal Implementation Plan for Arkansas*.

- [Alaska Department of Environmental Conservation](#), pg. 7 – 8
- [Arizona Department of Environmental Quality](#), Attachment (pg. 2)
- [Arkansas Department of Environmental Quality](#), pg. 2 – 6
- [Minnesota Pollution Control Agency](#), pg. 6
- [Nevada Division of Environmental Protection](#), pg. 2
- [North Carolina Division of Air Quality](#), pg. 24 – 26
- [South Dakota Department of Environment and Natural Resources](#), pg. 3
- [Wyoming Department of Environmental Quality](#), pg. 4 – 5

Other relevant comments: [Texas Attorney General](#), Attachment 1 & 2; [Attorneys General of WV, AL, AR, IN, LA, MI, OK, and SC](#), Exhibit A; [Association of Air Pollution Control Agencies](#), pg. 3

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***Nitrogen Oxides State Implementation Plan Call (NO<sub>x</sub> SIP Call)<sup>23</sup>***

"The Department would like the EPA to repeal the NO<sub>x</sub> SIP Call. At minimum, consider allowing an exemption for states where emissions are far under budget such as SC, or replace 40 CFR Part 75 monitoring with 40 CFR Part 60 monitoring requirements for those large non-EGUs operating in states well below the budget. States should be given the freedom to address their downwind obligations to meet their CSAPR budget limits with tailor-made solutions each state designs to fit their needs."

**South Carolina Department of Health and Environmental Control**

Illustrative state environmental agency comments:

- [North Carolina Division on Air Quality](#), pg. 10 – 11
- [Ohio Environmental Protection Agency](#), pg. 4 – 5
- [South Carolina Department of Health and Environmental Control](#), pg. 1 – 2

Other relevant comments: [Association of Air Pollution Control Agencies](#), pg. 2

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<sup>23</sup> [63 FR 57356](#) (10/27/1998). More information available [here](#).

**Interstate Ozone Transport, Including Transport Rules for 2008 and 2015 National Ambient Air Quality Standards for Ground-Level Ozone**

"Under Clean Air Act (CAA) Section 110(a)(2)(B)(i), referred to as the 'good neighbor provision,' States are obligated to prohibit emissions that contribute significantly to nonattainment or interfere with maintenance of a national ambient air quality standard (NAAQS) in any other State. The manner in which this provision is implemented has long been a significant burden on States and regulated entities. . . . U.S. EPA has set a standard for implementation that no State could reasonably perform on their own in order to fulfill their obligations to address the good neighbor provision in their infrastructure SIPs, or at least not without significant resource burdens to all the individual States. Therefore, States are equitably subject to the SIP process and deprived from their right to try to address the obligation in the infrastructure with a SIP. Furthermore, of greatest concern is U.S. EPA's choice of a screening threshold of 1 percent of the NAAQS. . . . The lower standards get with each subsequent review by U.S. EPA, approaching background concentrations, the more meaningful this 1 percent threshold becomes and the more insupportable the task of finding reductions to eliminate the contribution. U.S. EPA must evaluate this process and raise this threshold if it intends to continue this threshold."

**Ohio Environmental Protection Agency**

**Illustrative state environmental agency comments:**

- Colorado Air Pollution Control Division, pg. 2
- Connecticut Department of Energy and Environmental Protection, pg. 1
- Kansas Department of Health and Environment, pg. 1
- North Carolina Division of Air Quality, pg. 2 - 3, 18 - 19
- Ohio Environmental Protection Agency, pg. 1 - 2
- South Dakota Department of Environment and Natural Resources, pg. 3
- Utah Division of Air Quality, pg. 4

Other relevant comments: Texas Attorney General, Attachment 2; Attorneys General of WV, AL, AR, IN, LA, MI, OK, and SC, Exhibit A; Northeast States for Coordinated Air Use Management, pg. 2; Association of Air Pollution Control Agencies, pg. 1 - 3, 7 - 8.

**Clean Power Plan<sup>24</sup> and Standards of Performance for Greenhouse Gas Emissions From New, Modified, and Reconstructed Stationary Sources: Electric Generating Units<sup>25</sup>**

"The rule called for large reduction in emissions from Indiana power plants and did not give us the time to make wise decisions about how to accomplish this with minimal cost or interruption of power."

**Indiana Department of Environmental Management**

**Illustrative state environmental agency comments:**

- [Alaska Department of Environmental Conservation](#), pg. 1, 8
- [California Air Resources Board](#), pg. 2
- [Connecticut Department of Energy and Environmental Protection](#), pg. 1
- [Indiana Department of Environmental Management](#), pg. 3
- [Kansas Department of Health and Environment](#), pg. 1
- [Pennsylvania Department of Environmental Protection](#), pg. 2
- [South Dakota Department of Environment and Natural Resources](#), pg. 3
- [Wyoming Department of Environmental Quality](#), pg. 7

Other relevant comments: [Texas Attorney General](#), Attachment 2; [Attorneys General of WV, AL, AR, IN, LA, MI, OK, and SC](#), Exhibit A

**Modeling Issues & Appendix W<sup>26</sup>**

"EPA relies on the development and use of emissions and air quality modeling studies to understand the relative contributions of emissions sources to potential violations of the NAAQS and contributions to regional haze pollution.... EPA's lack of responsiveness to air agency questions and concerns raises questions about the reasonableness and accuracy of the modeling studies and EPA's intentions."

**North Carolina Division of Air Quality**

**Illustrative state environmental agency comments:**

- [Nevada Division of Environmental Protection](#), pg. 2

<sup>24</sup> 80 FR 64652 (October 23, 2015).

<sup>25</sup> 80 FR 64510 (October 23, 2015).

<sup>26</sup> 82 FR 5182 (1/17/2017)

- North Carolina Division of Air Quality, pg. 18 – 21
- Wisconsin Department of Natural Resources, pg. 3
- Wyoming Department of Environmental Quality, pg. 5 – 6

Other relevant comments: American Association of State Highway and Transportation Officials, pg. 5 – 7

***Implementation of the 2015 NAAQS for Ozone: Nonattainment Area Classifications and State Implementation Plan Requirements<sup>27</sup>***

"Proposed Implementation Rule for 2015 Ozone Standard ... would require controls for nonattainment areas that demonstrate the international emissions are responsible for nonattainment issues. Proposed rule would also require control for upwind areas adjacent to nonattainment areas. States should be given discretion on how to implement the standard, especially regarding international transport demonstrations and interstate transport."

**Arizona Department of Environmental Quality**

Illustrative state environmental agency comments:

- Arizona Department of Environmental Quality, Attachment, pg. 1
- Maine Department of Environmental Protection, pg. 11
- Nevada Division of Environmental Protection, pg. 1
- North Carolina Division of Air Quality, pg. 4
- Ohio Environmental Protection Agency, pg. 2 – 3

Other relevant comments: Clark County Department of Air Quality (NV), pg. 1 – 2; American Association of State Highway and Transportation Officials, Attachment; Western Governors Association, pg. 13; Attorneys General of WV, AL, AR, IN, LA, MI, OK, and SC, Exhibit A

<sup>27</sup> 81 FR 81276.



**2015 National Ambient Air Quality Standards for Ground-Level Ozone<sup>28</sup>**

"South Dakota looked into the sources of the air pollutants that cause high ozone concentrations in South Dakota. The preliminary information indicates ozone-forming air pollutants are predominantly coming from sources outside of our state. Average ozone concentrations or background levels for South Dakota are high because of the ozone and ozone-forming pollutants coming from areas upwind from our state. DENR recommends that the National Ambient Air Quality Standards should not be lowered until a majority of the current nonattainment areas have been resolved. By concentrating on fixing these nonattainment areas, air quality will improve in both the nonattainment areas and in states like South Dakota."

**South Dakota Department of Environment and Natural Resources**

**Illustrative state environmental agency comments:**

- Arizona Department of Environmental Quality, Attachment, pg. 1
- Maine Department of Environmental Protection, pg. 11
- Nevada Division of Environmental Protection, pg. 1
- North Carolina Division of Air Quality, pg. 4
- Ohio Environmental Protection Agency, pg. 2 – 3
- South Dakota Department of Environment and Natural Resources, pg. 2 – 3
- Wisconsin Department of Natural Resources, pg. 2 – 3

Other relevant comments: Clark County Department of Air Quality (NV), pg. 1 – 2; American Association of State Highway and Transportation Officials, Attachment; Western Governors Association, pg. 13; Attorneys General of WV, AL, AR, IN, LA, MI, OK, and SC, Exhibit A; Texas Attorney General, Attachment 2; National Association of Counties, National League of Cities, U.S. Conference of Mayors, and National Association of Regional Councils; Association of Air Pollution Control Agencies, pg. 3

<sup>28</sup> 80 FR 65282

**Cross-Media Electronic Reporting Rule (CROMERR)<sup>29</sup>**

"SCAQMD staff believes that implementation of CROMERR as written and interpreted by EPA limits the ability for local, regional and state agencies to develop and implement online streamlining mechanisms aimed at reducing administrative burdens on regulated parties."

- **South Coast Air Quality Management District**

Illustrative state environmental agency comments:

- Maine Department of Environmental Protection, pg. 9 – 10
- Massachusetts Department of Environmental Protection, pg. 2
- North Carolina Division of Air Quality, pg. 29 – 30

Other relevant comments: South Coast Air Quality Management District, pg. 1 – 2; Association of Air Pollution Control Agencies, pg. 2

**Other Electronic Reporting Requirements (Including CEDRI/CDX)**

"The current electronic reporting infrastructure makes it very confusing for small businesses to submit required reports. Each rule may have only certain reports (i.e. Notification of Compliance Status, Performance Evaluation Results) that are required to be submitted electronically, while others can still submit on paper. Yet, when the business (or its representative) attempts to use CEDRI or the Central Data Exchange (CDX) to submit a required electronic report, the particular test method or form is not available. Because electronic reporting results in excessive burdens for smaller businesses, we recommend that more flexibility in format of the reports/records be allowed."

- **National Steering Committee, Small Business Ombudsmen/Small Business Environmental Assistance Programs**

Illustrative state environmental agency comments:

- Maine Department of Environmental Protection, pg. 7 – 9

<sup>29</sup> 70 FR 59848 (10/13/2005). More information: <https://www.epa.gov/cromerr>.

- [Michigan Department of Environmental Quality](#), pg. 4
- [North Carolina Division of Air Quality](#), pg. 29 – 30

Other relevant comments: [Association of Air Pollution Control Agencies](#), pg. 2

#### **Monitoring Requirements**

"ECOS recommends that EPA allow states to reduce monitoring in maintenance areas that can demonstrate permanent ambient pollutant levels significantly below the level of the relevant National Ambient Air Quality Standards (NAAQS). In many areas of the country, ambient levels of pollutants have been drastically and permanently reduced based on improvements in technology, land use changes, and the implementation of State Implementation Plan controls. However, under current rules and guidance documents, these areas are required to continue to operate monitors throughout the 20-year maintenance period, even when these monitors demonstrate no threat of NAAQS violation. This imposes a significant cost with no environmental benefit; these are resources that could be better spent understanding pollutants that are a current health concern."

**The Environmental Council of the States**

Illustrative state environmental agency comments:

- [Alaska Department of Environmental Conservation](#), pg. 6 – 7
- [Arizona Department of Environmental Quality](#), pg. 1
- [Minnesota Pollution Control Agency](#), pg. 6
- [North Carolina Division of Air Quality](#), pg. 34
- [Utah Division of Air Quality](#), pg. 4 – 5
- [Wisconsin Department of Natural Resources](#), pg. 7
- [Wyoming Department of Environmental Quality](#), pg. 6

Other relevant comments: [Fairbanks North Star Borough Air Quality Division \(AK\)](#), pg. 2 – 4; [Maricopa County Air Quality Department \(AZ\)](#), pg. 1 – 2; [Environmental Council of the States](#), pg. 3 – 4; [Association of Air Pollution Control Agencies](#), pg. 6

**Other Title V Permit Review/Petition Issues**

"In 2004, the Clean Air Act Advisory Committee (CAAC) established a Task Force on Title V Implementation Experience... to report on stakeholder experience with implementation of the Title V operating permit program required under the CAA Part 70. U.S. EPA should examine this report and move forward with recommendations to provide the much-needed improvement to the Title V permit system."

**Ohio Environmental Protection Agency**

Illustrative state environmental agency comments:

- Georgia Environmental Protection Division, pg. 3
- Nebraska Department of Environmental Quality
- North Carolina Division of Air Quality, pg. 33
- Ohio Environmental Protection Agency, pg. 3
- South Dakota Department of Environment and Natural Resources, pg. 2

Other relevant comments: Association of Air Pollution Control Agencies, pg. 4

**Guidance as De Facto Rulemaking**

"EPA guidance has a long history of becoming *de facto* rulemaking and imposes oversight or operational demands on state regulatory agencies that were not necessarily contemplated in an underlying rule. Existing guidance should be examined with direct state agency staff representation to eliminate those that inhibit rather than support cost-effective and successful state regulatory strategies."

**Oklahoma Department of Environmental Quality**

Illustrative state environmental agency comments:

- Maine Department of Environmental Protection, pg. 1 – 2
- North Carolina Division of Air Quality, pg. 27 – 28
- Oklahoma Department of Environmental Quality, pg. 11
- Utah Division of Air Quality, pg. 1 – 2

Other relevant comments: Association of Air Pollution Control Agencies, pg. 4



**General National Ambient Air Quality Standards & State Implementation Plan Process Improvements**

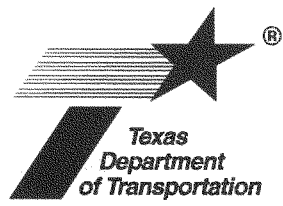
"EPA should review and revise regulations to improve the State Implementation Plan (SIP) approval process. The SIP is the federally enforceable plan for each State that sets out how that State will attain the various National Ambient Air Quality Standards (NAAQS) set forth in the Clean Air Act. The agency should continue to work efficiently to clear the backlog of SIPs, sign SIP approval status, and increase communication with the States."

**Attorneys General of West Virginia, Alabama, Arkansas, Indiana, Louisiana, Michigan, Oklahoma, and South Carolina**

**Illustrative state environmental agency comments:**

- California Air Resources Board, pg. 2
- Kansas Department of Health and Environment, pg. 1
- Maine Department of Environmental Protection, pg. 10 – 13
- North Carolina Division of Air Quality, pg. 4 – 6
- Ohio Environmental Protection Agency, pg. 1 – 5
- Wisconsin Department of Natural Resources, pg. 2 – 3

Other relevant comments: Attorneys General of WV, AL, AR, IN, LA, MI, OK, and SC, pg. 4 – 5; Association of Air Pollution Control Agencies, pg. 7 – 8



## Targeted Transportation Conformity Reform

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### Overview

Transportation conformity and State Implementation Plan (SIP) schedules do not align with transportation project development and planning schedules. This mis-timing results in project delays that reduce the benefits of MAP-21 environmental streamlining in nonattainment and maintenance areas. Innovative financing (TIFIA and PPP) along with local and state bond packages help to accelerate projects, but transportation conformity tends to delay such acceleration. Also, unless a SIP requires transportation control measures (TCMs) and none are required for marginal areas, regional transportation conformity does not reduce emissions. It's an intensive paperwork exercise that wastes resources and delays projects. Targeted transportation conformity reform would reduce project delays.

### Overview-Texas

Texas is the second most populated state with the second largest state gross domestic product. Since 2000, 6.1 million additional people call Texas home. This is the largest increase in state population in the nation – this increase is larger than individual state populations for 33 states. This population change coupled with lack of a long-term funding necessitated increased use of innovative financing.

Over this same time period, Texas reduced peak ozone pollution by 24% (the national average was only 12%).<sup>1</sup> Texas also has one of the most extensive air monitoring programs in the nation, measuring more organic compounds (like benzene) than any other state and providing more than 23 million data points per year.<sup>2</sup>

### Transportation Conformity Results in Project Delays

Examples of transportation conformity related project delays in Dallas (> \$50 million) and Houston (> \$12 million) are provided in Attachment 3. Highway sanctions and transportation conformity jeopardize the ability to plan and ultimately deliver transportation projects on time resulting in infrastructure delays<sup>3</sup>. Such delays may: impact the safety of the traveling public, waste funds, and contribute to congestion (thereby increasing travel time and wasting fuel). Regardless of how these issues were considered in the 1990 Clean Air Act (CAA) amendments, 25 years later, transportation funding cannot keep up with maintenance and demand, making congestion much worse. So the efficient use of transportation funds is more critical now than ever before.

<sup>1</sup> TCEQ Air Quality Successes at: <http://www.tceq.texas.gov/airquality/airsuccess/air-success-criteria>.

<sup>2</sup> TCEQ Air Quality Successes at: <http://www.tceq.texas.gov/airquality/airsuccess/air-success-toxics>.

<sup>3</sup> For example, a \$3.2 billion dollar toll concessionary project was delayed by 6-9 months, which delayed use and programming of those funds in the DFW area. Targeted Revisions to Transportation Conformity to Reduce Project Delays 2

### *Options for Reducing Transportation Emissions and Congestion*

Transportation emissions are reduced by one of the four main categories:

- **Federal CAA Engine and Fuel Controls** (tailpipe controls)–reduce tailpipe emissions by adding controls (e.g. catalytic converters), or using cleaner fuels and engines (e.g., reduced benzene in gas, hybrid, electric, or hydrogen engines). The CAA also requires vehicle inspection and maintenance programs in moderate and higher ozone nonattainment areas to ensure controls are properly working.
- Federal, state and local “cash for clunker” programs (removes high-emitters).
- **Traffic System Management (TSM or System Optimization)** - improves the operational characteristics of the transportation network to achieve the greatest possible efficiency (e.g., traffic light timing, pre-staged wrecker service to clear accidents faster, or traveler information systems).
- **Reduction in Vehicle Miles Traveled (VMT) or Travel Demand Management (TDM)** – reduces the rate of growth in VMT by trip reduction programs and/or high occupancy vehicle use (rideshare, vanpool, carpool, telecommute), and mode shift (transit, bike, walk and local land use programs such as transit oriented development).

TDM and TSM are measures that can be included in a SIP for transportation control measures.

Congestion wastes fuel. Fuel wasted in the top 101 most congested areas in the U.S. was:

- 1990 – 1.1 billion gallons and
- 2011 – 2.2 billion gallons.<sup>4</sup>

Improvements to urban congestion can be realized through three mechanisms<sup>5</sup>:

1. TSM or system optimization (discussed above).
2. TDM or reduced VMT (discussed above).
3. Increased system capacity – adding lanes on congested roadways or constructing new parallel roadways.<sup>6</sup>

The majority of emission reductions occur from **federal** tailpipe controls rather than through transportation conformity via transportation control measures (TCMs) and local land use measures. For example, a recent analysis by FHWA estimates federal tailpipe controls will reduce national on-road NO<sub>x</sub> by more than 40% (>8 %/year) from 2015 to 2020, while accounting for increased VMT (see Attachment 1). In addition, EPA's recent “*Potential*

<sup>4</sup> TTI 2012 Urban Mobility Report at <http://mobility.tamu.edu/ums/>

<sup>5</sup> 2030 Committee Texas Transportation Needs Report, 2009.

<sup>6</sup> During the economic downturn, several projects had to be removed from the H-GAC transportation plan for fiscal constraint, resulting in increased emissions due to the loss of capacity projects. This option of capacity projects reducing emissions was not envisioned in the CAA when considering transportation conformity and highway project delays sanctions). 3



*Changes in Emissions Due to Improvements in Travel Efficiency - Final Report, March 2011.*<sup>7</sup> suggests that tailpipe controls will continue to be crucial for reducing future vehicle emissions. This study suggests the "bundle" of: TDM + land use changes + transit fare reduction + transit service improvements + parking fees + mileage fees may reduce NOx by 8.65% by the year 2050 (40 year reduction). On average, this equals a 0.2% reduction/year for NOx.

The reductions historically achieved through conformity are miniscule compared to federal tailpipe controls. TxDOT informally polled four state DOTs (including information on the Washington D.C. area) and Texas Metropolitan Planning Organizations (MPOs). For all five states, transportation control measures (TCMs) were last needed for either the 1979 1-hour or the 1997 8-hour ozone NAAQS, and that they accounted for less than 1% (some less than 1 ton) reduction.<sup>8</sup> Transportation control measures (TCMs) in the 2007 DFW SIP (for the 1997 ozone NAAQS) accounted for approximately 0.4% NOx on-road reductions/year (on average).<sup>9</sup> Transportation control measures (TCMs) in the 2002-2004 Houston-Galveston-Brazoria (HGB) SIPs (for the 1979 1-hour ozone NAAQS) accounted for < 0.1% of the total SIP NOx reductions and 0.7% of the NOx transportation budget, with reductions occurring between 1994 through 2007<sup>10</sup> (or an average yearly reduction of 0.05%). These transportation control measure (TCM) commitments (summarized below) cost hundreds of millions of dollars to only result in < 0.1% reduction in NOx emissions for the HGB area<sup>11</sup>:

Signalization	52.2 center-lane miles
High Occupancy Vehicle lanes	18.2 center-lane miles
Vanpool vehicles	225 vans
Park and ride lots	15,098 spaces
Arterial Traffic Management System	343.48 center-lane miles
Computerized Traffic Management System	387.37 center-lane miles
Bicycle lanes	435.998 center-lane miles
Accident investigation sites	3.2 center-lane miles

Attachments 1 and 2 are charts showing NOx emission reductions from 1970 – 2013 along with projections from 2015 to 2050 (including the > 10% average annual on-road reduction between 2015 -2020). Note the tremendous reductions in both on-road and non-road

7 EPA report: "Potential Changes in Emissions Due to Improvements in Travel Efficiency - Final Report" and is available at: <http://www.epa.gov/oms/stateresources/policy/420r11003.pdf>.

8 TxDOT inquiry distributed on February 20, 2015. State DOT responses received from February 20-24, 2015.

9 Texas SIP information at: [www.tceq.texas.gov/airquality/sip/](http://www.tceq.texas.gov/airquality/sip/)

10 SIP Revision: HGB Mid-Course Review of the One-Hour Ozone Attainment Demonstration SIP, December 1, 2004, Appendix F.6: HGAC Excel Spreadsheet Detailing the 2007 Onroad TCM Benefits for the 8-County HGB Area ([http://www.tceq.texas.gov/assets/public/implementation/air/sip/sipdocs/2004-03-HGB/HGB\\_MCR\\_dec2004.pdf](http://www.tceq.texas.gov/assets/public/implementation/air/sip/sipdocs/2004-03-HGB/HGB_MCR_dec2004.pdf)).

11 Metropolitan Planning Organization of the Houston-Galveston-Brazoria Area (MPO) (http://www.epw.senate.gov/107th/Houston\_Response.html). 4

transportation emissions. NO<sub>x</sub> is an ozone precursor emission, and ozone reductions in Texas and most of the U.S. require NO<sub>x</sub> reductions.

EPA's Greenbook<sup>12</sup> identifies 36 marginal nonattainment areas and 10 areas moderate to extreme nonattainment for the 2008 ozone NAAQS (> 75% are marginal and < 25% are moderate to extreme, respectively). The marginal nonattainment areas are not subject to attainment demonstration SIPs,<sup>13</sup> so no transportation control measures (TCMs) are required. For the remaining 10 areas, SIPs are due to EPA until July 2015. If needed, these areas could be polled to see if new transportation control measures (TCMs) were needed or if federal tailpipe controls were sufficient.

For more than 75% and possibly up to 100% of the current 46 nonattainment areas (227 counties), the transportation conformity process is an administrative paperwork burden simply documenting reductions from federal tailpipe controls.

*Streamlining Option: When TCMs are not needed in the SIP because federal tailpipe controls are sufficient, then transportation conformity results in no additional emissions reductions (majority of areas). Areas could simply be "deemed to meet" transportation conformity requirements via implementation of federal tailpipe controls.*

#### **Regional Transportation Conformity Process**

For moderate to extreme ozone nonattainment areas, regional transportation conformity assesses if the current transportation plan is equal to or less than the SIP budget and that TCMS (if any) have been timely implemented. For areas without SIP budgets (marginal areas and areas awaiting a SIP), it assesses if emissions are less than a baseline scenario. The CAA requires regional transportation conformity once every four years. EPA's 2015 information collection request on conformity costs stated any conformity completed other than once every four years is "voluntary." However, the conformity rule (@ 40 CFR 93.104) requires regional conformity each time plans/TIPs are revised and within 2 years of the effective date of the following SIP triggers: EPA finds SIP budgets adequate; EPA approves a SIP with budgets; or EPA promulgates an implementation plan which establishes or revises a budget. In 2011, AASHTO and AMPO issued a joint letter disagreeing with EPA's assessment of what is "voluntary" and that EPA is greatly underestimating conformity human and financial resources associated with transportation conformity, and the end result of this massive resource drain is almost always that federal tailpipe controls are working.

One of the greatest challenges with regional transportation conformity is accurately predicting 20-30 years into the future because it requires the use of highly variable latest

<sup>12</sup> EPA Greenbook for nonattainment areas at: <http://www.epa.gov/oar/oaqps/greenbk/hnsum.html>

<sup>13</sup> The CAA (42 USC 7511a(a)) does not require an attainment demonstration SIP for marginal nonattainment areas because they should attain through implementation of existing requirements (federal and state) + nonattainment permitting. Additional state requirements should not be necessary for marginal nonattainment areas to provide more than sufficient reductions for marginal and maintenance areas into the reasonably foreseeable future.

planning assumptions that lack the level of precision needed for SIP budgets. Research studies document that a substantial degree of uncertainty exists in forecasting future population, land use, finances, and the multitude of issues that go into transportation plans and travel models<sup>14</sup>. Projecting exactly where people are going to live and work and what vehicle they will drive or mode choice they will use up to 20-30 years into the future is speculative at best. Plans and travel models were intended to be a guide with sufficient elasticity to account for changes in planning assumptions and project refinements as details unfold throughout project development. Most changes to planning assumptions are beyond the state DOT/MPO control. Conformity requires plan and project specificity and accuracy contrary to their intended fluid nature. For example, the Beaumont 1997 ozone attainment-maintenance SIP anticipated vehicle purchases for a robust economy, but during the Great Recession less new vehicles were sold. For this reason, Beaumont experienced an almost 2 year conformity lapse while attaining both the 1997 and 2008 ozone NAAQS. During this time, advancement of needed infrastructure was on hold. Short term funding has also led to the unanticipated removal of future projects because of reduced funding in financial forecasts. Long-term funding offers more financial stability for transportation plans.

*Why are MPOs/DOTs held to more frequent review of latest planning/model assumptions than the state environmental agency is for the SIP?*

*Why are DOTs/MPOs responsible for assessing federal tailpipe controls, when that's federal responsibility?*

The hierarchical nature of transportation conformity enforces a strict rigidity. For instance a project must conform to a regionally conforming transportation plan, which was, in turn, found to conform to the SIP. If a SIP revision is triggered, this affects conformity down the chain. The last major EPA emission model change is a great example of this. It increased NOx emission estimates by 30-50%, so areas had to undergo a SIP revision to include the increased NOx emissions before proceeding with regional conformity.

Larger metropolitan areas might be able to complete regional conformity semiannually to biennially, and smaller metropolitan areas less often (typically biennially in Texas), so conformity may delay projects by about 6-24 months. In order to obtain a project-level conformity determination as part of the NEPA decision, a project must be found to be consistent with the plan's regional conformity determination. A project change that makes it inconsistent with the plan's design concept and scope, funding, or schedule results in needing a new regional conformity analysis to advance the project. This can occur for changes as small as adding, delaying, or advancing one additional lane mile; even when the

14 National Academies - Transportation Research Board 288 excerpts include page 77 "there is really no hope that a mathematical model can ever accurately predict the future, given the uncertainty in demographics, technological shifts, and social changes" or page 76 "In...more rapidly changing regions, greater errors in demographic forecasts would be expected. There may be considerably more uncertainty in the behavior of a demographic forecast in a rapidly changing region than in a more stable region. These people and jobs are going to go within the region is far more uncertain."

transportation network may be quite large (Dallas-Fort Worth has 43,607 lane miles and 15,858 center-lane miles<sup>15</sup>, or 27,360 lane miles and 5212 center-lane miles for H-GAC<sup>16</sup>). Unfortunately, such changes can encompass such trivial things as changing the location of a ramp or extending the project limits for construction warning signs if the project is described with specific post miles in the plan and/or TIP. Regional conformity must be re-determined even if the change isn't sufficient to trigger a subsequent NEPA action. Delays have occurred on a number of projects in Texas while awaiting a new regional conformity determination. This delays the benefits (e.g., safety, congestion reduction, economic) associated with the project.

In an effort to add flexibility to project-level conformity determinations, the 1997 conformity rule had a "grandfathering" provision that locked in conformity at the NEPA approval point regardless of what happened later. However, that was thrown out by court action, so project-level conformity must be demonstrated for each federal decision point in project development (NEPA/environmental decision, design, PS&E, ROW, and construction). This increases the number of opportunities that a project-level conformity determination may trigger the need for a new regional conformity determination and the resulting delays. Providing an option for conformity to only apply to the post-NEPA stage prior to construction would allow for changes made in the NEPA process (including those made because of public involvement) to be incorporated into an updated plan prior to construction without causing project delays (similar to permits issued post-NEPA).

*Project delays occur because flexible meets rigid (a.k.a., planning and project development meet conformity), the future can't be accurately predicted, and air quality and transportation planning occur on different schedules.*

#### ***Transportation Implications for the Pending 2015 Ozone NAAQS***

The EPA proposal to lower the ozone NAAQS to a range between 65 and 70 parts per billion (ppb) may have a serious and detrimental effect on the future development of transportation projects in Texas and other states.

The 2008 ozone NAAQS impacts 227 counties, EPA predicts a NAAQS set at 65 could impact 558 counties. TxDOT estimates this amount would exceed 1000 counties, if EPA uses the designation criteria used historically for the 1997 and 2008 ozone NAAQS. A National Association of Manufacturer's suggests most of the U.S. could be designated nonattainment

<sup>15</sup> NCTCOG Draft 2014 Conformity Documentation, Appendix 10.11 at: <http://www.nctcog.org/trans/air/conformity/2014/10.11.pdf>

<sup>16</sup> Page 4 of the H-GAC Air Quality conformity Report, 2014, at: [http://www.h-gac.com/tag/airquality\\_model/conformity/2040\\_RTR/2014/04/04/2014\\_H-GAC\\_Air\\_Quality\\_Conformity\\_Report.pdf](http://www.h-gac.com/tag/airquality_model/conformity/2040_RTR/2014/04/04/2014_H-GAC_Air_Quality_Conformity_Report.pdf)

if EPA uses both modeling and monitoring data (an option available under existing rules). EPA has not yet proposed designation criteria, so the full impacts of this rule remain uncertain. Currently, 18 Texas counties do not meet the 2008 ozone NAAQS of 75 ppb. If the NAAQS is revised to 65 ppb, it may impact an additional 50 counties (68 total). Attachment 4 is a map identifying the areas in Texas that may be impacted by this proposal.

For the affected Texas counties, the proposal may impact transportation in the following ways:

- Increase potential for project delays<sup>17</sup> and potentially increase project costs;
- Place additional constraint/limit/delay on moving funds around and specifically delay the ability to rapidly utilize innovative funding options that may arise;
- Increase transportation planning requirements and lengthen planning schedules;
- Increase coordination for plans and projects with MPOs/TxDOT Districts and Divisions; EPA, TCEQ and FHWA;
- Dilute the distribution of limited state planning dollars that are set-aside to MPOs for air quality planning which may pose additional risk to transportation plans and projects;
- Redistribute limited federal Congestion Mitigation Air Quality (CMAQ) funds;
- For projects in these newly designated areas, require transportation conformity determinations prior to:
  - funding changes that impact fiscal constraint (federal, state, local and private);
  - plan/Transportation Improvement Plan changes (beyond administrative amendments); and
  - environmental clearance of changes to project funds, schedule, and/or design, concept and scope changes.

#### *Summary*

The Clean Air Act and current ozone NAAQS are working. EPA projections of future non-attainment areas show significant reductions, from 558 counties nationwide to 68 counties in 2025 and this will occur WITHOUT implementing new controls. Unfortunately, instead of focusing on the 68 counties that need extra help, the CAA requires all 558 counties to adhere to stricter requirements. In addition, these counties have to adhere to stricter requirements for 20 years AFTER achieving the NAAQS. Reforming conformity would put the focus where it

<sup>17</sup> For example, the \$3.2 billion SH 121 concessionary payment was delayed by several months awaiting a new conformity determination.

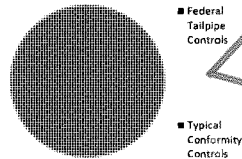
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is most needed and offer relief to areas that will achieve the NAAQS through implementation of existing requirements.

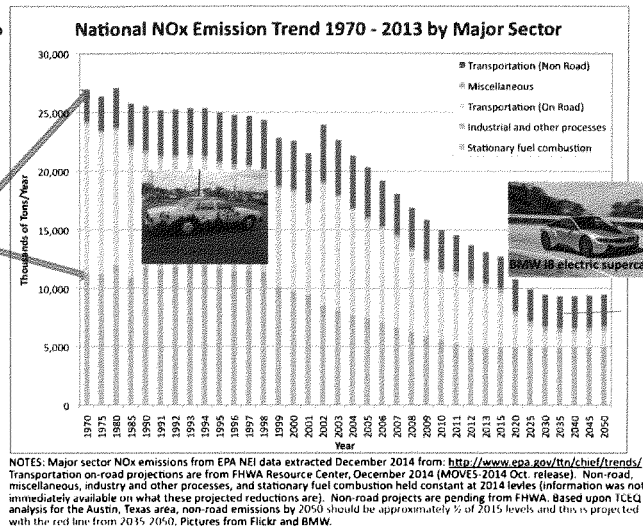
*Keep environmental requirements that are helpful; streamline/remove wasteful ones.*

For further details, please contact:  
Melissa Meyer  
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Texas Department of Transportation  
10 G St NE, Ste 650  
Washington, DC 20002  
202-434-0214 office  
512-658-2445 cell

### Typical Contribution for SIP Conformity Transportation Control Measures (TCMs)



- Transportation emissions are between the 2 orange arrows
- Federal tailpipe controls reduce most emissions
- SIP conformity controls (TCMs) are typically <1% to 0% of transportation reductions
- Even with increased vehicle miles of travel (VMT), there is a major downward trend in transportation emissions due to federal tailpipe controls, through 2050.
- Most SIPs have sufficient future transportation emission reductions due to tailpipe controls so that additional conformity related controls (TCMs) are NOT needed.
- Basically, conformity discloses that the federal tailpipe controls are working to reduce emissions.



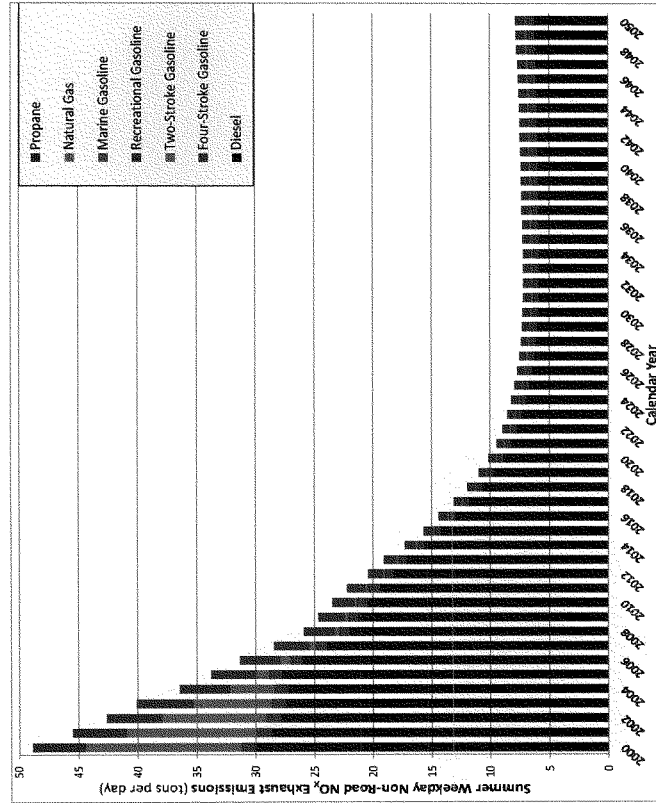
### Attachment 1 - NOx Emission Trends

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**Attachment 2 – Non-Road Emission Trend Example for Austin, Texas**



Nonroad Emissions Projections for the greater Austin, Texas Area



TCEQ, 2014. Approximately a 50% reduction from 2015 to 2050 levels.

### Attachment 3 – Examples Project Delays Due to Transportation Conformity

#### Dallas District

Project	Description	Year	Conformity Issue(s)	Delay	Cost
US 75	Capacity 4 to 6 lanes	2011/2012	Schedule Change	9 months	\$4,000,000
IH 35E	Ramp/FR Rds/Overpass	2004	Schedule Change	6 months	\$600,000
SH 114	Bottleneck Improvement	2005/2006	Project Definition Review	3 months	\$300,000
SH 121/US 75	Reconstruct Interchange	2005/2006	Schedule Change	11 months	\$3,200,000
FM 2181	Capacity 2 to 6 lanes	2004	Design Change	6 months	\$2,700,000
IH 635	Frontage Roads	2004	Schedule Change	6 months	\$600,000
FM 2499	New Location 6 Lanes	2008/2009	Schedule Change	12 months	\$5,400,000
SH 190 (EPGBT)	New 6-lane toll road	2007	Schedule and Design Change	6 months	\$2,700,000
IH 20	Frontage Roads	2002/2003	Schedule Change	12 months	\$3,600,000
SH 121	Add 6 lane toll to 6 lane frontage roads	2003	Design Change	12 months	\$3,600,000
US 175	Frontage Roads	2003/2004	Design Change	12 months	\$1,100,000
SH 121	Frontage Roads	2003/2004	Design Change	12 months	\$3,600,000
Belt Line Road	Capacity 4 to 6 lanes	2004/2005	Design Change	9 months	\$2,700,000
US 75	Interchange	2006/2007	Design Change	3 months	\$300,000
SH 289	Capacity 2 to 6 lanes	2006/2008	Design Change	22 months	\$6,500,000
FM 720	Capacity 2 to 6 lanes	2009/2010	Design Change	18 months	\$5,400,000
SH 114	Construct 0 to 2 concurrent HOV/Managed Lanes	2008/2009	Design Change	12 months	\$3,600,000
IH 35E	Capacity Project 4 to 6/8	2011/2012	Schedule Change	13 months	\$5,800,000

Totals <sup>18</sup>					\$55,700,000
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*Houston District*

Project	Description	Year	Conformity Issue(s)	Delay	Cost
SH 288	Construct 4 toll lanes and various intersection improvements	2012	Revised Design, Schedule and Cost	6 months	\$2,700,000
US 290	Reconstruct and widen to 8 main lanes with managed lanes and frontage roads	2012	Design Change	9 months	\$4,000,000
US 90A	Widen to lane divided	2014	Design Change	1 year	\$1,100,000
SH 146	Freeway widening	2013	Design Change	1 year	\$3,600,000
IH 10	Bottleneck improvement	2013	Design Change	9 months	\$900,000
Grand Parkway, Segment E, F1, F2	3 Segments of a new outer loop around Houston (managed lanes)	2007	Funding and Scheduling Change (litigation over-rode conformity related delays) For NEPA, had to do additional studies comparing transition from old to new plan including traffic data comparison	N/A	\$500,000 (additional NEPA related costs)
Totals <sup>19</sup>					\$12,800,000

<sup>18</sup> Assessing the Costs Attributed to Project Delay, Texas Transportation Institute, 2011 Transportation Short Course at: <http://tti.tamu.edu/conferences/tsc11/program/presentations/construction-2/ellis.pdf>. Example of cost calculations is provided below the table.

<sup>19</sup> Ibid.

*Examples of Cost of Construction Delay*

Monthly Cost of Project Delay			
	Small Project	Medium Project	Large Project
Wasted Time from Project Delay—Personal	\$26,363	\$31,248	\$63,902
Wasted Fuel from Project Delay—Personal	\$19,260	\$8,510	\$7,421
Wasted Time from Project Delay—Commercial	\$6,557	\$18,410	\$13,689
Wasted Fuel from Project Delay—Commercial	\$1,094	\$3,334	\$1,413
<b>Total Direct Cost to Travelers</b>	<b>\$52,180</b>	<b>\$58,167</b>	<b>\$85,012</b>
Construction Cost Increase per Month (based on HCI)	\$32,957	\$191,956	\$283,624
<b>Sub-total, Direct Costs</b>	<b>\$85,137</b>	<b>\$250,123</b>	<b>\$368,636</b>
Economic Impact of Project Delay	\$10,841	\$47,170	\$78,172
<b>Total Cost of Project Delay per Month</b>	<b>\$95,978</b>	<b>\$297,293</b>	<b>\$446,808</b>
<b>Total Cost of Project Delay</b>	<b>\$3,551,431</b>	<b>\$17,764,387</b>	<b>\$5,127,080</b>

ORAL ARGUMENT HELD SEPTEMBER 14, 2017  
DECISION ISSUED FEBRUARY 16, 2018

Case No. 15-1123  
(consolidated with 15-1115)

**IN THE UNITED STATES COURT OF APPEALS  
FOR THE DISTRICT OF COLUMBIA CIRCUIT**

SIERRA CLUB, *et al.*,

*Petitioners,*

v.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, *et al.*,

*Respondents.*

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**PETITION FOR PANEL REHEARING  
BY RESPONDENTS THE UNITED STATES  
ENVIRONMENTAL PROTECTION AGENCY, *et al.***

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April 23, 2018

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**CERTIFICATE AS TO PARTIES, RULINGS,  
AND RELATED CASES**

Pursuant to D.C. Circuit Rule 28(a)(1)(A), the undersigned counsel certifies as follows:

**A. Parties, Intervenor and Amici (Case No. 15-1123)**

Petitioners: Sierra Club; Conservation Law Foundation; Downwinders at Risk;  
Physicians for Social Responsibility – Los Angeles

Respondents: U.S. Environmental Protection Agency; E. Scott Pruitt,  
Administrator

Intervenor: None

Amici: Ventura County Air Quality Management District; South Coast Air  
Quality Management District

**B. Rulings under Review**

The Petitioners in both underlying consolidated cases sought review of a final EPA Rule entitled “Implementation of the 2008 National Ambient Air Quality Standards for Ozone: State Implementation Plan Requirements,” 80 Fed. Reg. 12,264 (March 6, 2015) (hereafter “SIP Requirements Rule”). The ruling under review in this Petition for Rehearing is the Court’s Decision dated February 16, 2018 (Dkt 1718293).

**C. Related Cases**

Case No. 15-1115 was consolidated with Case No. 15-1123, but briefed and argued separately. Case No. 15-1465 was severed and is being held in abeyance pending further order of the Court. There are no other related cases pending in this or other courts.

/s/ Heather E. Gange  
HEATHER E. GANGE  
Counsel for Respondents

**GLOSSARY**

1997 NAAQS	The national ambient air quality standard limiting daily maximum eight-hour average ozone concentrations to 0.08 parts per million. <i>See</i> 40 C.F.R. § 50.10(a).
2008 NAAQS	The national ambient air quality standard limiting daily maximum eight-hour average ozone concentrations to 0.075 parts per million. <i>See</i> 40 C.F.R. § 50.15(a).
CAA or Act	The Clean Air Act, 42 U.S.C. §§ 7401-7671q.
EPA	The U.S. Environmental Protection Agency
NAAQS	National Ambient Air Quality Standard
SIP	State Implementation Plan



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**INTRODUCTION AND SUMMARY**

Respondent United States Environmental Protection Agency (“EPA”) respectfully seeks panel rehearing of the Court’s February 16, 2018 decision (“Decision”). Rehearing is warranted because the Court overlooked two critical points of law. *See* Fed. R. App. P. 40(a)(2). In both instances, the Court failed to recognize that the Clean Air Act (“CAA” or the “Act”) is silent or ambiguous as it applies to the specific issues presented here. As a result, the Court never meaningfully considered—as it should have—why EPA’s construction of these fundamental provisions in the present context was reasonable.

First, the Court’s analysis is grounded on the apparent assumption that the Clean Air Act’s anti-backsliding provision, 42 U.S.C. § 7502(e), requires retention of all pre-existing “controls” when, as in this case, a national ambient air quality standard (“NAAQS”) is revised to be more stringent and the earlier standard is revoked. However, that provision, by its express terms, only applies in the event of “relaxation” of a NAAQS, and even then, only requires controls that are “not less stringent” than those that previously applied (*i.e.*, not *all* controls). *Id.* While the Court in prior cases upheld, as a reasonable exercise of the Agency’s discretion, EPA’s decision to take guidance from these anti-backsliding principles even when a more stringent NAAQS is adopted, the Court has never held that such an approach is *required* by the statute at all

in this context, let alone in the expansive and inflexible manner reflected in the Court's Decision here.

Second, the Court erred in construing 42 U.S.C. § 7506(c)(5) as unambiguously requiring transportation conformity determinations for the less stringent, now-revoked 1997 ozone NAAQS ("1997 NAAQS"), even where those areas were formally redesignated from nonattainment to attainment before that standard was revoked, and where those areas have been designated as being in attainment of the more stringent 2008 ozone NAAQS.<sup>1</sup> The Court based this aspect of its Decision entirely on the use of the past tense of a single word—"was"—in 42 U.S.C. § 7506(c)(5), a statutory construction that the Court advanced *sua sponte*. Decision, at 27-28. The Court's construction of the statute—reached without the benefit of full briefing—is not only unwarranted under traditional tools of statutory construction, but also stands in stark conflict with prior decisions of this Court—a conflict the Court's Decision did not recognize or attempt to resolve.

These are not academic or purely doctrinal concerns. For example, with regard to the anti-backsliding issue, at present there are seven different NAAQS, each of which is subject to review at five-year intervals. 42 U.S.C. § 7409(d). Every time a NAAQS is revised, there arise a host of complex, resource-intensive administrative and

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<sup>1</sup> A transportation conformity determination is a determination that a transportation plan, program, or project is consistent with the area's implementation plan. 42 U.S.C. § 7506(c)(1).

regulatory implications for EPA, States, the regulated community, and affected citizens. Congress simply did not intend the complete regulatory infrastructure for every revoked and superseded NAAQS (especially *less* stringent NAAQS that are superseded by more stringent ones) to live on automatically and indefinitely, draining State and federal resources that would be better directed to compliance with a more stringent and up-to-date standard.

These legal issues and their associated policy implications are important and complex. This petition can only highlight the most important points. EPA therefore requests that, if the Court grants rehearing, it allow supplemental briefing on these issues. Alternatively, if the Court does not grant rehearing on these substantive issues, EPA requests that the Court revise the relief granted in the Decision to remand without vacatur, to provide EPA the opportunity to implement the Court's Decision, certain targeted portions of the rule at issue (hereafter "SIP Requirements Rule") that do not impose anti-backsliding requirements for the 1997 NAAQS in Orphan Nonattainment Areas and do not impose transportation conformity requirements for Orphan Maintenance Areas. To vacate those specific provisions immediately upon issuance of the Court's mandate risks creating substantial confusion and disruption. As discussed below, while remedy issues were not briefed or analyzed in detail, the targeted approach suggested by EPA herein fully comports fully with *Allied-Signal, Inc.*

*v. U.S. Nuclear Regulatory Comm'n*, 988 F.2d 146, 150-51 (D.C. Cir. 1993), and related precedent of this Court on remand and vacatur issues.

#### **BACKGROUND**

Under the Act, EPA establishes NAAQS to protect public health with an adequate margin of safety for specified pollutants (eg, ozone). 42 U.S.C. § 7408. Once a NAAQS is promulgated or revised, EPA must designate areas as meeting or not meeting it (“attainment” or “nonattainment,” respectively). *Id.* § 7511(a). The Act also provides for EPA to redesignate areas from “nonattainment” to “attainment” once they attain a NAAQS and fulfill five requirements (including a NAAQS attainment determination and related SIP, maintenance plan, permitting, and nonattainment area requirements). *Id.* § 7407(d)(3)(E). Once redesignated to attainment, these are called “Maintenance Areas.”

States have primary responsibility for ensuring that air quality within their jurisdiction meets each NAAQS. CAA requirements can include, *inter alia*: transportation conformity demonstrations and development of a State implementation plan (“SIP”) that addresses new source review permitting. *Id.* §§ 7502(c), 7503, 7506(c).

The Act requires EPA to review the NAAQS every five years and make appropriate revisions. *Id.* §§ 7409(d)(1), 7502(a)(2)(A). When such revisions “relax” a NAAQS, EPA must promulgate anti-backsliding requirements for “all areas which



have not attained that standard as of the date of such relaxation . . . [that] provide for controls which are not less stringent than the controls applicable to areas designated nonattainment before such relaxation.” *Id.* § 7502(e). Because the CAA does not speak to situations where EPA *strengthens* a NAAQS by promulgating a more stringent standard and then revoking an older, less-stringent one, EPA has exercised its gap-filling authority. There, EPA looks to the principles in 42 U.S.C. § 7502(e) regarding whether and how anti-backsliding measures should be imposed in particular circumstances. *South Coast Air Qual. Mgmt. Dist. v. EPA*, 472 F.3d 882, 900 (D.C. Cir. 2006) (hereafter “*South Coast I*”); see *NRDC v. EPA*, 643 F.3d 311, 319 (D.C. Cir. 2011).

EPA promulgated the first ozone NAAQS in 1979 (“One-Hour NAAQS”), followed by the second, generally<sup>2</sup> more stringent 1997 NAAQS. 62 Fed. Reg. 38,856 (July 18, 1997). EPA later revoked the One-Hour NAAQS, including all related area designations and classifications. 69 Fed. Reg. 23,951 (Apr. 30, 2004); see *South Coast I*, 472 F.3d at 898.

EPA’s full revocation of the One-Hour NAAQS was challenged in this Court, which held that “EPA retains the authority to revoke the one-hour standard so long as adequate anti-backsliding provisions are introduced.” *South Coast I*, 472 F.3d at 899.

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<sup>2</sup> Because the 1-hour NAAQS and the 8-hour NAAQS are measured over different averaging times, the relative “stringency” of these two standards is not as simple to measure as is the relative stringency of the 1997 and 2008 versions of the 8-hour ozone NAAQS, which are the two NAAQS involved here.

The Court further stated that “[t]he only remaining requirements as to the one-hour NAAQS are the anti-backsliding limitations.” *Id.* at 899-900; *see also South Coast Air Quality Mgmt. Dist. v. EPA*, 489 F.3d 1245, 1248 (D.C. Cir. 2007) (reh’g petition for *South Coast I*).

In 2008 EPA promulgated an even more stringent ozone NAAQS (the “2008 NAAQS”). 73 Fed. Reg. 16,436 (Mar. 27, 2008).<sup>3</sup> In 2012, EPA issued a rule revoking the less stringent 1997 NAAQS solely for purposes of transportation conformity. 77 Fed. Reg. 30,160 (May 21, 2012). A decision resolving a challenge to that rule reiterated, “Because the [ ] rule considered in *South Coast* revoked the prior NAAQS ‘in full, including the associated designations,’ there remained no nonattainment areas or maintenance areas for purposes of the previous, fully revoked [One-Hour] standard.” *NRDC v. EPA*, 777 F.3d 456, 471-72 (D.C. Cir. 2014) (quoting *South Coast I*, 472 F.3d at 898).

In 2015, EPA issued the SIP Requirements Rule at issue in this case to implement the more stringent 2008 NAAQS. The SIP Requirements Rule revoked the 1997 NAAQS in full, including all designations and classifications. 80 Fed. Reg. 12,264, 12,296 (Mar. 6, 2015). EPA also exercised its gap-filling discretion by looking

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<sup>3</sup> Because the averaging times of the 1997 8-hour NAAQS and the 2008 8-hour NAAQS are the same, the 2008 NAAQS is definitively “more stringent” than the 1997 version, a consideration that has obvious relevance to the “not less stringent” criterion in the Act’s anti-backsliding provision, 42 U.S.C. § 7502(e).

to the principles of Section 7502(e) to establish anti-backsliding requirements for areas that were designated nonattainment for both the 1997 and 2008 NAAQS at the time the 1997 NAAQS was revoked, and establish two processes whereby those requirements subsequently could be lifted, including the “Redesignation Substitute.” *Id.* at 12,299.

On February 16, 2018, the Court issued its Decision granting in part and denying in part challenges to the SIP Requirements Rule. The Decision upheld the revocation of the 1997 NAAQS, and reaffirmed that “EPA may revoke a previous NAAQS in full ‘so long as adequate anti-backsliding provisions are introduced.’” Decision, at 12 (quoting *South Coast I*, 472 F.3d at 899).

Contrary to *South Coast I* and the rehearing decision for that case, however, the Court appeared to proceed on the assumption that 42 U.S.C. § 7502(e) applies directly in this case. Decision, at 16. The Court did not evaluate the reasonableness of EPA’s determinations with respect to each anti-backsliding measure using the standard of review in the second step of the analysis established in *Chevron U.S.A., Inc. v. NRDC*, 467 U.S. 837 (1984). This Court’s Decision also held, among other things, that anti-backsliding requirements must apply for the 1997 NAAQS until an area receives formal redesignation to attainment of the 1997 or 2008 NAAQS under 42 U.S.C. § 7407(d)(3)(E), Decision, at 16, 21, and that the plain language of 42 U.S.C. §

7506(c)(5) requires transportation conformity demonstrations in areas that were redesignated to attainment of the 1997 NAAQS prior to its revocation *and* designated attainment for the 2008 NAAQS (“Orphan Maintenance Areas”). The Court also vacated all nine specific portions of the SIP Requirements Rule that were successfully challenged. Decision, at 3.

ARGUMENT**I. THE COURT SHOULD RE-EVALUATE EPA’S ANTI-BACKSLIDING DETERMINATIONS UNDER *CHEVRON* STEP II.**

The CAA anti-backsliding provision does not speak to situations where, as here, a NAAQS is strengthened. The Court therefore should have performed a *Chevron* Step II analysis when evaluating EPA’s determinations of what is necessary to provide sufficient anti-backsliding protection for the 1997 NAAQS.

The plain language of Section 7502(e) “[by] its terms . . . applies only when EPA ‘relaxes’ a primary NAAQS,” not when it strengthens one. *South Coast I*, 472 F.3d at 900 (emphasis added); see *South Coast Air Qual. Mgmt. Dist.*, 489 F.3d at 1248; *NRDC v. EPA*, 643 F.3d at 319; *NRDC v. EPA*, 779 F.3d 1119, 1121 (9th Cir. 2015). In the SIP Requirements Rule, EPA therefore looked to the principles of 42 U.S.C. § 7502(e), as reasonably applied in the specific contexts presented here, to fill the statutory gap, instead of applying that provision directly.

The Agency first found that Section 7502(e) by its terms was never intended to apply to areas attaining a standard at the time of its relaxation, and that in nonattainment areas the purpose of anti-backsliding is “to ensure that the *level of protection* provided by requirements for the [revoked NAAQS] would remain in place as areas transition[] to implementing the more stringent[] standard.” 78 Fed. Reg. 34,178, 34,214/1 (June 6, 2013) (emphasis added); see 80 Fed. Reg. 12,299.

The Agency next found that the air quality in Orphan Nonattainment Areas—which were designated attainment for the more stringent 2008 NAAQS at the time the 1997 NAAQS was revoked—were not “areas which have not attained [the 1997 NAAQS] as of the date of” revocation, 42 U.S.C. § 7502(c), because it is mathematically impossible to attain the 2008 NAAQS without having already attained the weaker 1997 NAAQS. JA-354; 80 Fed. Reg. at 12,297/3; 78 Fed. Reg. at 34,219/1; EPA Brief, at 17. EPA therefore determined that it did not need to promulgate anti-backsliding measures for these areas, because Section 7502(c) was not designed to apply to areas that have attained a standard as of the date of revocation. In contrast, anti-backsliding measures are needed in areas that *failed* to attain the 1997 NAAQS as of its revocation. 40 C.F.R. § 51.1105(a)(3); EPA Brief, at 38-42; 80 Fed. Reg. at 12,297/3; 78 Fed. Reg. at 34,219/1; JA-363.

With respect to areas where anti-backsliding measures *are* needed (*i.e.*, those designated nonattainment for both the 1997 and 2008 NAAQS), EPA explained why the 17 requirements codified by the SIP Requirements Rule are more than adequate to ensure that projected improvements in air quality provided by requirements for the 1997 NAAQS would not be frustrated, while also not “imposing burdensome intermediate requirements left over from obsolete standards.” JA-349; 80 Fed. Reg. at 12,284; 78 Fed. Reg. at 34,215. That explanation included the record basis for these conclusions,

including evidence of continuous improvement in air quality where the same 17 anti-backsliding requirements were implemented for the formerly-revoked One-Hour NAAQS. 80 Fed. Reg. at 12,284; *see* JA-349.

Each of those determinations reasonably addressed issues that the statute does not address, and therefore should have been entitled to deference. *See Chevron*, 467 U.S. at 866. As noted above, even where the Act's anti-backsliding provision applies directly, it still only requires that current controls be "not less stringent" than prior controls, and does not establish a blanket requirement that *all* prior controls must be retained, including in Orphan Nonattainment Areas attaining the more stringent NAAQS. In this case, however, the Court erroneously presumed based on *South Coast I* that "EPA is required by statute to keep in place measures intended to constrain ozone levels," and based on that fundamentally incorrect presumption, proceeded to apply Section 7502(c) directly to hold that particular measures must be retained simply because, in the Court's view, they constituted a "control[.]" Decision, at 16. EPA submits that the Court erred by failing to perform the required *Chevron* Step II analysis for each of these determinations. It therefore seeks rehearing so that the Court may do so based upon the parties' earlier briefing and/or any supplemental briefing that the Court may deem appropriate.

**II. THE COURT ERRED WHEN IT CONSTRUED 42 U.S.C. § 7506(c)(5) TO REQUIRE TRANSPORTATION CONFORMITY DEMONSTRATIONS IN ORPHAN MAINTENANCE AREAS.**

The Court also erred by construing 42 U.S.C. § 7506(c) to require transportation conformity demonstrations in Orphan Maintenance Areas (i.e., areas formally redesignated attainment for the 1997 NAAQS prior to revocation), Decision, 27-28. This both conflicts with prior decisions of this Court and is flawed as a matter of statutory construction.

**A. The Court's Construction of 42 U.S.C. § 7506(c)(5) To Require Transportation Conformity in Orphan Maintenance Areas Conflicts with Prior Decisions of This Court.**

The Court's Decision that 42 U.S.C. § 7506(c)(5) requires transportation conformity demonstrations in areas redesignated to maintenance for the revoked 1997 NAAQS conflicts with *South Coast I*, 472 F.3d at 899, and *NRDC v. EPA*, 777 F.3d 456, 470-71, with respect to the consequences of a full NAAQS revocation. At the very least, this constitutes an important legal issue that the Court failed to acknowledge and address. Arguably, it also violates the law-of-the-circuit doctrine, which requires that "the *same issue* presented in a *later case* in the *same court* should lead to the *same result*." *FedEx Home Delivery v. NLRB*, 849 F.3d 1123, 1127 (D.C. Cir. 2017) (emphasis in original) (quoting *In re Grant*, 635 F.3d 1227, 1232 (D.C. Cir. 2011) and *LaShawn A. v. Barry*, 87 F.3d 1389, 1393 (D.C. Cir. 1996)).



The *South Coast I* decision held that, because EPA revoked the prior One-Hour NAAQS in full, including the associated designations, “there remained no . . . maintenance areas for purposes of the previous, fully revoked standard,” and “the only remaining requirements as to the one-hour NAAQS are the anti-backsliding limitations.” *NRDC v. EPA*, 777 F.3d at 471 (quoting *South Coast I*, 472 F.3d at 898, 899).

This Court not only reaffirmed that result, but also did so with respect to Section 7506(c)(5) and the 1997 NAAQS in *NRDC v. EPA*, 777 F.3d at 471-72. In that decision, the Court vacated part of an earlier rule in which EPA partially revoked the 1997 NAAQS solely for purposes of transportation conformity. In so doing, the Court distinguished *South Coast I*, reiterating that because the One-Hour NAAQS had been *fully* revoked, “there remained no nonattainment areas or maintenance areas for purposes of the previous, fully revoked standard.” *Id.* at 471. The Court also expressly held that the *partial* revocation at issue in *NRDC v. EPA* left the designations and redesignations for the 1997 ozone NAAQS in place, and EPA could not lift Section 7506(c)(5) requirements “for areas that remain in nonattainment or maintenance status under the 1997 NAAQS.” 777 F.3d at 470.

In this case, the SIP Requirements Rule revoked the 1997 ozone NAAQS in full, including all existing designations and classifications. Decision, at 9; *see* 80 Fed. Reg. at 12,297/1-2. Consequently, under the Court’s precedent, there simply no longer are any “remain[ing]” maintenance areas for the 1997 NAAQS, and thus, there

exist no areas of this type to which transportation conformity for that now-revoked standard could apply. The Court's construction of Section 7506(c)(5) to nonetheless require transportation conformity demonstrations based on an area's pre-revocation status as a maintenance area conflicts directly with this precedent. The Court's Decision on this issue never acknowledged this precedent or attempted to reconcile it with its present analysis. *See* Decision, at 27-28. For this reason alone, the Court should grant rehearing regarding the construction of 42 U.S.C. § 7506(c)(5).

**B. When 42 U.S.C. 7506(c)(5) Is Viewed In Context, It Is Clear That the Court's Construction Frustrates Its Statutory Purpose.**

The Court also erred in finding that Section 7506(c)(5) unambiguously requires transportation conformity demonstrations in Orphan Maintenance Areas based solely upon the use of the past tense "was" in that provision (an argument that was not specifically advanced by Petitioners in their briefing here). Decision, at 27 ("an area that *was* designated as a nonattainment area but that *was* later redesignated . . . as an attainment area") (quoting 42 U.S.C. § 7506(c)(5)) (emphasis in original)). It is well-established that "[t]he plainness or ambiguity of statutory language is determined [not only] by reference to the language itself, [but as well by] the specific context in which that language is used, and the broader context of the statute as a whole." *Yates v. United States*, 135 S. Ct. 1074, 1081-82 (2015) (quoting *Robinson v. Shell Oil Co.*, 519 U.S. 337, 340-41 (1997)) (citations omitted); *see also Deal v. United States*, 508 U.S. 129, 132 (1993); *U.S. Sugar Corp. v. EPA*, 830 F.3d 579, 605 (D.C. Cir. 2016). It is at least

ambiguous whether Congress intended the word “was” to mean an area “was designated as a nonattainment area” under the *current* standard as EPA reasonably construes the word, rather than “was” *ever* designated nonattainment—even pursuant to a former standard now revoked. But when Section 7506(c)(5) is viewed in context, it is clear that that provision is intended to facilitate the implementation of operative (*i.e.*, not revoked) NAAQS

Section 7506(c)(5) is a sub-section of the CAA conformity provision, 42 U.S.C. §7506(c), which bars federal funding, support or approvals for activities that do not conform to applicable implementation plans. 42 U.S.C. § 7506(c)(1), (c)(2). Conformity to an implementation plan is defined to implement presently-applicable NAAQS:

Conformity to an implementation plan means --

- (A) conformity to an implementation plan’s purpose of eliminating or reducing . . . violations of the national ambient air quality standards and achieving expeditious attainment of such standards; and
- (B) that such activities will not . . . cause or contribute to any new violation of any standard. . . increase the frequency or severity of any existing violation. . . or . . . delay timely attainment of any standard. . . .

42 U.S.C. § 7506(c)(1). Substituting “revoked national ambient air quality standards” into these provisions is not consistent with the apparent purpose of 42 U.S.C. § 7506(c). In fact, as this Court has recently stressed in an analogous statutory construction issue in another Clean Air Act case, where a statute refers to events that happened in the past, it is not presumed to have continuing effects into the future.

*See Mexichem Fluor, Inc. v. EPA*, 866 F.3d 451, 459 (D.C. Cir. 2017) (“For example, President Obama replaced President Bush at a specific moment in time: January 20, 2009, at 12 p.m. President Obama did not ‘replace’ President Bush every time President Obama thereafter walked into the Oval Office.”). Therefore, Congress’ use of the past tense does not unambiguously require that Section 7506(c)(5) apply when maintenance areas no longer even exist due to the revocation of the 1997 NAAQS. *See also General Dynamics Land Sys. v. Cline*, 540 U.S. 581, 585-86 (2003) (commonly used terms can have several commonly-understood meanings). The Court therefore should grant rehearing regarding the construction of 42 U.S.C. § 7605(c)(5) for this reason as well, to consider whether EPA’s construction of this provision to refer, in this context, to *current* NAAQS conformity obligations is reasonable.

### **III. THE COURT SHOULD REMAND TWO COMPONENTS OF THE SIP REQUIREMENTS RULE WITHOUT VACATUR.**

Finally, to the extent these issues are not resolved by the requested substantive rehearing, EPA seeks rehearing with respect to vacatur of certain provisions of the SIP Requirements Rule, as opposed to a simple remand of those provisions of the rule to EPA, without vacatur, for further proceedings consistent with the Court’s Decision. Specifically, EPA seeks this revision of the relief order with respect to the provisions that: (1) do not impose anti-backsliding measures on Orphan Nonattainment Areas; and (2) establish that transportation conformity requirements for the revoked 1997 NAAQS are not applicable in Orphan Maintenance Areas.

The Court has long a long-established test for exercising its discretion to remand rule provisions without vacatur, based upon the disruptive consequences of an immediate change and the level of doubt regarding the correctness of the Agency's choices. *See Allied-Signal, Inc. v. U.S. Nuclear Regulatory Comm'n*, 988 F.2d 146, 150-51 (D.C. Cir. 1993). In appropriate cases, disruptive consequences in and of themselves can be a sufficient basis for remand without vacatur, notwithstanding the Court's merits finding that the rule at issue was legally flawed. *See, e.g., North Carolina v. EPA*, 550 F.3d 1176 (D.C. Cir. 2008). Here, the disruption caused by immediately vacating these provisions of the SIP Requirements Rule would be substantial and profoundly inequitable. Affected federal and State agencies, State and local planning organizations, and members of the regulated community have complied with the Rule in good faith since 2015, including the full revocation of the 1997 NAAQS in their planning decisions. Immediate vacatur also would create significant gaps in EPA's implementation program.<sup>4</sup> EPA therefore requests that these components be remanded without vacatur to enable the Agency to implement the Court's Decision in an orderly and equitable fashion.

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<sup>4</sup> EPA is currently evaluating the impact of the Decision on the specific requirements that would apply as anti-backsliding measures. For example, EPA has detailed regulations addressing how transportation conformity and NSR permitting determinations are made in different areas and different circumstances, and the Agency is evaluating how they would apply in areas affected by the Court's decision.

Immediately vacating the SIP Requirements Rule provisions and guidance excusing the 13 Orphan Nonattainment Areas from anti-backsliding provisions for the revoked 1997 NAAQS would impose a significant burden on these areas, without conferring a comparable benefit. Decl. of William Wehrum (“Wehrum Decl.”) ¶¶ 8, 17. All of these areas factually did attain the 1997 NAAQS by their respective attainment dates, all currently have Clean Data Determinations for the standard (*i.e.*, EPA already determined that their air quality meets the NAAQS), and many are likely eligible for formal redesignation under 42 U.S.C. § 7407(d)(3)(E)—which also would excuse them from anti-backsliding. *Id.* ¶ 17-18; *see e.g., WildEarth Guardians v. EPA*, 830 F.3d 529, 533, 536 (D.C. Cir. 2016).

But these areas were prevented from seeking such redesignation, because the SIP Requirements Rule reflects EPA’s long-standing position that areas cannot be redesignated for revoked standards. *See* 80 Fed. Reg. at 12,304-305; JA-352; Wehrum Decl. ¶ 17. EPA estimates that States will need 18 months to develop the necessary SIP revisions that comprise the core of the application through state-level notice-and-comment rulemaking, after which EPA will need approximately 12 months to review them and then take final action through federal notice-and-comment rulemaking. Wehrum Decl. ¶ 19; *see* 42 U.S.C. § 7407(d). A remand without vacatur of the Rule provisions exempting them from anti-backsliding requirements—which they likely would be excused from by now, but for the SIP Requirements Rule—would allow

States to efficiently obtain this relief without the burden and disruption caused by the revival of unnecessary controls.

Absent a remand without vacatur, the disruption that government entities and regulated parties will experience will be particularly severe. For example, transportation conformity would apply to all Orphan Nonattainment Areas for anti-backsliding purposes—as well as to all 69 Orphan Maintenance Areas under the Court’s construction of Section 7605(c)(5). Wehrum Decl. ¶¶ 7-11, 18-20. Planning and construction of infrastructure projects is a continuous process that cannot simply stop without significant economic and potential safety implications. *See* Declaration of Matthew Welbes (“Welbes Decl.”) ¶¶ 4-5, 9-11; Declaration of Walter Waidelich, Jr. (“Waidelich Decl.”) ¶¶ 4-7, 9, 12. These 82 Orphan Nonattainment and Maintenance Areas, where millions of Americans reside, include large metropolitan areas such as Boston, Detroit, Indianapolis, Milwaukee and Las Vegas; mid-size cities such as Birmingham, Louisville, Norfolk, and Raleigh-Durham; and smaller cities such as Erie, PA, Lansing, MI, Charleston, WV and Rochester, NY. Wehrum Decl. ¶ 11.

Under the SIP Requirements Rule, as of April 2015 these areas were no longer required to demonstrate conformity for the 1997 NAAQS. In addition, many of them make no conformity determinations *at all*, because they are designated attainment for all current NAAQS for which transportation conformity applies. *Id.* ¶ 10. The corresponding State and local agencies therefore likely lack altogether, or have insufficient, administrative and technical capacity to implement transportation

conformity. *Id.* Consequently, many Orphan Maintenance Areas *and* Orphan Nonattainment Areas—that have in actuality attained the 1997 NAAQS and are also meeting the more stringent 2008 NAAQS—could be subject to substantial harm, because new or revised transportation plans, improvement programs and non-exempt highway or mass transit projects cannot be approved, with the effect that billions of dollars appropriated for infrastructure improvements could be frozen or lost. *See* 40 C.F.R. §§ 93.102, 93.104; Wehrum Decl. ¶¶ 12-13; Waideich Decl. ¶¶ 12-13; Welbes Decl. ¶¶ 6, 9-11. Imposition of other anti-backsliding measures also would cause additional turmoil and be equally burdensome in affected Orphan Nonattainment Areas that factually attained the 1997 NAAQS. *See* Wehrum Decl. ¶¶ 14-16.

#### **CONCLUSION**

This petition for rehearing should be granted for the substantive reasons discussed above. Alternatively, the vacatur of the SIP Requirements Rule provisions excusing Orphan Nonattainment Areas from anti-backsliding requirements for the 1997 NAAQS and removing transportation conformity requirements for Orphan Maintenance Areas should be converted to a remand without vacatur.



Respectfully submitted,

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April 23, 2018

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**CERTIFICATE OF COMPLIANCE WITH WORD LIMIT**

I certify that pursuant to Rule 32(a)(7)(C)(i) of the Federal Rules of Appellate Procedure and D.C. Circuit Rule 32(e)(1), the foregoing Petition is proportionately spaced, has a typeface of 14 points, and contains 4,542 words, exclusive of those parts exempted by Rule 32(a)(7)(B)(iii) and D.C. Circuit Rule 32(e)(1). I have relied on Microsoft Word's calculation feature.

Date: April 23, 2018

/s/ Heather E. Gange  
Heather E. Gange

**CERTIFICATE OF SERVICE**

I hereby certify that on this 23<sup>rd</sup> day of April 2018, I served the foregoing Petition on all registered counsel through the Court's electronic filing system (ECF) and United States Postal Service, postage prepaid.

Date: April 23, 2018

/s/ Heather E. Gange  
Heather E. Gange

**ORAL ARGUMENT HELD SEPTEMBER 14, 2017  
DECISION ISSUED FEBRUARY 16, 2018**

Case No. 15-1123  
(consolidated with 15-1115)

**IN THE UNITED STATES COURT OF APPEALS  
FOR THE DISTRICT OF COLUMBIA CIRCUIT**

SIERRA CLUB, *et al.*,

*Petitioners,*

v.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, *et al.*,

*Respondents.*

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**ADDENDUM TO PETITION FOR PANEL REHEARING  
BY RESPONDENTS THE UNITED STATES  
ENVIRONMENTAL PROTECTION AGENCY, *et al.***

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April 23, 2018

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<sup>1</sup> No Corporate Disclosure Statement is required from Respondents the United States Environmental Protection Agency ("EPA") and E. Scott Pruitt, Administrator of the EPA, under Federal Rule of Appellate Procedure 26.1 or Circuit Rule 26.1.

**CERTIFICATE AS TO PARTIES, RULINGS,  
AND RELATED CASES**

Pursuant to D.C. Circuit Rule 28(a)(1)(A), the undersigned counsel certifies as follows:

**A. Parties, Intervenor and Amici (Case No. 15-1123)**

Petitioners: Sierra Club; Conservation Law Foundation; Downwinders at Risk;  
Physicians for Social Responsibility – Los Angeles

Respondents: U.S. Environmental Protection Agency; E. Scott Pruitt,  
Administrator

Intervenor: None

Amici: Ventura County Air Quality Management District; South Coast Air  
Quality Management District

**B. Rulings under Review**

The Petitioners in both underlying consolidated cases sought review of a final EPA Rule entitled “Implementation of the 2008 National Ambient Air Quality Standards for Ozone: State Implementation Plan Requirements,” 80 Fed. Reg. 12,264 (March 6, 2015) (hereafter “SIP Requirements Rule”). The ruling under review in this Petition for Rehearing is the Court’s Decision dated February 16, 2018 (Dkt 1718293).

**C. Related Cases**

Case No. 15-1115 was consolidated with Case No. 15-1123, but briefed and argued separately. Case No. 15-1465 was severed and is being held in abeyance pending further order of the Court. There are no other related cases pending in this or other courts.

/s/ Heather E. Gange  
HEATHER E. GANGE  
Counsel for Respondents

**United States Court of Appeals**  
**FOR THE DISTRICT OF COLUMBIA CIRCUIT**

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Argued September 14, 2017      Decided February 16, 2018

No. 15-1115

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT,  
PETITIONER

v.

ENVIRONMENTAL PROTECTION AGENCY, ET AL.,  
RESPONDENTS

NATIONAL ENVIRONMENTAL DEVELOPMENT ASSOCIATION'S  
CLEAN AIR PROJECT, ET AL.,  
INTERVENORS

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Consolidated with 15-1123

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On Petitions for Review of a Final Action  
of the Environmental Protection Agency

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*Megan E. Lorenz Angarita* argued the cause for petitioner South Coast Air Quality Management District. With her on the briefs were *Kurt R. Wiese* and *Barbara Baird*.

*Seth L. Johnson* argued the cause for Environmental Petitioners. With him on the briefs was *David S. Baron*.

*Kelvin J. Dowd* and *Andrew B. Kolesar III* were on the brief for *amicus curiae* Ventura County Air Pollution Control District in support of petitioner South Coast Air Quality Management District.

*Heather E. Gange*, Trial Attorney, U.S. Department of Justice, argued the cause for respondents. With her on the brief was *John C. Cruden*, Assistant Attorney General at the time the brief was filed.

*Seth L. Johnson* argued the cause for Environmental Movant-Intervenors. With him on the brief was *David S. Baron*.

*Megan E. Lorenz Angarita*, *Kurt R. Wiese*, and *Barbara Baird* were on the brief for *amicus curiae* South Coast Air Quality Management District in support of respondent's opposition to Sierra Club's argument regarding reasonably available control technology in Case No. 15-1123.

*Leslie Sue Ritts* was on the brief for intervenor for respondent National Environmental Development Association's Clean Air Project in support of U.S. Environmental Protection Agency.

Before: GARLAND, *Chief Judge*, ROGERS, *Circuit Judge*, and SENTELLE, *Senior Circuit Judge*.

Opinion for the Court filed by *Senior Circuit Judge* SENTELLE.



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SENTELLE, *Senior Circuit Judge*: In this consolidated proceeding, we consider petitions for review of an Environmental Protection Agency (“EPA”) final rule entitled “Implementation of the 2008 National Ambient Air Quality Standards for Ozone: State Implementation Plan Review Requirements,” 80 Fed. Reg. 12,264 (Mar. 6, 2015). In Case No. 15-1115, petitioner South Coast Air Quality Management District (“South Coast”) contends that the EPA incorrectly concluded that precedent of this Court requires emissions reductions that demonstrate reasonable further progress all come from within the nonattainment area. In Case No. 15-1123, petitioners Sierra Club, Conservation Law Foundation, Downwinders at Risk, and Physicians for Social Responsibility (Los Angeles) (“Environmental Petitioners”) contend that in enacting the Final Rule, the EPA acted arbitrarily and capriciously in its revocation of 1997 National Ambient Air Quality Standards and relaxation of previously applicable requirements under the Clean Air Act.

For the reasons stated below, we deny South Coast’s petition for review, and grant in part and deny in part that of the Environmental Petitioners.

## I. BACKGROUND

### A. The Clean Air Act Framework

The Clean Air Act (“CAA” or “Act”) directs the EPA to set National Ambient Air Quality Standards (“NAAQS”) for air pollutants “allowing an adequate margin of safety . . . requisite to protect the public health.” 42 U.S.C. § 7409(b)(1). The CAA also requires the EPA to establish air quality control regions and designate them as “attainment” for “any area . . . that meets” the NAAQS, “nonattainment” for “any area that does not meet” the NAAQS, and “unclassifiable” for “any area

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that cannot be classified on the basis of available information.” § 7407(d)(1)(A).

The EPA must classify each area “designated nonattainment for ozone” as “marginal,” “moderate,” “serious,” “severe,” or “extreme” based on the degree to which the ozone level in the area exceeds the NAAQS. § 7511. “An area that exceeds the NAAQS by a greater margin is given more time to meet the standard but is subjected to progressively more stringent emissions controls for ozone precursors, namely, volatile organic compounds (VOCs) and oxides of nitrogen (NO<sub>x</sub>).” *Natural Res. Def. Council v. EPA (NRDC 2009)*, 571 F.3d 1245, 1250 (D.C. Cir. 2009).

The Act places on the states “the primary responsibility for assuring air quality” by submitting state implementation plans (“SIPs”) that specify how they will achieve and maintain compliance with the NAAQS. 42 U.S.C. § 7407(a). States must formally adopt SIPs through state notice and comment rulemaking and then submit the SIPs to the EPA for approval. § 7410(a). For those areas designated as “nonattainment,” SIPs must show how the areas will achieve and maintain the relevant NAAQS. *Id.*

A nonattainment area may be redesignated to attainment if the EPA (1) has determined that the area has attained the applicable NAAQS; (2) has fully approved the applicable SIP under § 7410(k); (3) has determined that the attainment is due to permanent and enforceable emissions reductions; (4) has fully approved a § 7505a “maintenance plan,” which demonstrates that the area will maintain the NAAQS for at least 10 years after the redesignation, *see* § 7505a(a); and (5) has determined that the state containing the area seeking redesignation has met all applicable SIP requirements.

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§ 7407(d)(3)(E). Areas redesignated as attainment are referred to as “maintenance areas.”

#### **B. SIPs for Nonattainment Areas**

As is relevant to this case, the Clean Air Act requires SIPs for nonattainment areas to include the following provisions:

##### **1. Reasonable Further Progress**

SIPs for nonattainment areas “shall require reasonable further progress.” § 7502(c)(2). “Reasonable further progress” is defined as “such annual incremental reductions in emissions of the relevant air pollutants as are required by this part or may reasonably be required by [the EPA] for the purpose of ensuring attainment of the applicable [NAAQS] by the applicable date.” § 7501(1). The Clean Air Act requires an area in a moderate or greater degree of nonattainment to reduce emissions of VOCs by fifteen percent in the first six years after November 15, 1990. § 7511a(b)(1)(A). For areas in a serious or greater degree of nonattainment, subsequent reductions in VOC emissions must average three percent per year over each consecutive three-year period until the area reaches attainment. § 7511a(c)(2)(B).

##### **2. Reasonably Available Control Technology**

SIPs for ozone nonattainment areas must also “provide for the implementation of all reasonably available control measures as expeditiously as practicable (including such reductions in emissions from existing sources in the area as may be obtained through the adoption, at a minimum, of reasonably available control technology).” § 7502(c)(1). For nonattainment areas classified as moderate and above, SIPs

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must “require the implementation of reasonably available control technology” with respect to all major sources of VOCs in the area and any sources that emit VOCs in the area that are covered by a control technique guideline. § 7511a(b)(2). The reasonably available control technology requirement also applies to major sources of NO<sub>x</sub>. § 7511a(f).

### 3. New Source Review

SIPs governing nonattainment areas must require permits for the construction of new or modified sources of air pollution. §§ 7502(c)(5), 7503, 7410(a)(2)(C). The goal of New Source Review is to require permits to ensure that new or modified sources will not exacerbate the pollution problem in the nonattainment area. § 7503(a)(1)(A), (a)(2), (c). New Source permits for major sources of VOCs require the proposed source (1) to comply with the lowest achievable emissions rate and (2) to obtain pollution offsets representing equal or greater reductions of a pollutant at issue in the area. *Id.*

### 4. Conformity

The Act mandates that nonattainment and maintenance areas are subject to “conformity requirements,” so that “[n]o department, agency, or instrumentality of the Federal Government shall engage in, support in any way or provide financial assistance for, license or permit, or approve, any activity which does not conform to an implementation plan.” § 7506(c)(1), (5). Federally funded projects must “conform” to SIPs, meaning that the projects will not “cause or contribute to any new violation,” “increase the frequency or severity of any existing violation,” or “delay timely attainment of any standard or any required interim emission reductions or other milestones in any area.” § 7506(c)(1)(B). These areas are also subject to the more specific transportation conformity

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requirements, whereby federal agencies may not “approve, accept or fund any transportation plan, program or project unless” it conforms to an applicable SIP. § 7506(c)(2). With respect to transportation conformity requirements, the EPA is responsible for promulgating, and periodically updating, “criteria and procedures for demonstrating and assuring conformity in the case of transportation plans, programs, and projects.” § 7506(c)(4)(B).

#### 5. Contingency Measures

SIPs must include contingency measures that take effect automatically “if the area fails to make reasonable further progress, or to attain the [NAAQS] by the attainment date.” §§ 7502(c)(9), 7511a(c)(9).

#### C. Anti-Backsliding Measures for Revoked NAAQS

The Clean Air Act requires the EPA to “complete a thorough review” of each NAAQS every five years and “make such revisions . . . and promulgate such new standards as may be appropriate.” § 7409(d)(1). In promulgating new standards, if the EPA relaxes a NAAQS, it shall promulgate anti-backsliding measures for all areas that have not attained that standard as of the date of the relaxation. § 7502(e). The anti-backsliding measures “shall provide for controls which are not less stringent than the controls applicable to areas designated nonattainment before such relaxation.” *Id.*

#### D. Ozone NAAQS

In 1979, the EPA promulgated the first ozone NAAQS based on a one-hour average concentration of 0.12 parts per million (ppm). Revisions to the NAAQS for Photochemical Oxidants, 44 Fed. Reg. 8202, 8202 (Feb. 8, 1979). In 1997,

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after determining that the one-hour NAAQS was inadequate to protect public health, the EPA promulgated a new NAAQS based on an eight-hour average of 0.08 ppm. NAAQS for Ozone, 62 Fed. Reg. 38,856, 38,858 (July 18, 1997). Although the EPA replaced the one-hour NAAQS with an eight-hour NAAQS, it determined that it would continue to enforce the one-hour NAAQS until “an area has attained air quality that meets the 1-hour standard.” Implementation of Revised Air Quality Standards for Ozone and Particulate Matter, 62 Fed. Reg. 38,421, 38,424 (July 18, 1997). In a 2004 rule, the EPA revoked the one-hour NAAQS effective June 15, 2005. Final Rule to Implement the 8-Hour Ozone NAAQS—Phase 1, 69 Fed. Reg. 23,951, 23,951 (Apr. 30, 2004). This Court held that the EPA has the “authority to revoke the one-hour standard so long as adequate anti-backsliding provisions are introduced.” *South Coast Air Quality Mgmt. Dist. v. EPA*, 472 F.3d 882, 899 (D.C. Cir. 2006), *clarified on denial of reh’g*, 489 F.3d 1245 (D.C. Cir. 2007).

In 2008, the EPA determined that the 1997 NAAQS was inadequate to protect public health. The EPA therefore promulgated a new NAAQS of 0.075 ppm of ozone averaged over eight hours. NAAQS for Ozone, 73 Fed. Reg. 16,436, 16,436 (Mar. 27, 2008). “The 2008 ozone NAAQS retains the same general form and averaging time as the 0.08 ppm NAAQS set in 1997, but is set at a more stringent level.” Implementation of the 2008 NAAQS for Ozone: State Implementation Plan Requirements, 80 Fed. Reg. 12,264, 12,265 (Mar. 6, 2015).

#### E. The Final Rule

On March 6, 2015, the EPA finalized a rule that “revises existing regulations and guidance as appropriate to aid in the implementation of the 2008 ozone NAAQS.” 80 Fed. Reg. at

12,265. As part of the Final Rule, the EPA revoked the 1997 NAAQS “for all purposes and establish[ed] anti-backsliding requirements for areas that remain designated nonattainment for the revoked NAAQS.” *Id.*

## II. STANDARD OF REVIEW

We will not set aside EPA action under the Clean Air Act unless we determine that such action is “arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law.” 42 U.S.C. § 7607(d)(9)(A). The EPA’s interpretation of the Clean Air Act is reviewed under the familiar two-step framework of *Chevron U.S.A., Inc. v. Natural Resources Defense Council, Inc.*, 467 U.S. 837 (1984), whereby we first look to the statute’s language to determine if Congress has “directly spoken to the precise question at issue.” *Id.* at 842. If Congress has directly spoken to the precise question, then we must “give effect to the unambiguously expressed intent of Congress.” *Id.* at 843. If, however, “the statute is silent or ambiguous with respect to the specific issue,” we defer to the EPA’s interpretation of the Act so long as it “is based on a permissible construction of the statute.” *Id.*

Under those standards, we review in turn the cross-petitions of South Coast and the Environmental Petitioners.

## III. SOUTH COAST’S PETITION

We begin with the simpler of the two petitions, that of South Coast. South Coast petitions this Court to invalidate the EPA’s interpretation of the CAA in the Final Rule that “states may not take credit for VOC or NO<sub>x</sub> reductions occurring from sources outside the nonattainment area for purposes of meeting the 15 percent [rate-of-progress] and 3 percent [reasonable further progress] requirements.” 80 Fed. Reg. at 12,273. South

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Coast argues that the EPA was not required to interpret “in the area” in the context of the reasonable further progress requirement to mean “in the nonattainment area.” See 42 U.S.C. § 7511a(b)(1)(B). In promulgating the Final Rule, the EPA explained that in light of this Court’s decision in *NRDC 2009*, 571 F.3d at 1256, “there is no legal basis” for “allowing states to credit reductions achieved at sources outside the nonattainment area.” 80 Fed. Reg. at 12,273. South Coast counters that our decision in *NRDC 2009* does not mandate the EPA’s interpretation. Instead, South Coast contends that because downwind nonattainment areas are impacted by emissions from upwind areas, the EPA could reasonably interpret “in the area” in the context of the reasonable further progress requirement to mean the “transport couple area”—“a larger area consisting of the nonattainment area in question plus the upwind area from which emission reductions would be obtained.”

The text here is unambiguous. The Clean Air Act requires nonattainment areas that are classified as moderate or above to plan for “reasonable further progress” measured from “baseline emissions,” which are defined as “the total amount of actual VOC or NO<sub>x</sub> emissions from all anthropogenic sources in the area during the” baseline year. 42 U.S.C. § 7511a(b)(1)(A), (b)(1)(B), (c)(2)(B), (d), (e). These statutory provisions refer to only one area, “the area.” Further, the term appears in a section entitled “Moderate Areas,” not a greater area. § 7511a(b); see also § 7511(c)(1).

South Coast contends that limiting the phrase “in the area” to nonattainment areas would produce absurd results. According to South Coast, it may be impossible for certain areas to achieve the necessary emissions reductions. Where the purpose of the Clean Air Act is served by interpreting “in the



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area” to mean “transport couple area,” South Coast argues that the statutory language is ambiguous.

However, the Clean Air Act provides for an alternative to reducing emissions of pollutants by fixed percentages. § 7511a(b)(1)(A)(ii). (c)(2)(B). Nonattainment areas may reduce emissions by less than 15 percent if they (1) implement controls on a broader range of new and existing stationary sources and (2) include in their SIP “all measures that can feasibly be implemented in the area, in light of technological achievability” and “measures that are achieved in practice by sources in the same source category in nonattainment areas of the next higher category.” § 7511a(b)(1)(A)(ii). Likewise, nonattainment areas may reduce emissions by less than three percent if the SIP “includes all measures that can feasibly be implemented in the area, in light of technological achievability” and “measures that are achieved in practice by sources in the same source category in nonattainment areas of the next higher classification.” § 7511a(c)(2)(B)(ii). Moreover, states may also ask the EPA to approve new boundaries for air quality control regions. *See* 42 U.S.C. § 7407(b)-(c). In light of the alternatives provided for in the Clean Air Act, South Coast has failed to meet the “exceptionally high burden” required to demonstrate absurdity. *Friends of Earth, Inc. v. EPA*, 446 F.3d 140, 146 (D.C. Cir. 2006).

In sum, considering the grammar and context of § 7511a(b)(1)(B), we hold at *Chevron* step one that “in the area” unambiguously refers to baseline emissions within the nonattainment area. Accordingly, we deny South Coast’s petition.

#### IV. ENVIRONMENTAL PETITIONERS' PETITION

Environmental Petitioners petition this Court to vacate several parts of the Final Rule. We take each challenge in turn.

##### A. Waiver of Statutory Attainment Deadlines Associated with the 1997 NAAQS

Environmental Petitioners seek to invalidate the Final Rule's revocation of the 1997 NAAQS. 80 Fed. Reg. at 12,296. They argue that by revoking the 1997 NAAQS, the Final Rule arbitrarily waives the obligation to attain the 1997 NAAQS by the statutory deadline. The EPA counters that the Clean Air Act authorizes revocation of a superseded NAAQS so long as adequate anti-backsliding measures are in place.

We have already held that the EPA may revoke a previous NAAQS in full "so long as adequate anti-backsliding provisions are introduced." *South Coast*, 472 F.3d at 899. But in the Final Rule, the EPA failed to introduce adequate anti-backsliding provisions.

Pursuant to the Clean Air Act, anti-backsliding provisions "shall provide for controls which are not less stringent than the controls applicable to areas designated nonattainment before such relaxation." 42 U.S.C. § 7502(e). Penalties for not meeting attainment deadlines such as fees and activation of contingency measures are unambiguously "controls" because they are "designed to constrain ozone pollution." *South Coast*, 472 F.3d at 902-03. Likewise, reclassification is also a control because it is "designed to constrain ozone pollution." *See id.* Areas that fail to timely attain are required to reclassify and be subject to more stringent emissions controls. 42 U.S.C. §§ 7511(b)(2), 7511a(i). If the EPA were allowed to remove

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the deadlines that trigger those penalties, “a state could go unpenalized without ever attaining” the NAAQS. *South Coast*, 472 F.3d at 902-03.

The Final Rule provides that “the EPA is required to determine whether an area attained the 1-hour or 1997 ozone NAAQS by the area’s attainment date solely for anti-backsliding purposes to address an applicable requirement for nonattainment contingency measures and CAA section 185 fee programs.” 80 Fed. Reg. at 12,315. But the Final Rule specifically waives the obligation “to reclassify an area to a higher classification for the 1997 ozone NAAQS” based on a failure to meet the 1997 NAAQS attainment deadlines. *Id.* As a result, the Final Rule allows areas that fail to timely attain to avoid being subject to more stringent emissions controls. Therefore, the Final Rule relaxed the controls applicable to areas designated nonattainment under the 1997 NAAQS in contravention of the anti-backsliding requirement. Accordingly, we grant this part of Environmental Petitioners’ petition and vacate the Final Rule as to the waived statutory attainment deadlines associated with the 1997 NAAQS.

**B. Removal of Anti-Backsliding Requirements for Areas Designated Nonattainment Under the 1997 NAAQS**

Environmental Petitioners also seek to invalidate other provisions of the Final Rule that they allege contravene the Clean Air Act’s anti-backsliding requirements. The Final Rule provides for three procedures by which areas designated nonattainment under the 1997 NAAQS may remove certain anti-backsliding requirements and shift other requirements from the active portion of their SIPs to the contingency measures portion. 80 Fed. Reg. at 12,299-12,304.

### 1. Orphan Nonattainment Areas

The first procedure applies to areas designated attainment for the 2008 NAAQS, but nonattainment for the 1997 NAAQS. *Id.* at 12,301-12,302. Environmental Petitioners refer to these areas as “orphan nonattainment areas.” For orphan nonattainment areas, “states are not required to adopt any outstanding applicable requirements for the revoked 1997 standard.” *Id.* at 12,302. Under the Final Rule, orphan nonattainment areas “are not subject to transportation or general conformity requirements.” *Id.* at 12,300. In addition, orphan nonattainment areas are no longer required to retain New Source Review programs in their SIPs. *Id.* at 12,299. Instead, these areas are subject to Prevention of Significant Deterioration (“PSD”) requirements. *Id.* States may also request that other anti-backsliding requirements be shifted to their list of contingency measures based on initial 2008 designations. *Id.* at 12,314. Finally, the Final Rule does not require orphan nonattainment areas to submit maintenance plans under § 7505a, and deems the requirement for maintenance under § 7410(a)(1) to be satisfied by the area’s approved Prevention of Significant Deterioration SIP. *Id.* at 12,302, 12,314.

(a) Environmental Petitioners argue that elimination of New Source Review and conformity in orphan nonattainment areas violates the anti-backsliding requirements. The EPA argues that the Final Rule lawfully lifts the requirement for New Source Review and conformity for orphan nonattainment areas because the 2008 NAAQS is more stringent than the 1997 NAAQS. According to the EPA, areas that have attained the 2008 NAAQS have necessarily attained the 1997 NAAQS.

This Court previously held that New Source Review is unambiguously a “control” under § 7502(e). *South Coast*, 472

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F.3d at 901-02. Environmental Petitioners also contend that conformity is a “control” under § 7502(e). The EPA does not address general conformity requirements, but argues that our decision in *South Coast* does not require transportation conformity as an anti-backsliding control. According to the EPA, in *South Coast* we held that only existing motor vehicle emissions budgets are required anti-backsliding controls, not the conformity requirement itself.

The Final Rule provides that 1997 nonattainment areas are “no longer . . . required to demonstrate transportation conformity for the 1997” NAAQS after the 1997 NAAQS is revoked. 80 Fed. Reg. at 12,284. Pursuant to the Final Rule, “the latest approved or adequate emission budgets for a previous ozone NAAQS . . . would continue to be used in conformity determinations for the 2008 ozone NAAQS until emission budgets are established and found adequate or are approved for the 2008 ozone NAAQS.” *Id.* But the Final Rule provides that areas “designated attainment for the 2008 ozone NAAQS are not subject to transportation or general conformity requirements regardless of their designation for the 1997 ozone NAAQS at the time of revocation of that NAAQS.” *Id.* at 12,300.

The EPA is correct that *South Coast* held only that “one-hour conformity emissions budgets constitute ‘controls’ under section 172(e).” 472 F.3d at 904. Furthermore, on rehearing, we clarified that our decision with respect to conformity determinations “speaks only to the use of one-hour motor vehicle emissions budgets as part of eight-hour conformity determinations until eight-hour motor vehicle emissions budgets are available.” *South Coast Air Quality Mgmt. Dist. v. EPA*, 489 F.3d 1245, 1248 (D.C. Cir. 2007). But our decision that emissions budgets constitute controls does not preclude that “conformity” requirements in general are controls.

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Conformity requirements are designed to constrain ozone pollution as they have the “purpose of eliminating or reducing the severity and number of violations of the [NAAQS] and achieving expeditious attainment of such standards.” 42 U.S.C. § 7506(c)(1)(A). Therefore, conformity requirements also are unambiguously “controls” under § 7502(e).

Although orphan nonattainment areas were originally designated attainment under the 2008 NAAQS, they have never been redesignated to attainment pursuant to § 7407(d)(3)(E) under the 1997 NAAQS. The EPA may not permit termination of New Source Review and conformity in the absence of formal redesignation under § 7407(d)(3)(E). See *Natural Res. Def. Council v. EPA*, 643 F.3d 311, 322-23 (D.C. Cir. 2011) (rejecting final rule that allowed attainment of the 1997 NAAQS to permit termination of the fees control for the one-hour NAAQS). As we stated in our prior *South Coast* opinion, “EPA is required by statute to keep in place measures intended to constrain ozone levels—even the ones that apply to outdated standards—in order to prevent backsliding.” *South Coast*, 472 F.3d at 905. Accordingly, we grant Environmental Petitioners’ petition and vacate the Final Rule as to the removal of New Source Review and conformity controls from orphan nonattainment areas.

(b) Environmental Petitioners argue that permitting states to shift other anti-backsliding requirements to contingency measures violates the Clean Air Act. The EPA responds that states must continue implementing all such measures in previously approved SIPs unless the EPA approves requests to amend SIPs to convert such requirements into contingency measures. For the same reasons that the EPA may not permit states to eliminate New Source Review and transportation conformity, the EPA also may not permit states to shift other anti-backsliding requirements to their list of contingency

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measures without complying with the statutory requirements for redesignation. Therefore, we grant Environmental Petitioners' petition and vacate the Final Rule as to permitting states to move anti-backsliding requirements for orphan nonattainment areas to their list of contingency measures based on initial 2008 designations.

(c) Likewise, without requiring nonattainment areas to meet the requirements for reattainment under § 7407(d)(3)(E), the EPA improperly waived the requirement that states adopt outstanding applicable requirements for the revoked 1997 NAAQS. Therefore, we grant Environmental Petitioners' petition and vacate the Final Rule as to waiving the requirement that states adopt outstanding applicable requirements for the revoked 1997 NAAQS.

(d) Environmental Petitioners argue that the Final Rule impermissibly waives the maintenance requirements under § 7410(a)(1) for orphan nonattainment areas. The Final Rule allows approved Prevention of Significant Deterioration SIPs to satisfy the obligation to submit a maintenance plan under § 7410(a)(1). 80 Fed. Reg. at 12,302. Prevention of Significant Deterioration SIPs bar the construction of major sources of emissions without compliance with certain statutory requirements. *See* § 7475(a).

The Final Rule also does not require orphan nonattainment areas to submit a maintenance plan under § 7505a. 80 Fed. Reg. at 12,302. The EPA contends that there is no statutory requirement for a separate maintenance plan for orphan nonattainment areas. However, one of the five requirements for redesignation under § 7407(d)(3)(E) is that the EPA "approve[] a maintenance plan for the area as meeting the requirements of section 7505a of this title." § 7407(d)(3)(E)(iv). Therefore, the Final Rule is inconsistent

with the clear text of § 7407(d)(3)(E) in waiving the § 7505(a) maintenance plan requirement for orphan nonattainment areas.

Environmental Petitioners also appear to contend that even with a § 7505a maintenance plan, the Final Rule would violate the maintenance requirement under § 7410(a)(1) because § 7410(a)(1) requires something more than a Prevention of Significant Deterioration SIP and a § 7505a maintenance plan. Specifically, Environmental Petitioners argue that a SIP for an orphan nonattainment area must include a plan to ensure that pollution from existing sources and new sources not subject to the PSD requirements does not cause those areas to fall into violation of the 2008 NAAQS. According to Environmental Petitioners, without such safeguards, existing measures have proved insufficient to provide for continuing attainment of the 2008 NAAQS.

Section 7410(a)(1) provides that SIPs must provide for “implementation, maintenance, and enforcement” of the NAAQS. The statute clearly requires “maintenance” provisions to be included in SIPs, but the statute does not require a separate SIP component entitled “maintenance plan.” In fact, the statute provides no guidance for what SIPs must include in order to comply with the § 7410(a)(1) maintenance requirement beyond the criteria laid out in § 7410(a)(2). Environmental Petitioners do not allege the agency has eliminated § 7410(a)(2)’s requirements. Therefore, the Final Rule will be upheld so long as it is neither unreasonable nor arbitrary.

The EPA justified the rule by explaining that a § 7471 “PSD SIP, in conjunction with the other already-existing statutory and regulatory provisions . . . are generally sufficient to prevent backsliding, and to satisfy the requirement for maintenance under” § 7410(a)(1). 80 Fed. Reg. at 12,302.



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According to the EPA, the “control measures implemented by these areas and included in their SIPs have already produced sufficient emissions reductions to achieve air quality that attained the 1997 ozone NAAQS, and resulted in an attainment designation for the more stringent 2008 ozone NAAQS.” *Id.* The EPA therefore concluded that “the burden of developing an approvable [§ 7410(a)(1)] maintenance plan for the 2008 ozone NAAQS would outweigh any compensating benefit for an area that is already attaining that NAAQS and that is subject to prior nonattainment requirements which are already incorporated into the SIP and have been sufficient to bring the area into attainment of both the 1997 and 2008 standards.” *Id.*

The EPA adequately explained why measures that achieved attainment of both the 1997 NAAQS and the 2008 NAAQS should be adequate to maintain the same 2008 NAAQS that has already been attained. The EPA also thoughtfully responded to comments that suggested the measures on which the EPA relies are insufficient to satisfy the § 7410(a)(1) maintenance requirement. Under these circumstances, the EPA’s determination is neither unreasonable nor arbitrary.

Environmental Petitioners contend that the EPA has not addressed comments that identified examples of orphan nonattainment areas that purportedly were in fact not attaining the 2008 NAAQS. These comments were not raised in regard to the § 7410(a)(1) maintenance requirement. Instead, they appear to have been raised in response to other alleged shortcomings with the proposed rule. Moreover, the EPA appears to have addressed those arguments in its response to comments. Response to Comments on Implementation of the 2008 NAAQS for Ozone: SIP Requirements (Feb. 13, 2015) at 133. In any event, the comments are directed toward enforcement issues with the current NAAQS, not issues with

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the underlying rule. Accordingly, the EPA's decision not to implement a separate § 7410(a) maintenance plan is neither arbitrary nor unreasonable.

Therefore, we grant Environmental Petitioners' petition and vacate the Final Rule with respect to the EPA's waiving of the § 7505a(a) maintenance plan requirement for orphan nonattainment areas, and we deny Environmental Petitioners' petition with respect to the § 7410(a)(1) maintenance requirement's application to orphan nonattainment areas in other respects.

## 2. Formal Redesignation

The second procedure by which areas designated nonattainment under the 1997 NAAQS may remove certain anti-backsliding requirements and shift other requirements from the active part of their SIPs to the contingency measures part involves areas designated nonattainment under both the 2008 NAAQS and the 1997 NAAQS. 80 Fed. Reg. at 12,303-04. The Final Rule allows states to seek formal redesignation to attainment based on the 2008 NAAQS with an approved maintenance plan that addresses the current and revoked NAAQS. *Id.* at 12,304. Under this procedure, states may terminate and remove any applicable anti-backsliding requirements, including New Source Review requirements, from the active part of their SIPs. *Id.*

The EPA properly subjected these areas to anti-backsliding requirements when the 1997 NAAQS was revoked because they were still in nonattainment at the time of revocation. *See* § 7502(e). The Act is ambiguous as to whether such areas must retain these anti-backsliding requirements after they are successfully redesignated as attainment areas under the 2008 NAAQS. Unlike orphan nonattainment areas, these areas

have met the statutory requirements for redesignation under § 7407(d)(3)(E). Therefore, these areas have shown, for example, that “the[ir] improvement in air quality is due to permanent and enforceable reductions in emissions resulting from implementation of the applicable implementation plan.” § 7407(d)(3)(E)(iii). Although these areas may not have been redesignated with respect to the 1997 NAAQS, by meeting the statutory requirements for redesignation with respect to the 2008 NAAQS, they necessarily also meet the less restrictive requirements for redesignation under the 1997 NAAQS. Accordingly, it is reasonable for these areas to shed their anti-backsliding controls by virtue of meeting the five statutory criteria for redesignation. Therefore, we deny Environmental Petitioners’ petition with respect to this aspect of the Final Rule.

### 3. Redesignation Substitute

The third procedure by which areas designated nonattainment under the 1997 NAAQS may remove certain anti-backsliding requirements and shift other requirements from the active part of their SIPs to the contingency measures part also involves areas designated nonattainment under both the 2008 NAAQS and the 1997 NAAQS. This procedure allows states “to submit a redesignation substitute request for a revoked NAAQS.” 80 Fed. Reg. at 12,304. The redesignation substitute request “is based on” the Clean Air Act’s “criteria for redesignation to attainment” under § 7407(d)(3)(E), 80 Fed. Reg. at 12,305, but it does not require full compliance with all five conditions in § 7407(d)(3)(E). The Clean Air Act unambiguously requires nonattainment areas to satisfy all five of the conditions under § 7407(d)(3)(E) before they may shed controls associated with their nonattainment designation. The redesignation substitute lacks the following requirements of § 7407(d)(3)(E): (1) the EPA has “fully approved” the

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§ 7410(k) implementation plan; (2) the area's maintenance plan satisfies all the requirements under § 7505a; and (3) the state has met all relevant § 7410 requirements. 80 Fed. Reg. at 12,305. Because the "redesignation substitute" does not include all five statutory requirements, it violates the Clean Air Act. Therefore, we grant Environmental Petitioners' petition and vacate the Final Rule as to the "redesignation substitute."

### C. Baseline Year

The Clean Air Act measures Reasonable Further Progress by using a baseline year as the starting point. Nonattainment areas must reduce emissions of pollutants by fixed percentages compared to the pollutant level in a baseline year. 42 U.S.C. § 7511a(b)(1)(A), (B). The initial baseline year under the statute is 1990, *id.*, but the statute does not define baseline years for future NAAQS. In the Final Rule, the EPA defined the baseline year as 2011, which is the "calendar year for the most recently available triennial emission inventory at the time [rate-of-progress/reasonable further progress] plans are developed." 80 Fed. Reg. at 12,272. The Final Rule also allows states to select an alternative baseline year between 2008 and 2012 if they provide appropriate justification. *Id.*

Environmental Petitioners argue that this rule is unlawful because the Clean Air Act requires the baseline year to be the year of designation/classification, which in the case of the 2008 NAAQS is 2012. While an initial baseline year of 1990 is specified by statute, the Clean Air Act is silent regarding future baseline years. Therefore, this question is governed by *Chevron* step two. The Reasonable Further Progress requirement ensures that states make regular emissions reductions to achieve timely attainment. *See* § 7511a. To monitor their progress in achieving regular emissions reductions, states are required to prepare an emissions

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inventory every three years. § 7511a(a)(3)(A). The EPA's selection of 2011 as the baseline year is reasonable because it is tied to the three-year statutory cycle for emissions inventories. *Id.* Therefore, we deny Environmental Petitioners' challenge to the setting of 2011 as the baseline year.

With respect to selection of an alternative baseline year between 2008 and 2012, the EPA has failed to provide a statutory justification. The "EPA must 'ground its reasons for action or inaction in the statute,' rather than on 'reasoning divorced from the statutory text.'" *Natural Res. Def. Council v. EPA (NRDC 2014)*, 777 F.3d 456, 468 (D.C. Cir. 2014) (quoting *Utility Air Regulatory Grp. v. EPA*, 134 S. Ct. 2427, 2441 (2014)). The EPA based its creation of the alternative baseline year option on the convenience of allowing nonattainment areas to receive credit for emissions reduction measures adopted prior to the baseline year. Because the EPA has no statutory basis for the alternative baseline year provision, we grant Environmental Petitioners' petition and vacate the Final Rule as to the alternative baseline year option.

#### **D. Fifteen-Percent Rule**

The Clean Air Act requires an area in a moderate or greater degree of nonattainment to reduce emissions of VOCs by fifteen percent within six years of the baseline year. 42 U.S.C. § 7511a(b)(1)(A). The Final Rule interprets this requirement as meaning that "an area that has already met the 15 percent requirement for VOC under either the 1-hour ozone NAAQS or the 1997 ozone NAAQS (for the first 6 years after the [reasonable further progress] baseline year for the prior ozone NAAQS) would not have to fulfill that requirement again." 80 Fed. Reg. at 12,271; *see also id.* at 12,276. The Environmental Petitioners argue that the rule is unlawful because the

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interpretation allows areas to avoid actually achieving emissions reductions to satisfy the fifteen-percent requirement.

The Final Rule does not require nonattainment areas that have previously revised their SIPs to address the Clean Air Act's fifteen-percent requirement to revise their SIPs again. If an area fails to achieve this reduction according to their plan, a petitioner may file for injunctive relief or the EPA may pursue an enforcement action. Environmental Petitioners argue that the Final Rule allows nonattainment areas to omit the fifteen-percent requirement even if they never previously achieved a fifteen-percent reduction. The EPA has represented that the provision at issue in this case is the same as that at issue in *NRDC 2009*, 571 F.3d 1245. In *NRDC 2009*, the EPA rule allowed areas that had revised their SIPs to include a fifteen-percent VOC emissions reduction to not be subjected to a second fifteen-percent requirement under the new NAAQS. *Id.* at 1261. We held that "the EPA reasonably resolved a statutory ambiguity under step 2 of the framework set out in *Chevron*." *Id.* at 1262. We accept the EPA's representation that the fifteen-percent requirement in the Final Rule is the same as the provision at issue in *NRDC 2009*. Therefore, because the EPA's interpretation is permissible, we deny Environmental Petitioners' challenge to the fifteen-percent reduction plan waiver.

#### **E. Area-Wide Emissions Reductions**

The Clean Air Act requires nonattainment areas to achieve "such reductions in emissions from existing sources in the area" as can be achieved by the adoption of Reasonably Available Control Technology ("RACT"). 42 U.S.C. § 7502(c)(1). The Final Rule allows nonattainment areas to satisfy the NO<sub>x</sub> RACT requirement by using averaged area-wide emissions reductions. 80 Fed. Reg. at 12,278-79. Thus,

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“states may demonstrate as part of their NO<sub>x</sub> RACT SIP submittal that the weighted average NO<sub>x</sub> emission rate from all sources in the nonattainment area subject to RACT meets NO<sub>x</sub> RACT requirements.” *Id.* at 12,278. Environmental Petitioners argue that this rule violates the clear terms of the Clean Air Act, which require each individual source to meet the NO<sub>x</sub> RACT requirement.

They contend that § 7511a(b)(2) requires implementation of RACT with respect to “all” major sources, and “all” means “each one of.” Section 7511a(b)(2) requires states to submit revisions to SIPs “to include provisions to require the implementation of reasonably available control technology under section 7502(c)(1) of this title with respect to each of” three specific categories of VOC sources, including “all . . . major stationary sources of VOCs that are located in the area.” Pursuant to § 7511a(f), that plan provision applies to “major stationary sources” of NO<sub>x</sub>. Section 7511a(b)(2) refers to “all” “major stationary sources” and requires implementation of RACT “with respect to” that entire category of sources. The statute does not specify that “each one of” the individual sources within the category of “all” “major sources” must implement RACT. Environmental Petitioners argue that the only reasonable dictionary definition of “all” when used with a plural noun (major stationary sources) is “each one of.” Instead, when used to refer to a plural noun, the word “all” may express an aggregate and be defined as the “whole number or sum of.” *Black’s Law Dictionary* 74 (6th ed. 1990). This definition is consistent with the categorical approach taken by the EPA. In short, the plain language—in the context of the interrelationship between §§ 7511a(b)(2) and 7502(c)(1)—does not mandate RACT for each individual source.

Therefore, as discussed above, we cannot strike down the EPA’s reasoned interpretation of the ambiguous term at

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*Chevron* step one, *see* Section II, *supra*. We must instead uphold the EPA's interpretation, provided it is reasonable, under *Chevron* step two. *See Chevron*, 467 U.S. at 842-43.

We further note that § 7511a(b)(2) refers to § 7502(c)(1), which provides that SIP "provisions shall provide for the implementation of all reasonably available control measures as expeditiously as practicable (including such reductions in emissions from existing sources in the area as may be obtained through the adoption, at a minimum, of reasonably available control technology)." § 7502(c)(1). Section 7502(c)(1) does not require reductions from each individual major source. Instead, it requires "reductions in emissions from existing sources in the area," and other than mandating that implementation be as "expeditious[] as practicable," the section is ambiguous as to how areas are required to achieve those reductions.

The EPA's interpretation reasonably allows nonattainment areas to meet RACT-level emissions requirements through averaging within a nonattainment area. Therefore, we deny Environmental Petitioners' petition as to the EPA's construction of the RACT requirement.

**F. Waiving Requirements for Areas Designated Maintenance Under the 1997 NAAQS**

Environmental Petitioners seek to have us invalidate several provisions of the Final Rule that apply to areas designated attainment for the 2008 NAAQS after being designated maintenance areas under the 1997 NAAQS ("orphan maintenance areas").



### 1. Elimination of Transportation Conformity

As with orphan nonattainment areas, the Final Rule declares that orphan maintenance areas are “no longer . . . required to demonstrate transportation conformity for the 1997 ozone NAAQS after the 1997 ozone NAAQS is revoked.” 80 Fed. Reg. at 12,284. Environmental Petitioners argue that the elimination of transportation conformity in orphan maintenance areas violates the Clean Air Act. Section 7506(c)(5) provides that conformity requirements apply to “(A) a nonattainment area and each pollutant for which the area is designated as a nonattainment area; and (B) an area that was designated as a nonattainment area but that was later redesignated . . . as an attainment area and that is required to develop a maintenance plan under section 7505a.”

We previously explained that the EPA lacks the authority to revoke transportation conformity for orphan nonattainment areas. *See* Section IV.B.1(a), *supra*. The EPA argues that it is permitted to remove conformity requirements for orphan maintenance areas because such areas became attainment areas for the 1997 NAAQS prior to the date on which it was revoked. As a result, the EPA argues that these areas are not subject to anti-backsliding requirements, so there is no statutory requirement that they maintain the transportation conformity requirement. We disagree.

In contrast to nonattainment areas, which § 7506(c)(5) references by their status as “nonattainment area[s],” maintenance areas are referenced by previous events: “an area that *was* designated as a nonattainment area but that *was* later redesignated . . . as an attainment area and that is required to develop a maintenance plan under section 7505a.” § 7506(c)(5) (emphases added). Although the Final Rule

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revoked the 1997 NAAQS, it cannot revoke the statutory status of orphan maintenance areas. Even after revocation of the 1997 NAAQS, an orphan maintenance area is “an area that *was* designated as a nonattainment area but that *was* later redesignated . . . as an attainment area.”

It is irrelevant that this previous designation and redesignation occurred before the prior NAAQS was revoked because nothing in the Clean Air Act allows the EPA to waive this unambiguous statutory requirement. Moreover, the Act clearly contemplates new NAAQS being promulgated within ten years of an area’s redesignation to attainment because the statute requires the EPA to review NAAQS every five years and to “promulgate such new standards as may be appropriate.” § 7409(d)(1). Therefore, the revocation of the 1997 NAAQS does not waive the unambiguous mandate that conformity requirements apply to orphan maintenance areas. Accordingly, we grant Environmental Petitioners’ petition as to the elimination of transportation conformity in orphan maintenance areas.

## **2. Section 7410(a)(1) Maintenance Planning Requirement**

Environmental Petitioners contend that the Final Rule unlawfully waives the § 7410(a)(1) maintenance planning requirement for the 2008 NAAQS. 80 Fed. Reg. at 12,301. The Final Rule provides that an orphan maintenance area’s § 7505a(a) maintenance plan for the revoked 1997 NAAQS and the state’s approved Prevention of Significant Deterioration SIP satisfy the area’s obligations for maintenance of the 2008 NAAQS under § 7410(a)(1) of the Clean Air Act. 80 Fed. Reg. at 12,301, 12,314. Environmental Petitioners argue the Prevention of Significant Deterioration SIP is the sole maintenance plan requirement for the 2008 NAAQS, and it

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only addresses pollution from very large sources. According to Environmental Petitioners, the EPA has no statutory authority to waive the § 7410(a)(1) maintenance requirement.

The EPA justified its rule on the ground that orphan maintenance areas have already been redesignated to attainment for the 1997 NAAQS and designated attainment for the more stringent 2008 NAAQS. 80 Fed. Reg. at 12,301. According to the EPA, “[a]ny further [§ 7410(a)(1)] maintenance plan requirement under the 2008 . . . NAAQS would be unnecessarily burdensome.” *Id.* Although the § 7505a(a) maintenance plans for orphan maintenance areas “were established for maintenance of the 1997 . . . NAAQS, . . . they also provide a foundation for maintenance of the 2008 . . . NAAQS, which, in combination with other active requirements for the 2008 ozone NAAQS, contribute to maintenance of the new standard.” *Id.* The Final Rule explained that “no additional measures beyond the prior [§ 7505a(a)] maintenance plans and the PSD plans for the 2008 [NAAQS] should be necessary to provide for maintenance in those areas.” *Id.*

We previously addressed the alleged waiver of the § 7410(a)(1) maintenance requirement with respect to orphan nonattainment areas. *See* Section IV.B.1(d), *supra*. As we explained, § 7410(a)(1) does not provide clear requirements as to what SIPs must include in order to comply with the § 7410(a)(1) maintenance requirement beyond the criteria laid out in § 7410(a)(2). As with orphan nonattainment areas, with respect to orphan maintenance areas, the EPA adequately explained why no additional measures beyond the § 7505a(a) maintenance plans and the Prevention of Significant Deterioration plans for the 2008 NAAQS are necessary to provide for maintenance of the 2008 NAAQS. Therefore, we deny Environmental Petitioners’ petition with respect to the

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§ 7410(a)(1) maintenance requirement's application to "orphan maintenance areas."

### 3. Elimination of Second Maintenance Plan

Environmental Petitioners challenge the Final Rule's elimination of the requirement that orphan maintenance areas prepare a second maintenance plan under § 7505a(b). 80 Fed. Reg. at 12,301. Section 7505a(b) provides that "8 years after redesignation of any area as an attainment area," states "shall submit . . . an additional revision of the" maintenance plan "for 10 years after the expiration of the 10-year period referred to in subsection (a)." The EPA argues that the requirement for a second 10-year maintenance plan is based on an area's designation status under an operative NAAQS. When the 1997 NAAQS was revoked, the orphan maintenance areas' designations as maintenance under the 1997 NAAQS were revoked as well.

The statutory requirement for a second maintenance plan is unambiguous. § 7505a(b). And the Clean Air Act clearly contemplates new NAAQS being promulgated within eight years of an area's redesignation to attainment because the statute requires the EPA to review NAAQS every five years and to "promulgate such new standards as may be appropriate." § 7409(d)(1). Therefore, the revocation of the old NAAQS does not waive the unambiguous requirement for second maintenance plans under § 7505a(b). Accordingly, we grant Environmental Petitioners' petition and vacate the Final Rule provision waiving the second 10-year maintenance plan for "orphan maintenance areas."

**V. Conclusion**

For the reasons set forth above, we deny South Coast's petition for review and grant in part and deny in part the Environmental Petitioners' petition. Specifically, we grant Environmental Petitioners' petition and vacate as to (1) waiver of the statutory attainment deadlines associated with the 1997 NAAQS; (2) removal of New Source Review and conformity controls from orphan nonattainment areas; (3) grant of permission to states to move anti-backsliding requirements for orphan nonattainment areas to their list of contingency measures based on initial 2008 designations; (4) waiver of the requirement that states adopt outstanding applicable requirements for the revoked 1997 NAAQS; (5) waiver of the § 7505a(a) maintenance plan requirement for orphan nonattainment areas; (6) creation of the "redesignation substitute"; (7) creation of an alternative baseline year option; (8) elimination of transportation conformity in orphan maintenance areas; and (9) waiver of the requirement for a second 10-year maintenance plan for orphan maintenance areas. In all other respects, Environmental Petitioners' petition is denied.

*So ordered.*

IN THE UNITED STATES COURT OF APPEALS  
FOR THE DISTRICT OF COLUMBIA CIRCUIT

Sierra Club, et al.,	)	
	)	
Petitioners,	)	
	)	
v.	)	No. 15-1123
	)	(consolidated with 15-1115)
United States Environmental Protection Agency,	)	
et al.,	)	
Respondent.	)	

**DECLARATION OF WILLIAM WEHRUM**

1. I, William L. Wehrum, under penalty of perjury, affirm and declare that the following statements are true and correct to the best of my knowledge and belief and are based on my own personal knowledge or on information supplied to me by United States Environmental Protection Agency ("EPA") employees under my supervision.

2. I am the Assistant Administrator for the Office of Air and Radiation ("OAR") at EPA, a position I have held since November 13, 2017. Previously I served as EPA's Acting Assistant Administrator for Air and Radiation from 2005 to 2007, as well as Principal Deputy Assistant Administrator and Counsel to the Assistant Administrator for Air and Radiation from 2001 to 2005.

3. OAR is the EPA office that develops national programs, technical policies, and regulations for controlling air pollution. OAR's assignments include protecting public health and welfare, pollution prevention, and air quality and addressing air pollution impacts of industrial air pollution, pollution from vehicles and engines, toxic air pollutants, acid rain, stratospheric ozone depletion, and climate change.

4. Of particular relevance to the above-captioned case, OAR is the office within EPA that is primarily responsible for the development and implementation of regulations, policy, and guidance associated with national ambient air quality standards ("NAAQS") under the Clean Air Act ("CAA"), including implementation of the NAAQS.

5. Accordingly, I am providing this declaration to explain EPA's analysis of the impacts of the Court's vacatur of certain provisions of the 2008 Ozone SIP Requirements Rule. Specifically, this declaration explains the impacts of the Court's vacatur of the Rule with respect to: (1) controls in "Orphan Nonattainment Areas," i.e., areas that were designated nonattainment for the 1997 standard, have not been formally redesignated to attainment for that standard, but were designated attainment for the 2008 standard; and (2) the transportation conformity requirement in "Orphan Maintenance Areas," i.e., areas that were initially designated nonattainment for the 1997 standard, were later formally redesignated to attainment for the 1997 standard,

and met the requirement to have a maintenance plan for that standard under section 175A of the Act, and additionally were designated attainment for the 2008 standard.

6. Immediate vacatur of these provisions upon issuance of the mandate will cause significant gaps in the Agency's implementation structure and will injure state and local planning organizations and regulated entities that were acting in accordance with and good-faith reliance on the SIP Requirements Rule. A remand of the SIP Requirements Rule without vacatur will allow the Agency time to implement the effects of the decision and assess what policy changes are necessary or advisable in light of the decision; to provide guidance to affected agencies, including federal, state, local, and tribal air agencies and regulated entities; and to provide adequate planning time to those entities.

#### Summary of Affected Areas<sup>1</sup>

7. There are 69 Orphan Maintenance Areas. As shown in the Tables 1 and 2, 63 of these areas are complete Orphan Maintenance Areas and 6 of these areas are partial Orphan Maintenance Areas—"partial" meaning only certain counties within the 1997 ozone NAAQS maintenance area were designated attainment for the 2008 ozone NAAQS, while the remainder of the area was designated as nonattainment for the 2008 ozone NAAQS.

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<sup>1</sup> Analysis in this section is based on information that is publicly available on EPA's "Green Book" webpage (<https://www.epa.gov/green-book>).



Table 1: Orphan Maintenance Areas

1997 Ozone NAAQS Area Name	State
Allegan County	MI
Altoona	PA
Beaumont-Port Arthur	TX
Benton Harbor	MI
Benzie County	MI
Birmingham	AL
Boston-Manchester-Portsmouth (SE)	NH
Canton-Massillon	OH
Cass County	MI
Charleston	WV
Clarksville-Hopkinsville	TN, KY
Clearfield and Indiana Counties	PA
Dayton-Springfield	OH
Detroit-Ann Arbor	MI
Door County	WI
Erie	PA
Evansville	IN
Flint	MI
Fort Wayne	IN
Franklin County	PA
Fredericksburg	VA
Grand Rapids	MI
Greene County	IN
Greene County	PA
Hancock, Knox, Lincoln and Waldo Counties	ME
Harrisburg-Lebanon-Carlisle	PA
Haywood and Swain Counties (Great Smoky National Park)	NC
Huntington-Ashland	WV, KY
Huron County	MI
Indianapolis	IN
Jackson County	IN
Johnstown	PA
Kalamazoo-Battle Creek	MI

Kent and Queen Anne's Counties	MD
Kewaunee County	WI
La Porte County	IN
Lansing-East Lansing	MI
Las Vegas	NV
Lima	OH
Louisville	KY
Macon	GA
Madison and Page Counties (Shenandoah National Park)	VA
Manitowoc County	WI
Mason County	MI
Muncie	IN
Murray County (Chattahoochee National Forest)	GA
Muskegon	MI
Norfolk-Virginia Beach-Newport News (Hampton Roads)	VA
Parkersburg-Marietta	WV, OH
Portland	ME
Raleigh-Durham-Chapel Hill	NC
Richmond-Petersburg	VA
Rocky Mount	NC
Scranton-Wilkes-Barre	PA
South Bend-Elkhart	IN
State College	PA
Steubenville-Weirton	OH, WV
Terre Haute	IN
Tioga County	PA
Toledo	OH
Wheeling	WV, OH
York	PA
Youngstown-Warren-Sharon	OH, PA

Table 2: Partial Orphan Maintenance Areas

<b>1997 Ozone NAAQS Area Name</b>	<b>State</b>	<b>Orphan Portion of the Area</b>
Atlanta	GA	Barrow, Carroll, Hall, Spalding and Walton Counties
Charlotte-Gastonia-Rock Hill	NC, SC	Parts of Cabarrus, Gaston, Lincoln, Rowan and Union Counties in NC and part of York County, SC
Cincinnati-Hamilton	OH, KY, IN	Parts of Boone, Campbell and Kenton Counties in KY
Knoxville	TN	Jefferson, Loudon and Sevier Counties, part of Anderson County and part of Cocke County
Milwaukee-Racine	WI	The entire area with the exception of the eastern part of Kenosha County
St. Louis	MO, IL	Jersey County, IL

8. There are 13 Orphan Nonattainment Areas. As shown in Tables 3 and 4, 9 of these areas are complete Orphan Nonattainment Areas and 4 of these areas are partial Orphan Nonattainment Areas—"partial" meaning only certain counties within the 1997 ozone NAAQS nonattainment area were designated attainment for the 2008 ozone NAAQS, while the remainder of the area was designated as nonattainment for the 2008 ozone NAAQS.

Table 3: Orphan Nonattainment Areas

1997 Ozone NAAQS Area Name	State	Within the OTR <sup>2</sup>
Albany-Schenectady-Troy	NY	Yes
Buffalo-Niagara Falls	NY	Yes
Essex County (Whiteface Mountain)	NY	Yes
Jefferson County	NY	Yes
Poughkeepsie	NY	Yes
Providence (all of Rhode Island)	RI	Yes
Rochester	NY	Yes
Springfield (Western Massachusetts)	MA	Yes
Sutter County (Sutter Buttes)	CA	No

Table 4: Partial Orphan Nonattainment Areas

1997 Ozone NAAQS Area Name	State	Within the OTR?	Orphan Portion of the Area
Boston-Lawrence-Worcester (Eastern Mass)	MA	Yes	Entire area except for Dukes County
Amador and Calaveras Counties (Central Mountain Counties)	CA	No	Amador County
Mariposa and Tuolumne Counties (Southern Mountain Counties)	CA	No	Tuolumne County
Philadelphia-Wilmington-Atlantic City	PA, NJ, MD, DE	Yes	Kent County, DE

<sup>2</sup> If an area is in the ozone transport region (OTR) under CAA section 184, 42 U.S.C. § 7511c, it is subject to certain minimum statutorily defined control technology and nonattainment permitting requirements regardless of its designation and classification status.

Impacts Related to Transportation Conformity

9. EPA has issued regulations to implement the transportation conformity requirements contained in section 176(c) of the Clean Air Act. See 40 C.F.R. part 93. In general, those regulations require both: (1) areas designated as nonattainment; and (2) areas redesignated from nonattainment to attainment and required, as a condition of redesignation, to have an approved maintenance plan under section 175A of the Act (commonly referred to as “maintenance areas”), must demonstrate that transportation plans, transportation improvement programs (TIPs), and transportation projects “conform to” the applicable SIP. The regulations also describe how transportation conformity determinations are made. The transportation conformity process involves state air quality and transportation agencies, metropolitan planning organizations, transit agencies, EPA, and the Department of Transportation.

10. The Court’s vacatur of EPA’s determination that transportation conformity requirements do not, after the 1997 ozone NAAQS was revoked, apply to areas that had been required to show conformity to that standard when it was in effect will significantly disrupt transportation planning in both orphan nonattainment areas and orphan maintenance areas. EPA has received communications from potentially affected state and local agencies detailing the disruptive impacts of the Court’s decision. See Attachment 1. Most of the complete Orphan Nonattainment and Maintenance Areas are not determining transportation conformity for any CAA pollutant because they have been designated as attainment for all currently existing

NAAQS. State and local governments for affected areas may no longer have the administrative and technical capacity to implement the transportation conformity-related aspects of the Court's decision, and may not be able to resume such implementation without investing considerable time and resources. For example, in order to complete transportation conformity determinations, the interagency consultation process that involves federal, state and local air quality and transportation agencies may need to be restarted. 40 C.F.R. 93.105. Significant additional state and local technical capacity in transportation and emissions modeling and data collection may also be needed, as described in paragraph 11.

11. Both the Orphan Nonattainment and Orphan Maintenance Areas include: large metropolitan areas including Boston, Detroit, Indianapolis, Milwaukee, and Las Vegas; mid-size cities including Birmingham, Louisville, Norfolk, and Raleigh-Durham; and smaller cities including Erie, PA, Lansing, MI, Lima, OH, Macon, GA, South Bend-Elkhart, IN, Charleston, WV, and Rochester, NY. With the exception of one county in the Boston area<sup>3</sup> and part of one county in the Milwaukee area<sup>4</sup>, *none* of the Orphan Areas enumerated in the prior sentence has demonstrated transportation conformity for ozone since the 1997 ozone NAAQS was revoked in 2015, in accordance with the SIP Requirements Rule.

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<sup>3</sup> Dukes County, MA is a nonattainment area for the 2008 ozone NAAQS.

<sup>4</sup> Part of Kenosha County, WI is a nonattainment area for the 2008 ozone NAAQS.

12. If the Court's decision remains unchanged, all of these areas could be subject to substantial harm, because new or revised transportation plans, improvement programs and non-exempt highway or mass transit projects cannot be approved, with the effect that billions of dollars appropriated for infrastructure improvements could be frozen or lost. *See* 40 C.F.R. §§ 93.102, 93.104.

13. By contrast, if the Court were to remand the transportation conformity aspects of the SIP Requirements Rule to EPA *without* vacatur, the Agency would be able to take further action needed to avoid the potential disruption to ongoing transportation planning, including issuance of regulatory revisions or guidance to assist areas in meeting transportation conformity requirements, particularly given the large number of areas that are not determining conformity for any other pollutants. It is likely that areas would need additional start-up time and possibly additional resources to use the latest emissions model (under 40 C.F.R. 93.111), for conformity modeling as well as time to collect and assemble the latest available planning assumptions (under 40 C.F.R. 93.110), to project on-road emissions into the future. As another example, areas which have not been conducting the conformity process will also need time to re-start their interagency consultation process. A wide range of local, state and federal agencies are required to be included in the consultation process, 40 C.F.R. 93.105, and restarting the process after a hiatus of several years may take time. Some areas may also need time to update their motor vehicle emissions budgets, which serve as the limits on transportation emissions when a conformity

determination is made. See 40 C.F.R. 93.101. For some areas, estimates of highway and transit emissions using a more current emissions model and planning assumptions may warrant updating motor vehicle emissions budgets, a process that involves a revision to the relevant SIP. A remand will allow EPA and the states time to put the necessary resources, programs, and framework in place to allow areas to appropriately meet the transportation conformity requirements.

Impacts from Other Requirements in “Orphan Nonattainment Areas”

14. With respect to Orphan Nonattainment Areas—areas that were designated nonattainment, and never redesignated to attainment, for the 1997 NAAQS, but were designated as attainment for the more stringent 2008 NAAQS and thus attaining the 1997 NAAQS as a factual matter—planning agencies and regulated entities have been following the anti-backsliding requirements outlined in the SIP Requirements Rule. Accordingly, some planning agencies and regulated entities in these areas have not been applying certain other requirements, including nonattainment new source review (NSR), with regard to the now-revoked 1997 standard; and, pursuant to the SIP Requirements Rule, *no* air agencies have made any further SIP revisions to address previously unaddressed nonattainment requirements for the revoked 1997 NAAQS. The Court held that EPA’s suspension of all these activities was improper for any area that had not undergone a formal redesignation for the 1997 NAAQS pursuant to CAA § 107(d)(3)(E).



15. The nonattainment NSR permit requirements apply to any proposed new and modified major stationary sources locating in an area designated nonattainment on the date such permit is to be issued. Such proposed new and modified sources must meet specific preconstruction requirements, including: (1) the installation of air pollution controls known as Lowest Achievable Emission Rate; (2) acquisition of emissions offsets from other existing sources; (3) certification that all other sources owned by the applicant in the state are complying with all applicable requirements in the state implementation plan; and (4) an analysis of alternative sites, sizes, production processes, and environmental control techniques to show that benefits of the proposed source significantly outweigh the environmental and social costs imposed as a result of its location, construction or modification.

16. Under the requirements set forth in the 2008 ozone NAAQS SIP Requirements Rule, after the 1997 NAAQS was revoked, Orphan Nonattainment Areas outside the implemented the Prevention of Significant Deterioration (“PSD”) permitting requirements for attainment areas, rather than the nonattainment NSR requirements for nonattainment areas. If EPA’s rule is immediately vacated upon issuance of the mandate, permit authorities in these areas will no longer be able to issue PSD permits, and applicants with pending permits will have to reapply to satisfy the applicable nonattainment NSR requirements. This is both highly disruptive and potentially burdensome.

17. Nearly all of the Orphan Nonattainment Areas are likely eligible for formal redesignation,<sup>5</sup> but have not sought one from the Agency because EPA took the position in the SIP Requirements Rule that the Agency *could not* formally redesignate areas for a revoked NAAQS. As shown in Table 5, all 13 areas factually did attain by their respective attainment dates, and currently have Clean Data Determinations.<sup>6</sup>

Table 5: Status of Orphan Nonattainment Areas

1997 Ozone NAAQS Area Name	State	1997 Ozone NAAQS Attainment Date	Attainment Year Design Value (ppm) <sup>7</sup>	Clean Data Determination Federal Register Notice
Amador and Calaveras Cos. (Central Mountain Cos.)	CA	6/15/2010	0.082	77 Fed. Reg. 71551

<sup>5</sup> In order to approve a redesignation request, a State must demonstrate that an area (1) has attained the NAAQS; (2) has a fully approved applicable implementation plan; (3) attained due to permanent and enforceable emission reductions; (4) has an approved maintenance plan; and (5) has met all requirements applicable to the area. 42 U.S.C. § 7407(d)(3)(E).

<sup>6</sup> A determination by EPA under 40 C.F.R. 51.918 that a nonattainment area has air quality that meets the applicable NAAQS. This determination suspends the requirements for such area to submit attainment demonstrations and associated reasonably available control measures, reasonable further progress plans, contingency measures, and other planning SIPs related to attainment of the 8-hour ozone NAAQS until such time as the area is redesignated to attainment, or EPA determines that the area has again violated the 8-hour ozone NAAQS.

<sup>7</sup> The 1997 NAAQS is based on an eight-hour average concentration of 0.08 ppm. 62 Fed. Reg. 38,856, 38,858 (July 18, 1997). Compliance with the 1997 NAAQS is determined based on data derived from air monitors operated in accordance with 40 C.F.R. Part 58. This data is used to calculate a statistic known as the “Design Value” for each monitor, which is “the 3-year average annual fourth-highest daily maximum 8-hour [ozone] concentration.” 40 C.F.R. Part 50, App.I.

Boston-Lawrence-Worcester (E. Mass)	MA	6/15/2010	0.081	77 Fed. Reg. 31496
Mariposa and Tuolumne Cos. (Southern Mountain Counties)	CA	6/15/2011	0.083	77 Fed. Reg. 71551
Philadelphia-Wilmington-Atlantic City	PA, NJ, MD, DE	6/15/2011	0.083	77 Fed. Reg. 17341
Albany-Schenectady-Troy	NY	6/15/2007	0.078	73 Fed. Reg. 15672
Buffalo-Niagara Falls	NY	6/15/2010	0.076	74 Fed. Reg. 63993
Essex County (Whiteface Mtn.)	NY	6/15/2007	0.071	74 Fed. Reg. 63993
Jefferson County	NY	6/15/2010	0.074	73 Fed. Reg. 15672
Poughkeepsie	NY	6/15/2010	0.078	74 Fed. Reg. 63993
Providence (all of Rhode Island)	RI	6/15/2010	0.077	75 Fed. Reg. 31288
Rochester	NY	6/15/2007	0.072	73 Fed. Reg. 15672
Springfield (Western Mass)	MA	6/15/2010	0.084	77 Fed. Reg. 36404
Sutter County (part) (Sutter Buttes)	CA	6/15/2007	0.081	77 Fed. Reg. 71551

18. If the Court does not reconsider its substantive holdings with respect to Orphan Nonattainment Areas, the states of New York, Massachusetts, Rhode Island, California, and Delaware will need to submit redesignation requests, and EPA will need to approve those requests, to stop implementation of nonattainment areas' controls for the 1997 standard. As noted earlier, EPA believes nearly all of the Orphan Nonattainment Areas are likely eligible for formal redesignation.

19. In order for an area to be redesignated, the state must submit a redesignation request to the Agency, which can only be submitted after completing a state-level notice and comment rulemaking process. EPA must then act on that request through notice-and-comment rulemaking. The preliminary estimate is that these states will need 18 months to develop and submit the SIP revision necessary for a redesignation, following all applicable SIP adoption procedures. Upon receipt, EPA will need approximately 12 months to review, propose and finalize action on the states' requests.

20. Immediate vacatur of the SIP Requirements Rule upon issuance of the mandate will not allow states time to prepare and submit such requests, let alone allow EPA to act on them, before various nonattainment requirements will spring into place. A remand without vacatur would allow the states responsible for these areas (which are all factually attaining the 1997 NAAQS) and EPA a reasonable period of time to carry out the necessary redesignation work, and would avoid confusion and disruption in the short term on the part of state and local governments that have been relying in good faith on the rule under review.

SO DECLARED:

  
WILLIAM L. WEHRUM

Dated: 4-23-18

# Attachment 1



March 16, 2018

The Honorable Scott Pruitt  
Office of the Administrator  
U.S. Environmental Protection Agency  
1200 Pennsylvania Ave. NW  
Washington, DC 20460



Re: EPA Response to D.C. Circuit Decision in *South Coast Air Quality Management District v. EPA*, Case No. 15-1115

Dear Administrator Pruitt:

The American Association of State Highway and Transportation Officials (AASHTO) and the Association of Metropolitan Planning Organizations (AMPO) jointly request that the Environmental Protection Agency (EPA) file a petition for rehearing and request for stay of the February 16, 2018 decision in *South Coast Air Quality Management District v. EPA*, Case No. 15-1115 in the U.S. Court of Appeals for the District of Columbia. This letter sets forth the reasons for this urgent request.

In the *South Coast* decision, the court vacated major portions of a 2015 final rule that established procedures for transitioning from the 1997 National Ambient Air Quality Standard (NAAQS) for ozone to the stricter 2008 NAAQS for the same pollutant.<sup>1</sup> The 2015 rule included several important provisions to avoid imposing duplicative and unnecessary regulatory burdens. Of most importance to transportation agencies, the 2015 rule ensured that areas designated as nonattainment or maintenance for the 1997 standard would not be subject to air quality conformity requirements if those areas are in attainment for the stricter 2008 standard.

The court decision overturned this common-sense provision in the 2015 rule, holding that areas designated as nonattainment or maintenance for the 1997 standard—but as attainment for the 2008 standard—must remain subject to conformity requirements for the 1997 standard to avoid “backsliding” on efforts to meet that standard. But the court also *agreed* with EPA’s finding that the “measures that achieved attainment of both the 1997 NAAQS and the 2008 NAAQS should be adequate to maintain the same 2008 NAAQS that has already been attained.” The contradiction is clear: on one hand, the court finds that conformity must continue to apply for the 1997 standard to avoid backsliding; but on the other, the court agreed that the measures already in effect in those areas should be sufficient to maintain compliance with the stricter 2008 standard.

<sup>1</sup> See “Implementation of the 2008 National Ambient Air Quality Standards for Ozone: State Implementation Plan Review Requirements,” 80 Fed. Reg. 12,264 (Mar. 6, 2015).

The court also vacated several other provisions in the rule that provided flexibility in transitioning to the 2008 ozone standard, and appears to have invalidated EPA's revocation of the 1997 standard. If the revocation of the 1997 standard is invalidated, the implications of this decision are even broader: it would mean that areas designated as nonattainment or maintenance for the 2008 standard must make conformity determinations for the 1997 standard, in addition to making conformity determinations for the stricter 2008 standard for the same pollutant.

The practical effects of this decision on transportation agencies will be severe. As of February 16, 2018, air quality conformity requirements for the 1997 ozone standard have been re-imposed on dozens of areas around the country that have fully attained the stricter 2008 ozone standard, and possibly on dozens of additional areas that are in nonattainment or maintenance for the 2008 standard. The immediate re-imposition of conformity requirements will prevent States and metropolitan planning organizations (MPOs) from approving transportation plans and transportation improvement programs (TIPs) until the necessary air quality analysis and conformity determinations can be completed. Without an approved plan and TIP, the flow of federal funds for highway and transit projects in many areas will be halted.

Moreover, the invalidation of EPA's 2015 rule potentially calls into question the validity of *existing* every plan and TIP approvals made in reliance on that rule. MPOs across the country have approved plans and TIPs since March 2015 without making conformity determinations with respect to the revoked 1997 ozone standard. If EPA were to conclude that those previous plan and TIP approvals are now invalid, given the lack of a conformity determination for the 1997 standard, the effects of this decision would be even more immediate and far-reaching, potentially including a halt to ongoing construction projects.

As an indication of the potential magnitude of the problem, there were 35 nonattainment areas and 80 maintenance areas for the 1997 standard at the time the 1997 standard was revoked. These 115 areas are located in 32 states and 434 counties.<sup>2</sup> The immediate re-imposition of conformity requirements for the 1997 standard could disrupt transportation projects in all of those counties. In Atlanta alone, the MPO has approximately \$1.5 billion of projects in its TIP; in Houston, the MPO has approximately \$4.37 billion of projects in its TIP; in Hampton Roads, Virginia, the TIP includes \$4.89 billion of projects. The re-imposition of the 1997 standard threatens the ability of these and other MPOs to continue moving forward with billions of dollars in projects.

To avoid immediate and far-reaching disruption to transportation projects, it is critical to seek every available means to obtain relief from this court decision. We therefore request that EPA file a petition for rehearing in the D.C. Circuit and seek a stay of the court's decision within the 45-day period allowed for such a petition (by April 2, 2018). If EPA files a petition for rehearing, our organizations intend to seek the court's permission to file an amicus brief in support of the rehearing request.

<sup>2</sup> See EPA website, <https://www3.epa.gov/airquality/greenbook/gbtc.html>.



In addition, we request that EPA issue interim guidance as soon as possible regarding implementation of the court decision, and that any such guidance provide maximum flexibility and minimize disruption to ongoing projects. Specifically, we ask EPA to confirm that:

- In nonattainment or maintenance areas where the 1997 ozone standard was revoked and no other conformity determinations for other pollutants or standards were required, all existing transportation plans, TIPs and projects are valid for twelve months from the date of the Court decision; at the end of the twelve-month period, a conformity determination for the 1997 ozone standard would be required.
- In areas where the 1997 ozone standard was revoked and conformity requirements for other pollutants or standards apply, all currently approved conformity determinations are valid until the next required conformity determination is made in each such nonattainment or maintenance area. At the time of the next required determination, the nonattainment or maintenance area would meet the conformity requirements for the 1997 ozone standard and any other pollutants or standards for which conformity is required.


While not a complete solution, such guidance may provide some relief from the regulatory burdens and project delays caused by this decision.

We also note that this court decision highlights the need for a permanent legislative solution to resolve the uncertainty about what the Clean Air Act requires when EPA issues a new, stricter NAAQS to replace a previous one for the same pollutant. In its recent infrastructure reform proposal, the White House specifically recommended “[a]mending the Clean Air Act to clarify that conformity requirements apply only to the latest NAAQS for the same pollutant.”<sup>3</sup> We strongly support this recommendation for legislative change.

We appreciate your attention to this urgent request. We would welcome the opportunity to meet with you and your staff to discuss these issues. Should you have any questions, please contact: Melissa Savage from AASHTO at (202) 624-3638, or Bill Keyrouze from AMPO at (202) 624-3683.

Sincerely,

  
 Bud Wright  
 Executive Director  
 AASHTO

  
 DeLania Hardy  
 Executive Director  
 AMPO

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<sup>3</sup> “Legislative Outline for Rebuilding Infrastructure in America,” (Feb. 12, 2018), p. 44.

cc:  
 Brandye Hendrickson, Acting Administrator, Federal Highway Administration, U.S. Department  
 of Transportation  
 K. Jane Williams, Acting Administrator, Federal Transit Administration, U.S. Department of  
 Transportation  
 Jeffrey Wood, Acting Assistant Attorney General, Environment and Natural Resources Division,  
 U.S. Department of Justice  
 D.J. Gribbin, Special Assistant to the President for Infrastructure, The White House  
 Alex Herrgott, Associate Director for Infrastructure, Council for Environmental Quality, The  
 White House



Atlanta Regional Commission

March 8, 2018

The Honorable Scott Pruitt  
 Office of the Administrator  
 U.S. Environmental Protection Agency  
 1200 Pennsylvania Avenue, N.W.  
 Washington, DC 20460

**Re: Request for EPA to Seek an Appeal and Stay of the South Coast Air Quality Management District Ruling**

The recent court ruling in the South Coast Air Quality Management District v. EPA et al., No. 15-1115 (D.C. Cir. Feb. 16, 2018) vacated portions of the 2008 Ozone Implementation Rule (80 Fed. Reg. 12,264) revoking transportation conformity for the 1997 ozone standard. This action appears to result in EPA being unable to render conformity determinations for pending transportation plans and programs in areas originally classified as nonattainment for the 1997 standard. The attached summary details the impacts on the Atlanta region as we understand the court ruling.

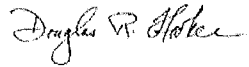
Since Georgia's Metropolitan Planning Organizations (MPOs) have ceased demonstrating conformity to the 1997 ozone standard, per the 2008 Ozone Implementation Rule, several urbanized areas in the state of Georgia are now without a 1997 ozone standard conforming transportation plan, thereby restricting the ability of EPA to approve conformity determinations for amendments to Regional Transportation Plans (RTPs) and Transportation Improvement Programs (TIPs). Currently in Georgia, the Atlanta Regional Commission (ARC) has two RTP/TIP amendments in progress that are impacted by this decision. This court decision threatens the implementation of over \$1.5 billion in federal transportation funds in FY 2018 and FY 2019.

The Atlanta Regional Commission, Georgia Department of Transportation, and Georgia Regional Transportation Authority request that EPA appeal this ruling and request a stay on the previous decision to ensure the transportation planning and project delivery process can continue on schedule. This action will ensure a smooth transition - and prevent delays in the delivery of transportation projects and programs - that will impact the lives of millions of Georgians.

atlantaregional.org

International Tower  
 279 Peachtree St, NE | Suite 100  
 Atlanta, Georgia 30303

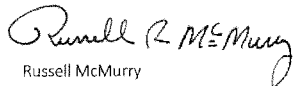
Sincerely,



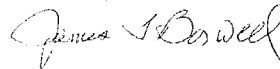
Doug Hooker  
Executive Director  
Atlanta Regional Commission



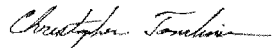
Kerry Armstrong  
Chairman  
Atlanta Regional Commission



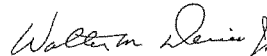
Russell McMurry  
Commissioner  
Georgia Department of Transportation



Jamie Boswell  
Chairman  
Georgia Department of Transportation



Christopher Tomlinson  
Executive Director  
Georgia Regional Transportation Authority &  
State Road and Tollway Authority



Walter M. "Sonny" Deriso, Jr.  
Board Chairman  
Georgia Regional Transportation Authority

C: Ken Wagner, EPA

Attachment: Ozone Implementation Ruling Impacts

**ANTICIPATED IMPACTS ON THE ATLANTA REGION TRANSPORTATION PROGRAM FROM THE SOUTH COAST  
 AIR QUALITY MANAGEMENT DISTRICT, PETITIONER v. ENVIRONMENTAL PROTECTION AGENCY, ET AL.,  
 RESPONDENTS NATIONAL ENVIRONMENTAL DEVELOPMENT ASSOCIATION'S CLEAN AIR PROJECT, ET AL.,  
 INTERVENORS**

Background

When a new ozone or particulate matter standard is put in place, the Environmental Protection Agency (EPA) provides a rule that informs States on how to implement the new standard. This rule is colloquially called the "Implementation Rule." When the nation transitioned from the 1997 to the 2008 ozone standard, EPA laid out a process in its Implementation Rule to remove requirements for the 1997 standard, including transportation conformity requirements, for areas that were designated for the new, stricter 2008 ozone standard and had attained the 1997 standard.

The goal of this process was to lower the burden on governments to meet requirements for multiple standards simultaneously, especially in the case where areas were already determined to be in nonattainment for a stricter standard.

In the Atlanta region, the transition from the 1997 to the 2008 ozone standard resulted in a smaller 15-county nonattainment area, replacing the 20-county 1997 ozone area. Conformity was then revoked for the outer 5 counties - including the Gainesville-Hall MPO - in 2015. In 2015-2016, ARC worked with the Georgia Environmental Protection Division (GA EPD) to establish new motor vehicle emissions budgets for the 2008 ozone standard and altered the conformity process to reflect the new procedures outlined in the Implementation Rule.

Lawsuit and the United States Court of Appeals for the District of Columbia Circuit Ruling

In 2017, the South Coast Air Quality Management District filed suit against EPA over the Implementation rule, citing removing conformity requirements (among other items) violates rules that help areas uphold air quality standards. As a result, on February 16, 2018 the DC Circuit Court of Appeals vacated portions of the EPA's 2008 Ozone Implementation Rule, agreeing with the plaintiffs. This ruling vacated the revocation of transportation conformity requirements for the 1997 ozone standard.

Implications and Unknowns

As ARC staff currently understands the ruling, all areas that were nonattainment for the 1997 ozone standard at one time must now continue to demonstrate conformity to that standard to receive a positive conformity determination on their Regional Transportation Plan (RTPs) and Transportation Improvement Program (TIP).

ARC has two TIP amendments in the pipeline that staff believes cannot be approved by federal partners, effectively stalling the transportation planning process. It is important to understand that this stall will be temporary, but threatens the implementation of over \$1.5 billion in federal transportation funds in FY 2018 and FY 2019 – and has the potential of trickling into future years as delays accrue. This action is the result of a court ruling, and is NOT a conformity lapse due to the inability to demonstrate conformity to established motor vehicle emissions budgets, as was the case in the Atlanta region during the conformity lapse of 1999. ARC will continue to work with our state and federal partners to pursue the best path forward. ARC can respond to the recent court ruling (processing a RTP/TIP amendment and demonstrating conformity to the 1997 Ozone standard) – if this is what EPA requires, but this will take time.

EPA should immediately seek an appeal and stay of the ruling, allowing states and MPOs to respond to the ruling and avoid threatening billions in federally-funded transportation projects.

IN THE UNITED STATES COURT OF APPEALS  
FOR THE DISTRICT OF COLUMBIA CIRCUIT

SIERRA CLUB, <i>et al.</i> ,	)	
	)	Nos. 15-1115, 15-1123
Petitioners,	)	(consolidated)
	)	
v.	)	
	)	<b>DECLARATION OF</b>
UNITED STATES ENVIRONMENTAL	)	<b>WALTER C. WAIDELICH, JR.</b>
PROTECTION AGENCY, <i>et al.</i> ,	)	
	)	
Respondents	)	
	)	
	)	
_____	)	

I, Walter C. Waidelich, Jr., declare as follows:

1. I am the Executive Director for the Federal Highway Administration (FHWA), an operating administration of the U.S. Department of Transportation (DOT). I have served in that capacity since March 15, 2016. Over the past 30 years, I have held a variety of other positions within FHWA, and have been intimately involved in virtually all aspects of highway planning and project delivery.

2. FHWA supports State and local governments in the planning, design, and construction of Federal-aid highways. FHWA administers the \$44 billion annual Federal-Aid Highway Program, thereby providing significant financial assistance for the over one million miles of Federal-aid highways. Under FHWA's governing

statutes, FHWA's primary purpose is to provide oversight and "monitor the effective and efficient use of funds" on these Federal-aid highway projects.

3. As a part of executing its statutory obligations, and as relevant in this case, FHWA provides federal oversight and approval for the complex environmental planning processes that such projects require, including "transportation conformity" determinations imposed by the Clean Air Act (CAA). FHWA's field offices work in collaboration with State Departments of Transportation and Metropolitan Planning Organizations (MPOs) to ensure compliance with the CAA procedural requirements as a prerequisite to implementing Federal-aid highway and related transportation projects.

4. If a State determines it will seek Federal-aid assistance for a highway project, the project must first be submitted to FHWA on the Statewide Transportation Improvement Program ("STIP"), which lists the various proposed federally-funded projects that the State wishes to pursue. States are required to submit their STIPs to FHWA and the Federal Transit Administration (FTA), another operating administration of DOT, for joint approval. In metropolitan planning areas, the proposed project must also be included in a Metropolitan Long Range Plan (Plan) and Transportation Improvement Program (TIP). The TIP then becomes a subset of the statewide STIP. In order for a transportation project to receive Federal-aid highway funds, FHWA's planning statutes at 23 U.S.C. §§

134(j)(1) & (2) and 135(g)(5) require the project to be consistent with the statewide and metropolitan long-range transportation plans and be included in the STIP and TIP.

5. Under the CAA, the Environmental Protection Agency (EPA) reviews air pollution conditions in state and metropolitan areas, and may designate areas as either in “attainment” or “nonattainment” for a national ambient air quality standard (NAAQS) of a pollutant. Once a nonattainment area has attained the NAAQS for a specified pollutant, the State may submit a request to the EPA for the re-designation of the nonattainment area and revises its State Implementation Plan to provide for the “maintenance” of its air quality status (i.e., remaining in “attainment” for that NAAQS). The area is then known as a “maintenance area” for that NAAQS.

6. As a prerequisite to receive federal funding, Plans and TIPs in nonattainment and maintenance areas for the transportation-related pollutants, including ozone, must meet “transportation conformity” requirements under the CAA. The purpose of a transportation conformity determination is to ensure that federal funds go to transportation activities that are consistent with (i.e., “conform to”) a State’s air quality goals and plans that are set forth in the State Implementation Plan. Conformity means that FHWA funding and approvals are given to highway



activities that will not cause new air quality violations, worsen existing violations, or delay timely attainment of the NAAQS or any interim milestone.

In addition to the metropolitan transportation planning documents, individual projects in nonattainment and maintenance areas must also meet transportation conformity requirements. If a highway project in a nonattainment or maintenance area is not in the conforming Plan and TIP, then FHWA cannot obligate the funds that were programmed for the project, and the project may not advance to construction.

7. The transportation conformity determination process involves complex technical analysis and assessment. For Plans and TIPs, the major components of a conformity determination include: interagency coordination on critical issues; public involvement; use of the latest planning assumptions and the latest EPA-approved emissions model; regional emissions analysis; demonstrations that on-road mobile source emissions are within a motor vehicle emissions budget; a demonstration that there is timely implementation of transportation control measures; and meeting of fiscal constraint requirements of the planning regulations.

8. EPA has identified 82 nonattainment and maintenance areas for the 1997 ozone NAAQS, which encompass as many as 228 counties in 24 States. These are the areas addressed by this Court's February 16, 2018 decision. The Petitioners

referred to them as “orphan” areas (which is not a term of art used in transportation planning and project delivery or transportation conformity).

9. In many of the 82 “orphan” areas to which this court’s decision applies, the process of making the transportation conformity determinations for the 1997 ozone NAAQS that are required pursuant to the Court’s decision may take up to a year or longer to complete. The time involved in completing the transportation conformity determination process depends on a variety of factors, including the planning organization’s technical capabilities to perform the modeling processes, the degree of technical complexity for a given State or area, and the relative freshness or staleness of prior studies and data inputs. The attached timeline provides details of the steps and time that FHWA expects will be necessary for most of the “orphan” areas to complete their conformity determinations for the 1997 ozone NAAQS, in the absence of further guidance or relief from EPA. Exhibit 1. We do not expect that this exercise will impact emissions of ozone pollution precursors, because EPA considers all 82 “orphan” areas as currently in attainment, not only with the 1997 NAAQS but also with the more stringent 2008 NAAQS.

10. This Court’s decision raises numerous implementation questions about exactly what should be done in these “orphan” areas to comply with the CAA, particularly with respect to transportation conformity determinations for Plans and TIPS, as well as future project funding and/or approval actions. As the

transportation planning process and project approvals are continuously ongoing processes, the regulated community is straining under the considerable uncertainty that now exists with respect to moving forward with actions currently pending or that will be pending in the near future. EPA has not yet provided guidance that addresses this uncertainty, and will need adequate time to do so.

11. The criteria and procedures that EPA has established for making transportation conformity determinations currently only applies to non-revoked NAAQS. FHWA is not aware of any EPA regulations or guidance on preparing a transportation conformity determination for a revoked NAAQS, such as would be the case with the 1997 ozone NAAQS.

12. The impacts of the Court's decision will negatively affect FHWA's abilities to determine that pending Plans and TIPs meet conformity requirements. It also may impact FHWA's ability to approve STIPs. Consequently, advancing the projects in those Plans and TIPs and STIPs may be halted until the necessary air quality analysis and conformity determinations can be completed. Although it is difficult to quantify the immediate impacts of the Court's opinion given the vast array of projects being planned and implemented around the country, we estimate that there are substantial impacts on major highway projects in as many as 228 counties in 24 states. Literally billions of dollars in construction projects could be impacted through the end of this calendar year if there is no relief. All of these

projects are located in areas that have cleaned up their ozone air pollution, and currently meet the more stringent 2008 ozone NAAQS.

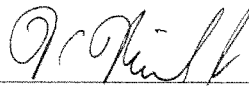
13. State and local planning organizations and transportation agencies involved in transportation conformity and project decisions have requested EPA to provide guidance on how to proceed with their work in light of the Court's opinion. These organizations have justifiably relied on a decision-making environment where, based on EPA's 2008 Ozone SIP Requirements Rule at issue in this case, they no longer needed to make conformity determinations for the 1997 ozone NAAQS because they had already reached attainment with the stricter 2008 NAAQS. The Court's opinion has sweeping practical implications for these organizations and agencies. For instance, in a joint letter to the EPA Administrator dated March 16, 2018 (see Exhibit 2), the American Association of State Highway and Transportation Officials (AASHTO) and the Association of Metropolitan Planning Organizations (AMPO) implored the EPA to provide immediate guidance because "[t]he practical effects of this decision on transportation agencies will be severe." The letter continued: "The immediate re-imposition of conformity requirements [for the 1997 ozone NAAQS] will prevent States and metropolitan planning organizations (MPO's) from approving transportation plans and transportation improvement programs (TIPs) until the necessary air quality analysis and conformity determinations can be completed."

14. As part of FHWA's efforts to implement this Court's decision while in a temporary vacuum of EPA guidance, FHWA has identified a critical need for technical assistance among its partner State and local governments. FHWA has therefore organized a technical support team located in various parts of the country to serve as a partial resource for affected stakeholders to use over the next twelve months. This team is composed of air quality modelers and other subject matter experts, who can help guide the necessary work for affected stakeholders to satisfy the re-instated requirements for 1997 ozone conformity determinations.

In addition, on April 23, 2018, FHWA and FTA issued Interim Guidance (Exhibit 3) to FHWA and FTA field offices. The interim guidance demonstrates FHWA and FTA's good faith effort to comply with the Court's decision by halting planning and project actions in all of the "orphan" areas for the time being. FHWA would use the time allowed by a remand without vacatur to work with EPA to develop guidance and to help its stakeholders implement this Court's decision without disrupting the delivery of necessary highway projects to the millions of citizens who depend on FHWA to provide safe and efficient highway travel.

Pursuant to 28 U.S.C. § 1746(2), I declare under penalty of perjury that the foregoing is true and correct.

Executed on 4/23/18.



WALTER C. WAIDELICH, JR.

# Exhibit 1

## EXHIBIT 1:

Timeline of Typical Steps to Complete Conformity Determinations  
on Plans and TIPs in "Orphan" 1997 Ozone Areas  
Not Completely Covered by 2008 Ozone Areas\*

Metropolitan Planning Organization (MPO) Activities/Responsibilities	Months to Complete, from start	FHWA Actions
<ul style="list-style-type: none"> <li>Identify impacts and determine technical needs – resources, staff, expertise (modeling needs)</li> </ul>	0-1	Reach out to each affected FHWA Division office and associated State to determine scope and extent of federal assistance needed
<ul style="list-style-type: none"> <li>Initiate interagency consultation (40 CFR 93.105)</li> <li>Prepare for emissions modeling (e.g., download/install latest emissions model, complete training, secure contractors for work if necessary) (40 CFR 93.111)</li> <li>Obtain data for travel networks (40 CFR 93.122)</li> <li>Develop latest planning assumptions (e.g., collect new vehicle activity data, socioeconomic forecasts, etc.) (40 CFR 93.110)</li> </ul>	1-3	Provide technical assistance related to impacts
<ul style="list-style-type: none"> <li>Prepare assumptions and reach consensus (40 CFR 93.110)</li> <li>Review assumptions via MPO committees</li> <li>Conduct interagency consultation (required) (40 CFR 93.105)</li> <li>Build travel networks – horizon years (40 CFR 93.106)</li> </ul>	4-5	Participate in interagency consultation on assumptions (40 CFR 93.105)
<ul style="list-style-type: none"> <li>MPO Board approves project lists</li> <li>Conduct travel and emissions modeling and off-network analysis (40 CFR 93.105)</li> <li>Document analyses and interagency review (40 CFR 93.105)</li> </ul>	5-10	Provide technical assistance on data collection, travel modeling, emissions analysis and other conformity requirements, etc.
Conduct public involvement (generally 30 days) on metropolitan long range Plan, TIP, and conformity documentation (40 CFR 93.105, 93.112)	9-10	<ul style="list-style-type: none"> <li>Participate in interagency consultation related to conformity documentation (40 CFR 93.105)</li> <li>Provide technical assistance (e.g., on modeling comments)</li> </ul>
<ul style="list-style-type: none"> <li>Respond to interagency and public comments (40 CFR 93.105, 93.112)</li> <li>MPO Board makes conformity determination (40 CFR 93.102)</li> </ul>	11	



Publish final conformity determination (40 CFR 93.105)	11-12	<ul style="list-style-type: none"> <li>• Review MPO conformity determination and consult with EPA</li> <li>• Make conformity determination in coordination with FTA (40 CFR 93.102)</li> </ul>
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\*This timeline was developed by staff in FHWA's Office of Planning, Environment & Realty/Air Quality and Transportation Conformity Team as a supplement to the declaration.

# Exhibit 2



March 16, 2018

The Honorable Scott Pruitt  
Office of the Administrator  
U.S. Environmental Protection Agency  
1200 Pennsylvania Ave. NW  
Washington, DC 20460



Re: EPA Response to D.C. Circuit Decision in *South Coast Air Quality Management District v. EPA*, Case No. 15-1115

Dear Administrator Pruitt:

The American Association of State Highway and Transportation Officials (AASHTO) and the Association of Metropolitan Planning Organizations (AMPO) jointly request that the Environmental Protection Agency (EPA) file a petition for rehearing and request for stay of the February 16, 2018 decision in *South Coast Air Quality Management District v. EPA*, Case No. 15-1115 in the U.S. Court of Appeals for the District of Columbia. This letter sets forth the reasons for this urgent request.

In the *South Coast* decision, the court vacated major portions of a 2015 final rule that established procedures for transitioning from the 1997 National Ambient Air Quality Standard (NAAQS) for ozone to the stricter 2008 NAAQS for the same pollutant.<sup>1</sup> The 2015 rule included several important provisions to avoid imposing duplicative and unnecessary regulatory burdens. Of most importance to transportation agencies, the 2015 rule ensured that areas designated as nonattainment or maintenance for the 1997 standard would not be subject to air quality conformity requirements if those areas are in attainment for the stricter 2008 standard.

The court decision overturned this common-sense provision in the 2015 rule, holding that areas designated as nonattainment or maintenance for the 1997 standard—but as attainment for the 2008 standard—must remain subject to conformity requirements for the 1997 standard to avoid “backsliding” on efforts to meet that standard. But the court also *agreed* with EPA’s finding that the “measures that achieved attainment of both the 1997 NAAQS and the 2008 NAAQS should be adequate to maintain the same 2008 NAAQS that has already been attained.” The contradiction is clear: on one hand, the court finds that conformity must continue to apply for the 1997 standard to avoid backsliding; but on the other, the court agreed that the measures already in effect in those areas should be sufficient to maintain compliance with the stricter 2008 standard.

<sup>1</sup> See “Implementation of the 2008 National Ambient Air Quality Standards for Ozone: State Implementation Plan Review Requirements,” 80 Fed. Reg. 12,264 (Mar. 6, 2015).

The court also vacated several other provisions in the rule that provided flexibility in transitioning to the 2008 ozone standard, and appears to have invalidated EPA's revocation of the 1997 standard. If the revocation of the 1997 standard is invalidated, the implications of this decision are even broader: it would mean that areas designated as nonattainment or maintenance for the 2008 standard must make conformity determinations for the 1997 standard, in addition to making conformity determinations for the stricter 2008 standard for the same pollutant.

The practical effects of this decision on transportation agencies will be severe. As of February 16, 2018, air quality conformity requirements for the 1997 ozone standard have been re-imposed on dozens of areas around the country that have fully attained the stricter 2008 ozone standard, and possibly on dozens of additional areas that are in nonattainment or maintenance for the 2008 standard. The immediate re-imposition of conformity requirements will prevent States and metropolitan planning organizations (MPOs) from approving transportation plans and transportation improvement programs (TIPs) until the necessary air quality analysis and conformity determinations can be completed. Without an approved plan and TIP, the flow of federal funds for highway and transit projects in many areas will be halted.

Moreover, the invalidation of EPA's 2015 rule potentially calls into question the validity of *existing* every plan and TIP approvals made in reliance on that rule. MPOs across the country have approved plans and TIPs since March 2015 without making conformity determinations with respect to the revoked 1997 ozone standard. If EPA were to conclude that those previous plan and TIP approvals are now invalid, given the lack of a conformity determination for the 1997 standard, the effects of this decision would be even more immediate and far-reaching, potentially including a halt to ongoing construction projects.

As an indication of the potential magnitude of the problem, there were 35 nonattainment areas and 80 maintenance areas for the 1997 standard at the time the 1997 standard was revoked. These 115 areas are located in 32 states and 434 counties.<sup>2</sup> The immediate re-imposition of conformity requirements for the 1997 standard could disrupt transportation projects in all of those counties. In Atlanta alone, the MPO has approximately \$1.5 billion of projects in its TIP; in Houston, the MPO has approximately \$4.37 billion of projects in its TIP; in Hampton Roads, Virginia, the TIP includes \$4.89 billion of projects. The re-imposition of the 1997 standard threatens the ability of these and other MPOs to continue moving forward with billions of dollars in projects.

To avoid immediate and far-reaching disruption to transportation projects, it is critical to seek every available means to obtain relief from this court decision. We therefore request that EPA file a petition for rehearing in the D.C. Circuit and seek a stay of the court's decision within the 45-day period allowed for such a petition (by April 2, 2018). If EPA files a petition for rehearing, our organizations intend to seek the court's permission to file an amicus brief in support of the rehearing request.

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<sup>2</sup> See EPA website, <https://www3.epa.gov/airquality/greenbook/gbhc.html>.

In addition, we request that EPA issue interim guidance as soon as possible regarding implementation of the court decision, and that any such guidance provide maximum flexibility and minimize disruption to ongoing projects. Specifically, we ask EPA to confirm that:

- In nonattainment or maintenance areas where the 1997 ozone standard was revoked and no other conformity determinations for other pollutants or standards were required, all existing transportation plans, TIPs and projects are valid for twelve months from the date of the Court decision; at the end of the twelve-month period, a conformity determination for the 1997 ozone standard would be required.
- In areas where the 1997 ozone standard was revoked and conformity requirements for other pollutants or standards apply, all currently approved conformity determinations are valid until the next required conformity determination is made in each such nonattainment or maintenance area. At the time of the next required determination, the nonattainment or maintenance area would meet the conformity requirements for the 1997 ozone standard and any other pollutants or standards for which conformity is required.


While not a complete solution, such guidance may provide some relief from the regulatory burdens and project delays caused by this decision.

We also note that this court decision highlights the need for a permanent legislative solution to resolve the uncertainty about what the Clean Air Act requires when EPA issues a new, stricter NAAQS to replace a previous one for the same pollutant. In its recent infrastructure reform proposal, the White House specifically recommended “[a]mending the Clean Air Act to clarify that conformity requirements apply only to the latest NAAQS for the same pollutant.”<sup>1</sup> We strongly support this recommendation for legislative change.

We appreciate your attention to this urgent request. We would welcome the opportunity to meet with you and your staff to discuss these issues. Should you have any questions, please contact: Melissa Savage from AASHTO at (202) 624-3638, or Bill Keyrouze from AMPO at (202) 624-3683.

Sincerely,

  
 Bud Wright  
 Executive Director  
 AASHTO

  
 DeLania Hardy  
 Executive Director  
 AMPO

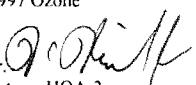
<sup>1</sup> “Legislative Outline for Rebuilding Infrastructure in America,” (Feb. 12, 2018), p. 44.

cc:  
 Brandye Hendrickson, Acting Administrator, Federal Highway Administration, U.S. Department  
 of Transportation  
 K. Jane Williams, Acting Administrator, Federal Transit Administration, U.S. Department of  
 Transportation  
 Jeffrey Wood, Acting Assistant Attorney General, Environment and Natural Resources Division,  
 U.S. Department of Justice  
 D.J. Gribbin, Special Assistant to the President for Infrastructure, The White House  
 Alex Herrgott, Associate Director for Infrastructure, Council for Environmental Quality, The  
 White House

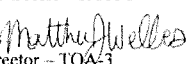
# Exhibit 3

Subject: Interim Guidance on Conformity Requirements for the 1997 Ozone NAAQS

Date: April 23, 2018

From: Walter C. Waidelich, Jr.   
FHWA Executive Director – HOA-3

In Reply Refer To:  
HCC-30  
TCC-Helen Serassio

Matthew J. Welbes   
FTA Executive Director – TOA-3

To: FHWA Division Administrators and  
FTA Regional Administrators

This guidance provides important information regarding transportation conformity requirements for certain pending planning and project development actions in programs administered by the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA). The U.S. Court of Appeals for the D.C. Circuit recently issued a decision in *South Coast Air Quality Management District v. EPA*, No. 15-1115, which struck down portions of the 2008 Ozone NAAQS SIP Requirements Rule concerning the ozone National Ambient Air Quality Standards (NAAQS). These portions of the 2008 Ozone NAAQS SIP Requirements Rule addressed implementation requirements for the 2008 ozone NAAQS as well as the anti-backsliding requirements associated with the revocation of the 1997 ozone NAAQS. The impact of the decision addresses two groups of ozone areas described in the decision:

Areas that were maintenance areas for the 1997 ozone NAAQS at the time of revocation and are designated as attainment for the 2008 Ozone NAAQS. These areas have not been required to make transportation conformity determinations for any ozone NAAQS since the 1997 ozone NAAQS were revoked in April 2015 by EPA's Rule.

Areas that were designated as nonattainment for the 1997 ozone NAAQS at the time of revocation and are designated as attainment for the 2008 Ozone NAAQS. These areas have not been required to make transportation conformity determinations for any ozone NAAQS since the 1997 ozone NAAQS were revoked in April 2015 by EPA's Rule.

Based on the information in EPA's Greenbook,<sup>1</sup> we have identified 82 such areas encompassing as many as 228 counties in 24 States that are potentially affected by the

<sup>1</sup> <https://www.epa.gov/green-book/green-book-8-hour-ozone-1997-area-information-naaqs-revoked>



Court's decision.<sup>2</sup> Please refer to 40 CFR Part 81 and/or EPA's Greenbook for a full description and maps of these 1997 ozone areas.

While we are waiting for guidance from EPA clarifying the possible impacts, *all routine planning and project development actions may proceed throughout the country, except for the following actions within the identified areas that should be considered "on-hold" for now:*

- New Metropolitan Long Range Plan and Transportation Improvement Programs (TIP), *updates and amendments* that include the addition of a project that is *not exempt* from transportation conformity may not proceed until transportation conformity with the 1997 ozone NAAQS is determined. Exempt projects are listed in 40 CFR 93.126 and 93.127. *Administrative modifications* to Metropolitan Plans and TIPs may proceed because, by definition in 23 CFR 450.104, those actions do not require a conformity determination.
- Statewide Transportation Improvement Program (STIP) approvals and amendments that include TIPs or non-exempt projects from the 82 identified areas may not proceed, unless the TIP or project is determined to conform with the 1997 ozone NAAQS or is limited to projects that are exempt from transportation conformity. Exempt projects are listed in 40 CFR 93.126 and 93.127. Partial STIP approvals, i.e., those limited to other areas of the state may proceed as described in 23 CFR 450.220(b)(1)(iii).
- Within the 82 identified areas, NEPA approvals for FHWA/FTA projects (40 CFR 93.101) may not proceed unless the existing Metropolitan Plan and TIP include the project. For projects that already completed NEPA, there is no need to delay further action, including: grant obligations; approvals of plans, specifications and estimates; and authorizations to begin construction.

If your office receives questions from a state or local transportation partner related to the impacts of this court decision on proposed planning actions or project approvals beyond what is described above, the most appropriate response is that FHWA and FTA, in coordination with OST and EPA, are reviewing the decision and evaluating next steps, and that we will provide updates as soon as possible. You should not speculate regarding the next steps that may be under review.

For technical assistance, please contact at FHWA Cecilia Ho (202-366-9862), Karen Perritt (202-366-9066) or David Kall (202-366-6276), and at FTA Dwayne Weeks (202-493-0316) or Megan Blum (202-366-0463). You may also contact Gloria Shepherd, Associate Administrator for the FHWA's Office of Planning, Environment and Realty (202-366-0116), or Sherry Riklin, Acting Associate Administrator for FTA's Office of Planning and Environment (202-366-5407) with any questions.

Thank you for your immediate attention to this guidance.

<sup>2</sup> The 82 areas are set forth in the tables below. We have requested confirmation of the affected counties and States from EPA and are awaiting its response.

**1997 Ozone Areas Not Covered in Full by the 2008 Ozone Standard,  
by State (24) and 1997 Ozone Area Name (82)**

State	1997 Ozone NAAQS Area Name
AL	Birmingham, AL
CA	Amador and Calaveras Cos. (Central Mountain Cos.), CA
CA	Mariposa and Tuolumne Cos (Southern Mtn), CA
CA	Sutter Co (Sutter Buttes), CA
DE	Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE
GA	Atlanta, GA
GA	Macon, GA
GA	Murray Co (Chattahoochee Nat Forest), GA
IL	St. Louis, MO-IL
IN	Evansville, IN
IN	Fort Wayne, IN
IN	Greene Co, IN
IN	Indianapolis, IN
IN	Jackson Co, IN
IN	La Porte Co., IN
IN	Louisville, KY-IN
IN	Muncie, IN
IN	South Bend-Elkhart, IN
IN	Terre Haute, IN
KY	Cincinnati-Hamilton, OH-KY-IN
KY	Clarksville-Hopkinsville, TN-KY
KY	Huntington-Ashland, WV-KY
KY	Louisville, KY-IN
MA	Boston-Lawrence-Worcester (E. Mass), MA
MA	Springfield (W. Mass), MA
MD	Kent and Queen Anne's Cos, MD
ME	Hancock, Knox, Lincoln and Waldo Cos, ME
ME	Portland, ME
MI	Allegan Co, MI
MI	Benton Harbor, MI
MI	Benzie Co, MI
MI	Cass Co, MI
MI	Detroit-Ann Arbor, MI
MI	Flint, MI
MI	Grand Rapids, MI
MI	Huron Co, MI
MI	Kalamazoo-Battle Creek, MI
MI	Lansing-East Lansing, MI
MI	Mason Co, MI

MI	Muskegon, MI
NC	Charlotte-Gastonia-Rock Hill, NC-SC
NC	Haywood and Swain Cos (Great Smoky NP), NC
NC	Raleigh-Durham-Chapel Hill, NC
NC	Rocky Mount, NC
NH	Boston-Manchester-Portsmouth (SE), NH
NV	Las Vegas, NV
NY	Albany-Schenectady-Troy, NY
NY	Buffalo-Niagara Falls, NY
NY	Essex Co (Whiteface Mtn), NY
NY	Jefferson Co, NY
NY	Poughkeepsie, NY
NY	Rochester, NY
OH	Canton-Massillon, OH
OH	Dayton-Springfield, OH
OH	Lima, OH
OH	Parkersburg-Marietta, WV-OH
OH	Steubenville-Weirton, OH-WV
OH	Toledo, OH
OH	Wheeling, WV-OH
OH	Youngstown-Warren-Sharon, OH-PA
PA	Altoona, PA
PA	Clearfield and Indiana Cos, PA
PA	Erie, PA
PA	Franklin Co, PA
PA	Greene Co, PA
PA	Harrisburg-Lebanon-Carlisle, PA
PA	Johnstown, PA
PA	Scranton-Wilkes-Barre, PA
PA	State College, PA
PA	Tioga Co, PA
PA	York, PA
PA	Youngstown-Warren-Sharon, OH-PA
RI	Providence (all of RI), RI
SC	Charlotte-Gastonia-Rock Hill, NC-SC
TN	Clarksville-Hopkinsville, TN-KY
TN	Knoxville, TN
TX	Beaumont-Port Arthur, TX
VA	Fredericksburg, VA
VA	Madison and Page Cos (Shenandoah NP), VA
VA	Norfolk-Virginia Beach-Newport News (Hampton Roads), VA
VA	Richmond-Petersburg, VA
WI	Door Co, WI

WI	Kewaunee Co, WI
WI	Manitowoc Co, WI
WI	Milwaukee-Racine, WI
WV	Charleston, WV
WV	Huntington-Ashland, WV-KY
WV	Parkersburg-Marietta, WV-OH
WV	Steubenville-Weirton, OH-WV
WV	Wheeling, WV-OH

1  
2 **IN THE UNITED STATES COURT OF APPEALS**  
3 **FOR THE DISTRICT OF COLUMBIA CIRCUIT**  
4

5 SIERRA CLUB, *et al.*, )  
6 )

7 Petitioners, )

8 v. )

No. 15-1123

9 UNITED STATES )  
10 ENVIRONMENTAL PROTECTION )  
11 AGENCY, ET AL., )

**DECLARATION OF  
MATTHEW J. WELBES**

12 Respondents )  
13 )  
14 )  
15 )

16 I, Matthew J. Welbes, hereby declare:

- 17 1. I am the Executive Director of the Federal Transit Administration (FTA), an  
18 operating administration of the U.S. Department of Transportation (DOT). I  
19 have served in this capacity since 2008. As Executive Director, I direct the  
20 daily operations of the agency in support of public transportation services in  
21 communities across the United States, including providing local public  
22 transit systems with federal funding from FTA consistent with all the  
23 statutory and regulatory prerequisites to the award of funding. FTA currently  
24 has an annual budget of over \$13 billion.
- 25 2. With some limited exceptions, transportation conformity applies to  
26 metropolitan and statewide transportation planning and projects funded by  
27 FTA and the Federal Highway Administration (FHWA), another operating  
28 administration of DOT, in nonattainment and maintenance areas for

1 transportation-related pollutants. FTA and FHWA must make transportation  
 2 conformity determinations on metropolitan long-range plans, transportation  
 3 improvement programs (TIPs), and non-exempt projects prior to accepting,  
 4 approving or funding these transportation activities. 42 U.S.C. § 7506(c)(2).

5 3. The recent decision by the Court in this case has potential impacts to the  
 6 FTA process for approvals and award of funds. Section 176(c) of the Clean  
 7 Air Act (CAA) establishes conformity requirements for metropolitan  
 8 transportation plans, TIPs, and projects in areas designated as nonattainment  
 9 or maintenance. *Id.* § 7506(c). Section 176(c)(2)(B) of the CAA  
 10 establishes requirements for timely implementation of transportation control  
 11 measures that are contained in a TIP and are funded or approved by FTA or  
 12 FHWA. *Id.* 42 U.S.C. § 7506(c)(2)(B). 23 U.S.C. § 109(j) establishes  
 13 requirements to ensure that transportation project development is consistent  
 14 with approved plans for air quality.

15  
 16 4. The CAA requires that each State environmental agency develop a plan  
 17 called a State Implementation Plan (SIP) that shows how the State will  
 18 implement measures designed to improve air quality enough to meet  
 19 National Ambient Air Quality Standards, 42 U.S.C. § 7407. The  
 20 transportation conformity process attempts to ensure that metropolitan  
 21 transportation plans (20-year planning horizon), TIPs, and projects are  
 22 consistent with meeting air quality goals in order to be eligible for federal  
 23 funding and approval. Whenever a metropolitan transportation plan or TIP is  
 24 updated or amended, unless the amendment only adds or deletes projects  
 25 that are exempt from transportation conformity such as safety related  
 26 projects, the Metropolitan Planning Organization (MPO) must comply with  
 27  
 28

1 the conformity requirements.<sup>1</sup>

2 5. FTA and FHWA jointly, in consultation with Environmental Protection  
3 Agency (EPA), make the determination of whether or not a metropolitan  
4 transportation plan and TIP is in conformance with the SIP for air quality.  
5 A project needs to be in an approved TIP before it can be added to a  
6 Statewide Transportation Improvement Program (STIP). The STIP is then  
7 forwarded to FTA/FHWA for joint approval. A project must be in an  
8 approved STIP for the appropriate phase of project development before the  
9 National Environmental Policy Act (NEPA) process can be completed. A  
10 NEPA determination is a mandatory precondition to award of either FTA or  
11 FHWA funding.

12  
13 6. The Court's decision potentially impacts FTA and FHWA projects in  
14 various stages of funding, as well as projects that are in various stages of the  
15 planning process. Together with EPA, FTA and FHWA have identified 82  
16 impacted areas of the country, encompassing as many as 228 counties in 24  
17 States, that are potentially affected by the Court's decision. Specifically, it  
18 has the potential to impact projects in the following categories:

- 19 a. Projects that do not yet have a conformity determination; and  
20  
21 b. Projects that are in a TIP and have been added to a STIP, but the STIP has  
22 not yet been approved.

23 7. The decision potentially could halt projects in each of these stages of the  
24 process if they are located in one of the 82 impacted areas:  
25

26  
27 <sup>1</sup> See 40 CFR 93.104(b)(2) and (c)(2). The projects that are exempt from the transportation conformity  
28 requirement are set forth in 40 CFR §§ 93.126 and 127.

- a. An "orphan"<sup>2</sup> non-attainment area;
- b. An "orphan" maintenance area;
- c. A partial "orphan" non-attainment area; and
- d. A partial "orphan" maintenance area.

8. Here is a chart that shows the number of areas in each category:

Type of Area	Number of 1997 Ozone Areas
Partial "Orphan" Maintenance Areas	6
Partial "Orphan" Nonattainment Areas	4
<b>Sub-total</b>	<b>10</b>
"Orphan" Maintenance Areas	63
"Orphan" Nonattainment Areas	9
<b>Total</b>	<b>82</b>

9. FTA must award most Federal funds within a specific period of time prescribed by statute. *See, e.g.* 49 U.S.C. § 5309(n)(1); *Id.* § 5336(g). All of the program funds apportioned or awarded by FTA have an administrative period for obligation of six years or less. Any apportioned or awarded funds that remain unobligated at the end of that period will revert to FTA for redistribution in the following year and the grantee will not have another opportunity to utilize those funds. If the funds are not awarded by the statutory deadline, then those funds lapse and the project sponsor no longer has the

<sup>2</sup> The term "orphan" is not a transportation term, but is used in the litigation.



1 ability to receive those funds. If there is no relief from the immediate  
 2 application of the Court's decision, tens of millions of FTA funds could  
 3 potentially lapse in approximately five months, at the end of Fiscal Year 2018.

4 10. Additionally, for the projects that are awaiting STIP approval and may now  
 5 need to conduct new conformity determinations, the funding delays and  
 6 disruptions are likely to be significant and likely could take as long as a year or  
 7 more.<sup>3</sup> If funds lapse, as a result of the delay, project sponsors will have no  
 8 recourse.  
 9

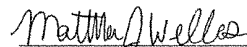
10 11. The potential harm from this decision to transportation projects in the  
 11 impacted areas is extremely significant in scope and dollars. FTA has projects  
 12 in the 1997 "orphan" maintenance and non-attainment areas that have lapsing  
 13 funds. In addition, those areas will not be able to advance new projects funded  
 14 from DOT's discretionary funding programs, including the Better Utilizing  
 15 Investments to Leverage Development (BUILD)<sup>4</sup> Transportation program, or  
 16 Section 5307, 5310, or 5311 (of Title 49 of the U.S. Code) funds sub-allocated  
 17 by State Departments of Transportation. FTA estimates that approximately  
 18 \$800 million in Section 5307 grant funds, which may not already be in  
 19 approved STIPs, could potentially be impacted. Additionally, the impact as a  
 20 result of the delay to conducting conformity determinations will delay  
 21 metropolitan transportation plan, TIP and STIP approvals, which in turn will  
 22 delay grant awards.  
 23  
 24  
 25

26 <sup>3</sup> See, Exhibit 2, Declaration of Walter C. Waidehich, Jr., Executive Director for the Federal Highway Administration,  
 27 dated April 23, 2018, attached to Respondents' Petition for Panel Rehearing.

28 <sup>4</sup> This program replaces the Transportation Investment Generating Economic Recovery (TIGER) program.

1  
2 Pursuant to 28 U.S.C. § 1746(2), I declare under penalty of perjury that the  
3 foregoing is true and correct.  
4

5 Executed on 4/23/18

6   
7 MATTHEW J. WELBES  
8 Executive Director for  
9 Federal Transit Administration  
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DECL. OF WELBES  
No. 15-1123