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SHORT-CIRCUITING PROGRESS: HOW THE CLEAN AIR ACT IMPACTS BUILDING NECESSARY INFRASTRUCTURE AND ONSHORING AMERICAN INNOVATION

HEARING

BEFORE THE

SUBCOMMITTEE ON ENVIRONMENT

OF THE

COMMITTEE ON ENERGY AND COMMERCE

HOUSE OF REPRESENTATIVES

ONE HUNDRED NINETEENTH CONGRESS

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SHORT-CIRCUITING PROGRESS: HOW THE CLEAN AIR ACT IMPACTS BUILDING NECESSARY INFRASTRUCTURE AND ONSHORING AMERICAN INNOVATION

WEDNESDAY, JUNE 11, 2025

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

The subcommittee met, pursuant to call, at 10:15 a.m., in room 2322, Rayburn House Office Building, Hon. H. Morgan Griffith (chairman of the subcommittee) presiding.

Members present: Representatives Griffith, Crenshaw, Latta, Carter of Georgia, Palmer, Joyce, Weber, Pfluger, Miller-Meeks, Langworthy, Fedorchak, Guthrie (ex officio), Tonko (subcommittee ranking member), Schakowsky, Ruiz, Peters, Barragán, Soto, Auchincloss, Carter of Louisiana, Menendez, Landsman, and Pallone (ex officio).

Also present: Representative Dingell.

Staff present: Ansley Boylan, Director of Operations; Byron Brown, Chief Counsel; Jessica Donlon, General Counsel; Sydney Greene, Director, Finance and Logistics; Emily Hale, Staff Assistant; Christen Harsha, Senior Counsel, Environment; Calvin Huggins, Clerk; Megan Jackson, Staff Director; Ben Mullaney, Press Secretary; Kaitlyn Peterson, Policy Analyst, Environment; Matt VanHyfte, Communications Director; Katharine Willey, Senior Counsel; Giancarlo Ceja, Minority Environment Fellow; Timia Crisp, Minority Professional Staff Member; Waverly Gordon, Minority Deputy Staff Director and General Counsel; Tiffany Guarascio, Minority Staff Director; Caitlin Haberman, Minority Staff Director, Environment; and Kylea Rogers, Minority Policy Analyst.

Mr. GRIFFITH. It looks like everybody has taken their seats. I appreciate that. And I will call the subcommittee on the environment to order.

The Chair now recognizes himself for 5 minutes for an opening statement.

OPENING STATEMENT OF HON. H. MORGAN GRIFFITH, A REPRESENTATIVE IN CONGRESS FROM THE COMMONWEALTH OF VIRGINIA

Today this subcommittee begins efforts to modernize the Clean Air Act. The Act was last amended in a consequential way in 1990

with Energy and Commerce Chair John Dingell being a driving force in that bicameral comprise.

The Clean Air Act has been effective. According to EPA's 2023 Air Quality Statistics Report, since the Clean Air Act amendments were past in 1990 there has been a 79 percent reduction in carbon monoxide, a 92 percent reduction in sulfur dioxide, or SOx, and a 55 percent reduction in nitrogendioxide, or NOx.

Since 2000 we have seen a 42 percent reduction in particulate matter 2.5, which are inhalable particles measuring less than 2.5 micrometers. The Clean Air Act's National Attainment Air Quality Standard or—standards, or NAAQS standards, setting and permitting programs with each new review.

EPA generally sets new lower—with each new review EPA generally sets new lower pollution allowances, and over time these newer standards have had the tendency to pass the point of diminishing returns.

Accordingly, if you are an industrial plant wanting to build in this country, you may have to wait until another plant goes out of business and you can take over their permit. This is not a path for economic prosperity.

Additionally, I don't believe that banning new industrial activity in the United States was what the authors of the Clean Air Act were aiming for.

It was a tough compromised bill meant to have each State scrutinize major sources and think about air permit planning, industry concentration, and air quality in unfavorable geographic settings.

The Act was written to get industry to reexamine its operations and control pollution by investing in and implementing innovative technologies. It worked. But now we have to examine the law in light of little additional public health gain at the expense of paralyzing nationally important industries. And that health gain, what I am talking about is the fact that we continue to lower the amount of pollutants allowed.

We need to begin a modernization effort by examining draft legislative proposals to reform the out-of-date NAAQS process. As we heard in our recent full committee hearing, overly restrictive air regulations have curtailed some domestic investment in important semiconductor plants and data centers, which in turn could jeopardize America's ability to be able to compete in the global artificial intelligence race.

One of the draft bills we are discussing today would improve the processes EPA uses to identify NAAQS pollutants and ceilings, and then for States to implement those new standards.

Under the Clean Air Act's NAAQS program, the EPA sets standard for six criteria pollutants, like ground-level ozone and particulate matter.

Historically the Clean Air Act required the EPA to review NAAQS standards and, if appropriate, issue new limits at 5-year intervals. The EPA has consistently missed statutory deadlines for both reviewing standards and for providing implementation guidance to the States, which has led to litigation in some cases.

These proposals will enable more reasonable requirements that States can actually implement. That is why the Clean Air Act and Economic Advancement Reform Act that we are talking about

today would lengthen that interval to 10 years and allow the EPA Administrator to consider whether it was likely the standard—whether it was likely the standard can actually be attained.

Additionally, the bill would require the EPA to consider the economic feasibility of these new standards.

The bill would also allow for naturally occurring air pollution events, such as wildfires, not to count against NAAQS emission averages for a particular State.

The other bill, the Clean Air and Building Infrastructure Improvements Act, has to do more specifically with the most recent PM 2.5 rule that really would cripple a lot of industry by reducing the limit from 12 micrograms per cubic meter of air to 9 micrograms per cubic meter of air.

Further, it allows for an easier preconstruction permitting process.

Protecting our environment and our economy do not have to be mutually exclusive goals, but in order to achieve both we must rethink how our country classifies pollution levels outside of our control.

The EPA is still in the process of updating various air quality standards. As that work continues, Congress must ensure States and employers aren't unfairly penalized by impractical or burdensome new rules which could hurt our national security and our economic competitiveness.

I look forward to learning from our expert witnesses who have extensive experience in implementing and complying with NAAQS standards under the Clean Air Act.

[The prepared statement of Mr. Griffith follows:]

Chairman H. Morgan Griffith
Opening Statement—Subcommittee on Environment
"Short-Circuiting Progress: How the Clean Air Act Impacts Building Necessary Infrastructure for Onshoring American Innovation"
June 11, 2025

As prepared for delivery

Today, this Subcommittee begins its efforts to modernize the Clean Air Act. The Act was last amended in a consequential way in 1990 with Energy and Commerce Chair, John Dingell, being a driving force in that bicameral compromise. The Clean Air Act has already been effective.

According to EPA's 2023 Air Quality statistics report, since the Clean Air Act amendments were passed in 1990, there has been a 79 percent reduction in Carbon Monoxide, a 92 percent reduction in Sulfur Dioxide or SOx, and a 55 percent reduction in Nitrogen Dioxide or NOx. Since 2000, we've seen a 42 percent reduction in Particulate Matter 2.5, which are inhalable particles measuring less than two and a half micrometers.

The Clean Air Act's National Attainment Air Quality Standards or NACKS standard setting and permitting programs, with each new review, EPA generally sets new lower pollution allowances, over time, these newer standards have had the tendency to pass the point of diminishing returns.

Accordingly, If you're an industrial plant wanting to build in this country, you may have to wait until another plant goes out of business and you can take over their permit. That is not a

path to economic prosperity. Additionally, I don't believe that banning new industrial activity in the United States was what the authors of the Clean Air Act were aiming for.

It was a tough compromise bill meant to have each state scrutinize major sources and think about air permit planning, industry concentration, and air quality in unfavorable geographic settings. The Act was written to get industry to reexamine its operations and control pollution by investing in, and implementing, innovative technologies.

It worked, but now we need to examine the law in light of little additional public health gain at the expense of paralyzing nationally important industries. We need to begin a modernization effort by examining draft legislative proposals to reform the out-of-date NACKS process.

As we heard in our recent full Committee hearing, overly restrictive air regulations have curtailed some domestic investment in semiconductor plants and data centers, which in turn could jeopardize America's ability to compete in the global Artificial Intelligence race.

One of the draft bills we are discussing today would improve the processes EPA uses to identify NACKS pollutants and ceilings. And then, for states to implement those new standards.

Under the Clean Air Act's NACKS program, the EPA sets standards for six criteria pollutants like ground-level ozone and particulate matter. Historically, the Clean Air Act required EPA to review NACKS standards and if appropriate, issue new limits, at five-year

intervals. The EPA has consistently missed statutory deadlines for both reviewing standards and for providing implementation guidance to states which has led to litigation in some cases.

These proposals will enable more reasonable requirements that states can actually implement. This is why the Clean Air Act and Economic Advancement Reform Act that we are talking about today would lengthen that interval to 10 years and allow the EPA Administrator to consider whether it was likely the standard can actually be attained.

Additionally, the bill would require the EPA to consider the economic feasibility of these standards. The bill would also allow for naturally occurring air pollution events, such as wildfires, to not count against NACKS emission averages for a state.

The other bill, the Clean Air and Building Infrastructure Improvements Act has to do more specifically with the most recent PM 2.5 rule that really would cripple a lot of industry by reducing that limit from 12 micrograms per cubic meter of air to 9 micrograms per cubic meter of air.

Further, it allows for an easier preconstruction permitting process. Protecting our environment and our economy do not have to be mutually exclusive goals, but in order to achieve both, we must rethink how our country classifies pollution levels outside our control.

The EPA is still in the process of updating various air quality standards. As that work continues, Congress must ensure states and employers aren't unfairly penalized by impractical or burdensome new rules which could hurt our national security and our economic competitiveness.

I look forward to learning more from our expert witnesses who have extensive experience in implementing, and complying with NACKS standards under the Clean Air Act.

Mr. GRIFFITH. With that I yield back, and now recognize the gentleman from New York for his opening statement.

OPENING STATEMENT OF HON. PAUL TONKO, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEW YORK

Mr. TONKO. Thank you, Mr. Chair, and welcome to our witnesses.

For almost as long as I have served on this committee, Republicans have tried and failed to enact the proposals before us today. These bills do not represent new and innovative solutions specifically tailored to meet our current policy changes—or challenges, including addressing growing electricity demand.

They are the same tired ideas that suggest Americans should expect to live with unsafe air quality if the rules necessary to protect them would cut into polluters' profits.

I am certain that Members from both sides of the aisle will celebrate the success of the Clean Air Act, which has resulted in significant reductions in air pollution while our economy has grown. But the majority tends to believe that this is evidence that the job is done and we should dramatically change the law.

I on the other hand take the exact opposite lesson: The Clean Air Act is working, and there is still considerable work for the law to do.

The American Lung Association's 2025 State of the Air Report found that even after 5 decades of the Clean Air Act, 46 percent of Americans—more than 156 million people—are living in places with unhealthy levels of ozone or particle pollution, two of the pollutants addressed by the National Ambient Air Quality Standards, or NAAQS.

Now, as I said, the proposals before us today are not new, but there is some new and important context for us to discuss.

First, 3 weeks ago House Republicans passed their Big Ugly Bill, which according to the nonpartisan Congressional Budget Office would result in 16 million Americans losing their healthcare. Now, the proposals today add insult to injury pushing us toward a future where hospitals, already under financial pressure, will have to deal with more cases of asthma, of COPD, and other health consequences of increased air pollution affecting millions more as uninsured Americans.

Second, the Trump administration intends to attempt to roll back the 2024 standard for fine particulate matter. EPA previously estimated that this standard will result in some $46 billion worth of net benefits in 2032, including 4,500 avoided premature deaths, 800,000 avoided asthma attacks, and nearly 300,000 avoided missed days of work each year.

So the 2024 standard for fine particulate matter is expected to provide such significant benefits to the American people because NAAQS are required by law to be protective of our health without consideration of cost. But the proposals before us today would drastically weaken the process to set standards based on the latest science.They would double the amount of time between reviews of standards and inject cost considerations and attainability into the standard-setting process.

I also find it unfortunate that the majority's hearing title would lead us to believe that the Clean Air Act is stifling American innovation, and yet House Republicans continue to sit on their hands while the Trump administration dismantles all of the conditions that have historically made the United States an engine for innovation.

President Trump is proposing devastating funding cuts to the Federal research enterprise, NSF, NIH, NOAA, NOAA, and other critical research agencies. This will ensure that America fails to train the next generation of great scientists, engineers, and other innovators who do rely on Federal dollars to achieve their advanced degrees and conduct cutting-edge research.

DOE's industrial programs, NIST manufacturing extension partnership, and other programs that American manufacturers rely upon are also under threat. The Trump administration has caused an uncertain and an unstable investment environment with its unstrategic and ever-changing tariff policies, and Republicans have demonstrated a willingness to jeopardize private-sector investments by seeking to abruptly end energy tax incentives.

Even Federal contracts are no longer worth the paper they are printed on following the arbitrary and unlawful terminations of many finalized agreements. These actions are having a chilling effect on private-sector investment, the American research community, and other entities that are critical to the future competitiveness of our economy. These are not the actions of a government that is serious about fostering innovation.

But rather than criticize the Trump administration, we are back to undermining environmental protections and trying to convince Americans that we simply cannot afford safe, healthy air. I am certain there is evidence going back decades of industries claiming each and every past NAAQS standard has been unachievable or would cause irrevocable economic harm. But the sky has never fallen. The Clean Air Act has worked and worked effectively as intended, and it continues to protect Americans' health while enabling economic growth.

These goals are not at odds, but unfortunately the proposals we are examining today do not share that view.

[The prepared statement of Mr. Tonko follows:]

Committee on Energy and Commerce

Opening Statement as Prepared for Delivery
of
Subcommittee on Environment Ranking Member Paul D. Tonko

Hearing on "Short-Circuiting Progress: How the Clean Air Act Impacts Building Necessary"

June 11, 2025

Thank you, Mr. Chair.

For almost as long as I have served on this Committee, Republicans have tried and failed to enact the proposals before us today. These bills do not represent new and innovative solutions specifically tailored to meet our current policy challenges, including addressing growing electricity demand.

They are the same tired ideas that suggest Americans should expect to live with unsafe air quality if the rules necessary to protect them would cut into polluters' profits. I am certain that Members from both sides of the aisle will celebrate the success of the Clean Air Act, which has resulted in significant reductions in air pollution while our economy has grown.

But the majority tends to believe that this is evidence that the job is done, and we should dramatically change the law. I, on the other hand, take the exact opposite lesson. The Clean Air Act is working, and there is still considerable work for the law to do.

The American Lung Association's 2025 "State of the Air" report found that even after five decades of the Clean Air Act, 46% of Americans— more than 156 million people— are living in places with unhealthy levels of ozone or particle pollution, two of the pollutants addressed by the National Ambient Air Quality Standards, or NAAQS.

Now, as I said, the proposals before us today are not new. But there is some new and important context for us to discuss. First, three weeks ago, House Republicans passed their Big, Ugly Bill, which according to the nonpartisan Congressional Budget Office will result in 16 million Americans losing their health care.

The proposals today add insult to injury, pushing us towards a future where hospitals, already under financial pressure, will have to deal with more cases of asthma, COPD, and other health consequences of increased air pollution affecting millions more uninsured Americans. Second, the Trump Administration intends to attempt to roll back the 2024 standard for fine particulate matter.

EPA previously estimated that this standard will result in $46 billion in net benefits in 2032, including 4,500 avoided premature deaths, 800,000 avoided asthma attacks, and nearly 300,000 avoided missed days of work each year. The 2024 standard for fine particulate matter is

expected to provide such significant benefits to the American people because NAAQS are required by law to be protective of our health without consideration of costs.

But the proposals before us today would drastically weaken the process to set standards based on the latest science. They would double the amount of time between reviews of standards and inject cost considerations and attainability into the standard setting process.

I also find it unfortunate that the majority's hearing title would lead us to believe that the Clean Air Act is stifling American innovation. And yet, House Republicans continue to sit on their hands while the Trump Administration dismantles all the conditions that have historically made the United States an engine for innovation.

President Trump is proposing devastating funding cuts to the Federal research enterprise— NSF, NIH, NOAA, and other critical research agencies. This will ensure that America fails to train the next generation of great scientists, engineers, and other innovators, who rely on Federal dollars to achieve their advanced degrees and conduct cutting-edge research.

DOE's industrial programs, NIST's Manufacturing Extension Partnership, and other programs that American manufacturers rely upon are also under threat. The Trump Administration has caused an uncertain and unstable investment environment with its un-strategic and ever-changing tariff policies, and Republicans have demonstrated a willingness to jeopardize private sector investments by seeking to abruptly end energy tax incentives.

Even Federal contracts are no longer worth the paper they are printed on following the arbitrary and unlawful terminations of many finalized agreements. These actions are having a chilling effect on private sector investment, the American research community, and other entities that are critical to the future competitiveness of our economy.

These are not the actions of a government that is serious about fostering innovation. But rather than criticize the Trump Administration, we are back to undermining environmental protections and trying to convince Americans that we simply cannot afford safe, healthy air.

I am certain there is evidence going back decades of industry claiming each and every past NAAQS standard has been unachievable or would cause irrevocable economic harm. But the sky has never fallen.

The Clean Air Act has worked effectively as intended, and it continues to protect Americans' health while enabling economic growth. These goals are not at odds. But unfortunately, the proposals we are examining today do not share that view.

With that, I yield back.

Mr. TONKO. And with that, Mr. Chair, I yield back.

Mr. GRIFFITH. The gentleman yields back. I now recognize the chairman of the full committee, the gentleman from Kentucky, for 5 minutes for his opening statement.

OPENING STATEMENT OF HON. BRETT GUTHRIE, A REPRESENTATIVE IN CONGRESS FROM THE COMMONWEALTH OF KENTUCKY

Mr. GUTHRIE. Thank you. Thank you, Chairman Griffith, for this hearing, and welcome my Ranking—friend Ranking Member Tonko, and all the witnesses for being here today.

And we are continuing our important work finding commonsense solutions to reduce unreasonable regulatory burdens while continuing to protect our environment. Unfortunately, over the last 4 years the onslaught of the Biden-Harris administration regulations under the Clean Air Act created significant regulatory burdens for the American electric, power, manufacturing, and transportation sectors. We were recently reminded of this when we held a full committee hearing on artificial intelligence and heard testimony about the critical need to support and accelerate AI technologies.

In that hearing, industry experts repeated the same concerns many of us have heard from small businesses and manufacturers: The overall regulatory environment and permitting processes, in particular, are overburdensome and inefficient here in the United States.

As we will hear today, the economic impact of harmful regulatory burdens promulgated during the Biden-Harris administration totaled nearly 1.8 trillion, a historical record. Amazingly, more than 70 percent of that cost was imposed by the EPA, much of it from the Clean Air Act rules.

The last time Congress meaningfully amended the Clean Air Act was 1990, 35 years ago. We have learned a lot and seen a lot of environmental progress since then.

In the decades since Congress first passed the Clean Air Act, air quality in the United States has dramatically improved. Criteria air pollutants are down 73 percent since 1980, according to the World Health Organization, and U.S. has the some of the lowest particulate matter levels in the world.

The progress that we have seen does not mean the Clean Air Act cannot be reviewed and modernized. Some of the Clean Air Act's provisions are unclear, outdated, and do not reflect the world we live in today.

This trend is illustrated by the Biden-Harris National Ambient Air Quality Standards, or NAAQS, for particulate matter.

A prime example of the need for reforming and updating the flawed system used for setting and reviewing Clean Air Act regulations, the Biden rule will force large portions of the country into nonattainment status, which will block new development, halt modernization and stunt job growth.

In their testimony in April, witnesses in our AI hearing pointed to the particulate matter rule as a significant barrier when they look to onshore American innovation. They noted that as currently implemented the rule would limit opportunities for American manufacturing.

These overly restrictive regulations oppress domestic investments in semiconductor plants, data centers, jeopardizing America's ability to compete in the global AI race.

On top of unreasonable compliance costs and complexity, these regulations also fail to fulfill the promise of the Clean Air Act. A majority of emissions measured in NAAQS are from sources outside of a manufacturer's control.

American industry propelled the innovation that made our air cleaner, and yet they are being penalized for factors unrelated to their operation.

A few weeks ago, EPA Administrator Lee Zeldin testified before this subcommittee about his efforts to address the significant regulatory burdens promulgated during the Biden-Harris administration and have oppressed economic development without spurring meaningful improvements to environmental protection. Now it is our turn to do the same.

The discussion drafts before us today are based on legislation considered by this committee in previous Congresses and offered commonsense, practical solutions to remedy significant flaws in the current NAAQS process. The panel of witnesses are uniquely well qualified to discuss the compliance nature of the NAAQS program and its need of reform.

And I thank Congressman Allen and Congressman Carter for their leadership on these bills, and I look forward to working with the rest of the members of the committee as we consider additional proposals on how to best modernize the Clean Air Act. And I look forward to today's discussion, and I yield back.

[The prepared statement of Mr. Guthrie follows:]

Chairman Brett Guthrie
Opening Statement—Subcommittee on Environment
"Short-Circuiting Progress: How the Clean Air Act Impacts Building Necessary Infrastructure for Onshoring American Innovation"
June 11, 2025

As prepared for delivery

Thank you, Chairman Griffith, and thank you to our witnesses for joining us for today's hearing, which begins the Committee's effort to review and modernize the Clean Air Act.

We are continuing our important work, finding common-sense solutions to reduce unreasonable regulatory burdens while continuing to protect our environment.

Unfortunately, over the last four years, the onslaught of Biden-Harris Administration regulations under the Clean Air Act created significant regulatory burdens for the American electric power, manufacturing, and transportation sectors.

We were recently reminded of this when we held a full committee hearing on artificial intelligence and heard testimony about the critical need to support and accelerate AI technologies.

In that hearing, industry experts repeated the same concerns many of us have heard from small businesses and manufacturers: the overall regulatory environment, and permitting processes in particular, are overburdensome and inefficient here in the U.S.

As we will hear today, the economic impact of harmful regulatory burdens promulgated during the Biden-Harris Administration totaled nearly $1.8 trillion, a historical record.

Amazingly, more than 70 percent of that cost was imposed by the EPA, much of it from Clean Air Act rules.

The last time Congress meaningfully amended the Clean Air Act was 1990, 35 years ago. We've learned a lot – and seen a lot of environmental progress – since then.

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Criteria air pollutants are down 73 percent since 1980. According to the World Health Organization, the U.S. has some of the lowest fine particulate matter levels in the world.

The progress we have seen does not mean the Clean Air Act cannot be reviewed and modernized. Some of the Clean Air Act's provisions are unclear, outdated, and do not reflect the world we live in today.

This trend is illustrated by the Biden-Harris National Ambient Air Quality Standards, or NAAQS [NACKs], for particulate matter, a prime example of the need for reforming and updating the flawed system used for setting and reviewing Clean Air Act regulations.

The Biden rule will force large portions of the country into "non-attainment" status, which will block new development, halt modernization, and stunt job growth.

In their testimony in April, witnesses in our AI hearing pointed to the particulate matter rule as a significant barrier when they look to onshore American innovation. They noted that as currently implemented, the rule would limit opportunities for American manufacturing.

These overly restrictive air regulations oppress domestic investments in semiconductor plants and data centers, jeopardizing America's ability to compete in the global AI race.

On top of the unreasonable compliance costs and complexity, these regulations also fail to fulfill the purpose of the Clean Air Act. A majority of emissions measured in NAAQS are from sources outside of a manufacturers' control.

American industry propelled the innovation that made our air cleaner, yet they are being penalized for factors unrelated to their operation.

A few weeks ago, EPA Administrator Lee Zeldin testified before this subcommittee about his efforts to address the significant regulatory burdens promulgated during the Biden-Harris Administration that oppressed economic development, without spurring meaningful improvements to environmental protection.

Now it's our turn to do the same.

The discussion drafts before us today are based on legislation considered by this Committee in previous Congresses and offer common-sense, practical solutions to remedy significant flaws in the current NAAQS process.

The panel of witnesses is uniquely well-qualified to discuss the complicated nature of the NAAQS program and its need for reform.

I thank Congressmen Allen and Congressmen Carter for their leadership on these bills, and I look forward to working with the rest of the members on the Committee as we consider additional proposals on how to best modernize the Clean Air Act.

I look forward to today's discussion and yield back.

Mr. GRIFFITH. The gentleman yields back. The Chair now recognizes the ranking member of the full committee, the gentleman from New Jersey, for 5 minutes for his opening statement.

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

Mr. PALLONE. Thank you, Mr. Chairman. Today we are examining two Republican draft bills that, once again, put corporate polluters over people and will make the American people sicker. With these discussion drafts, Republicans are altering the fundamental premise of the Clean Air Act and threatening our ability to ensure Americans have clean and healthy air to breathe.

For over 50 years the Environmental Protection Agency has had the authority and obligation to set National Ambient Air Quality Standards, or NAAQS, and these health-based standards essentially set the level of pollution that is safe to breathe, and they are based solely on the latest science and medical evidence.

Since 1970, the standards have been the foundation of the Clean Air Act, resulting in healthier air, while our economy has grown. And we know air pollution poses serious and significant health risks to communities every day. Even short-term exposure can cause aggravated asthma attacks, acute bronchitis, and increased susceptibility to respiratory infections. Pollution is dangerous, plain and simple. And Americans have a right to clean, safe air.

And that is why I was pleased that last year EPA strengthened the NAAQS for fine particulate matter, also known as PM 2.5. The new standard has tremendous health benefits. It will save Americans up to $46 billion in 2032 in healthcare costs alone. It will also prevent asthma attacks, lost workdays, and thousands of premature deaths.

But Trump's EPA is abandoning that effort. My Republican colleagues now want to double down on the administration's actions by resurrecting bills that sell out the health of families and children to line the pockets of big corporate interests, and they work to steal healthcare from 16 million people, you know, in their big ugly bill, but at the same time they are pushing proposals that will make people sick.

The discussion drafts before us today would allow industry profits to override science in setting air quality standards, provide amnesty to new polluting facilities at the expense of existing ones, and remove incentives to cut pollution.

They would also weaken and delay the fundamental protections in the law, virtually guaranteeing that people living in areas with poor air quality will continue to breathe unhealthy air.

And these pieces of legislation are not new. Over the last decade Republicans have pushed these proposals through the committee several times. They can try to claim these drafts will not increase air pollution, but any time you put polluters' bottom line over public health, the result is dirtier air and sicker people.

Our experience with the Clean Air Act tells us that we do not need to choose between the health of our communities and a healthy economy. We can and must have both.

[The prepared statement of Mr. Pallone follows:]

Committee on Energy and Commerce

Opening Statement as Prepared for Delivery
of
Ranking Member Frank Pallone, Jr.

Hearing on "Short-Circuiting Progress: How the Clean Air Act Impacts Building Necessary Infrastructure and Onshoring American Innovation"

June 11, 2025

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The discussion drafts before us today would allow industry profits to override science in setting air quality standards, provide amnesty to new polluting facilities at the expense of existing ones, and remove incentives to cut pollution. They would also weaken and delay the fundamental protections in the law, virtually guaranteeing that people living in areas with poor air quality will continue to breathe unhealthy air.

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increase air pollution, but any time you put polluters' bottom line over public health, the result is dirtier air and sicker people.

Our experience with the Clean Air Act tells us that we do not need to choose between the health of our communities and a healthy economy. We can, and must, have both.

Mr. PALLONE. So before I close, I did want to ask the chairman a question about our committee rules. As you know, our rules require that the, quote, "date, time, place and subject matter of any hearing of the committee shall be announced at least one week in advance of the commencement of such hearing," unquote, unless there is a determination of a good cause exception.

For at least the last decade the subject matter of a legislative hearing has been interpreted to include announcing of the title of any legislation to be discussed and circulating a copy of the legislative text. However, the notice for today's hearing did not include an announcement that legislation would be the topic of today's hearing and did not include a copy of any legislative text.

My staff did receive communications from the chairman's staff just prior to the notice circulating that you intended it to be a legislative hearing, but they did not receive a copy of the two committee prints until last Thursday, one day after the hearing was noticed, and Republicans then circulated two new versions of committee prints with the memo on Monday.

So this is not, as you know, Mr. Chairman, the way the committee works. When Republicans choose not to provide the legislative text with a notice, it hinders our ability to prepare for this hearing, including our ability to discuss the subject matter with potential witnesses. And that is why it is imperative that the notice include both the title of any legislation being discussed and the copies of the legislative text consistent with longstanding committee procedure.

So, Mr. Chairman, I was going to confirm, I would like to confirm that moving forward the notice for legislative hearing will include the name of any legislation to be discussed and a copy of the legislative text, unless, of course, we go through the procedure to invoke a good cause exception. I was just going to ask the chairman to respond.

Mr. GRIFFITH. Does the gentleman from New Jersey yield time to the gentleman from Kentucky?

Mr. PALLONE. Absolutely.

Mr. GRIFFITH. The gentleman from Kentucky.

Mr. GUTHRIE. Thank you. Thank the gentleman for yielding. And the committee rules do not require legislative text to be made available in advance of the hearing, including a legislative hearing. I understand that this is the precedent this committee typically follows, that text is released with the hearing notice. We intend to continue to follow this committee precedent when at all possible.

However, like when you were chair, we reserved the right to deviate from that, and my understanding is that the issue that you described is we presented legislative text, we did submit another piece of update legislative text after the hearing was noticed, and that was because someone from Leg Counsel was absent. And so we will do—we couldn't help that, but we will do whatever is within our ability to follow the precedent.

Mr. GRIFFITH. The gentleman from New Jersey.

Mr. PALLONE. I just want to be sure I understand, Mr. Chairman, you are saying while it is not a requirement of the rules, what I articulated, that you are willing to follow it as a committee precedent.

Mr. GUTHRIE. Everywhere where practicable, yes.

Mr. PALLONE. All right. I appreciate that. Thank you.

Mr. GRIFFITH. Does the gentleman from New Jersey yield back?

Mr. PALLONE. I yield back.

Mr. GRIFFITH. The gentleman from New Jersey yields back.

Now I will conclude with Member opening statements. The Chair would like to remind the Members that, pursuant to the committee rules, all Members' opening statements will be made part of the record.

We want to thank our witnesses for being here today and taking the time to testify before the subcommittee. Although it is not the practice of this subcommittee to swear witnesses, I would remind our witnesses that knowingly and willingly making material false statements to the legislative branch is against the law under title 18, section 1001 of the United States Code. You have the opportunity to give an opening statement followed by questions.

Our witnesses today are Mr. Chad Whiteman, vice president of environmental and regulatory affairs at the U.S. Chamber of Commerce. Thank you for being here.

Mr. James W. Boylan, chief of Air Protection Branch of the Georgia Environment Protection Division. Thank you for being here, sir.

Mr. John Walke, director of Federal clean air and senior attorney, environmental health, at the Natural Resources Defense Counsel. Thank you, sir.

And Mr. Paul Noe, vice president of public policy at the American Forest and Paper Association. Thank you for being here, sir.

We appreciate all of you being here today. And I now recognize Mr. Whiteman for his 5 minutes to give an opening statement.

STATEMENTS OF CHAD S. WHITEMAN, VICE PRESIDENT, ENVIRONMENTAL AND REGULATORY AFFAIRS, GLOBAL ENERGY INSTITUTE, U.S. CHAMBER OF COMMERCE; JAMES W. BOYLAN, PH.D., CHIEF, AIR PROTECTION BRANCH, GEORGIA ENVIRONMENT PROTECTION DIVISION; JOHN D. WALKE, FEDERAL CLEAN AIR DIRECTOR, NATURAL RESOURCES DEFENSE COUNSEL; AND PAUL NOE, VICE PRESIDENT OF PUBLIC POLICY, AMERICAN FOREST & PAPER ASSOCIATION

STATEMENT OF CHAD S. WHITEMAN

Mr. WHITEMAN. Good morning. Thank you, Chairman Guthrie, Ranking Member Pallone, and Subcommittee Chairman Griffith and Ranking Member Tonko, and distinguished members of the subcommittee for the opportunity testify today on behalf of the business community regarding recent air quality regulations.

I am Chad Whiteman, vice president of environment and regulatory affairs for the Global Energy Institute at the U.S. Chamber of Commerce.

As we discuss the Clean Air Act's impact to building infrastructure and onshoring American innovation, I would like to focus on how the National Ambient Air Quality Standards, the NAAQS, program impacts our ability to meet growing energy needs, reshoring manufacturing and securing our supply chains. Specifically, there are five points that I would like to make today.

First, we must right size regulations to support economic growth and innovation. While balanced regulations can provide clarity that help implement the laws passed by Congress in a manner that maximizes innovation and choice, when not properly constructed regulations become a form of government micromanagement that eliminates the ability to do what people in the free markets do best: innovate.

The lack of innovation stifles economic growth. And echoing what Representative Guthrie stated in his opening statement, the wave of regulations issued over the prior 4 years has raised concerns about the economic impact due to their cumulative $1.8 trillion price tag, a historic record that may be underestimated.

More than 70 percent of those costs on the public were imposed by the Environmental Protection Agency, and the vast majority of those came from the air regulations like the NAAQS.

Second, over the past several decades the United States has made remarkable progress in improving air quality. Since 1970, emissions of key pollutants has significantly decreased thanks to a collaborative efforts of businesses, States, and Federal Government. The Clean Air Act has been instrumental in driving these improvements.

Since 2000, emissions of pollutants such as sulfur dioxide, nitrogen oxides, and particulate matter have decreased by 87, 54, and 37 percent, respectively.

These emission reductions have all occurred while gross domestic product, vehicle miles traveled, and population have all increased.

The United States has some of the best air quality in the world, with particulate matter levels up to 431 percent lower than other major economies, thanks to steady reductions in pollutants over the last several decades.

Third, most fine particulate matter now comes from nonindustrial sources. As EPA's data shows, 84 percent of particulate matter emissions now come from sources like wildfires and road dust that are costly and hard to control. While EPA technically offers exemptions for wildfires under the Clean Air Act's exceptional events program, the process is time consuming and difficult for States to navigate, involving extensive documentation and analysis. For one State, 70 percent of their past exemption requests were denied.

On top of the challenges, the regulatory program may currently restrict these types of exemptions. Amendments like those included in the CLEAR Act would help address this.

Fourth, the 2024 particulate matter standards will cause permitting gridlock across our economy. Unless the 2024 rule is rescinded, it will block the permitting of new manufacturing facilities and associated good-paying jobs, pushing investment overseas just at the time when we are trying to bring back manufacturing and stronger supply chains.

The rule will also prevent the delay and construction of roads, bridges, and other infrastructure funded by legislation recently passed by Congress.

Fifth, and finally, small businesses, homeowners, and families could bear disproportionate burden ofthese regulations. Increased compliance costs and administrative complexity can particularly be

challenging for small businesses, limiting their ability to grow and compete.

Furthermore, EPA—for instance, in EPA's cost analysis, the Agency identified various compliance pathways for tighter particulate matter standards, including the possibility of States requiring small businesses such as restaurants to install costly equipment and requiring homeowners to replace wood fireplaces with natural gas logs.

Furthermore, EPA failed to identify cost-effective and technologically achievable pathways for complying with tighter standards as the Agency only analyzed costs of partial compliance.

I would like to close by reaffirming the business community's support for efforts to improve air quality. The Chamber looks forward to working with policymakers on a reasonable regulatory approach that would achieve our shared goals of improving air quality and unleashing economic prosperity.

Again, thank you for the opportunity to testify today, and I am looking forward to answering your questions.

[The prepared statement of Mr. Whiteman follows:]

Short-Circuiting Progress: How the Clean Air Act

Impacts Building Necessary Infrastructure

and Onshoring American Innovation

Hearing Before the United States House of Representatives

Energy and Commerce Committee

Subcommittee on Environment

June 11, 2025

Written Testimony of Chad S. Whiteman

Vice President, Environment and Regulatory Affairs, Global Energy Institute

U.S. Chamber of Commerce

Chairman Griffith, Ranking Member Tonko, and distinguished members of the subcommittee, I am Chad Whiteman, Vice President, Environment and Regulatory Affairs for the Global Energy Institute at the U.S. Chamber of Commerce. I appreciate the opportunity to testify today on behalf of the business community regarding recent air quality regulations.

The U.S. Chamber of Commerce appreciates the opportunity to offer its views to the Subcommittee concerning the setting and implementation of Clean Air Act ("Act") National Ambient Air Quality Standards (NAAQS), and the impact of the NAAQS program on our ability to build critical infrastructure

to meet growing energy needs, reshore manufacturing to create good paying jobs, and secure our supply chains to bolster the economy and national security.

Right-Sizing Regulations to Support Economic Growth and Innovation

Regulations, when properly constructed, help implement the laws passed by Congress to improve our quality of life. Some level of government regulation is necessary to ensure public safety, protect the environment, and promote competitive and free markets.

Well-designed regulations provide greater clarity and certainty about how the law operates in practice and do so in a manner that maximizes innovation and choice while avoiding unduly prescriptive requirements and excessive costs. When not properly constructed, regulations become a form of government micromanagement that eliminates the ability of regulated entities and the marketplace to do what people in free markets do best: innovate. This lack of innovation and the often excessive costs of government micromanagement hold back economic growth. The cost to the economy is compounded when the rules are constantly being changed. What is permissible or required in one moment may become prohibited or not required in the next. This uncertainty makes it difficult to plan and invest for the future.

The wave of regulations issued over the prior four years has raised serious concerns in the business community, including concerns about economic impacts due to those regulations' cumulative $1.8 trillion dollar price tag, an historic record.[1] More than 70 percent of those costs on the public were imposed by the Environmental Protection Agency, and the vast majority of that 70 percent came from air regulations. Overly ambitious standards can skyrocket compliance costs and deter investment, threaten job losses, and add to the cost of producing goods and services (what we call "regflation"), particularly in

[1] The Biden Regulatory Record, American Action Forum, https://www.americanactionforum.org/insight/the-biden-regulatory-record/.

sectors such as manufacturing, infrastructure, and energy. It is essential to ensure complex regulatory requirements such as those tied to the NAAQS continue air quality progress without undue harm to investment and economic growth.

The $1.8 trillion in regulatory costs reported by federal agencies themselves may be underestimated due to several factors. Agencies often fail to account for all direct and indirect costs, such as the time and resources businesses must spend to comply with new rules. Additionally, the availability and cost of necessary technology can be uncertain, making compliance more challenging and expensive than initially anticipated. Unintended consequences of regulations, such as increased litigation or disruptions to existing business practices, can also add to the overall cost. Furthermore, agencies sometimes artificially cap estimates of regulations' costs and do not take into account the full scope of a regulation's impact, leading to significant underestimations of the true economic burden.

Air Quality Successes Over the Last Few Decades

Over the past several decades, the United States has made remarkable progress in improving air quality. Since 1970, emissions of key pollutants have significantly decreased, thanks to the collaborative efforts of businesses, states, and the federal government. This progress has been achieved while our economy has continued to grow, demonstrating that environmental protection and economic prosperity can go hand in hand.

The Clean Air Act has been instrumental in driving these improvements. The Act established a comprehensive framework for regulating air pollutants, setting national standards, and requiring states to develop implementation plans for how to meet those standards. As a result, since 2000, emissions of pollutants such as sulfur dioxide, nitrogen oxides, and particulate matter have decreased by 87 percent,

54 percent, and 37 percent respectively.[2] These emissions reductions have all occurred while gross domestic product, vehicle miles traveled, and population have all increased as shown in Figure 1 below. These improvements are a testament to the effectiveness of collaborative efforts between industry, states, and the federal government.

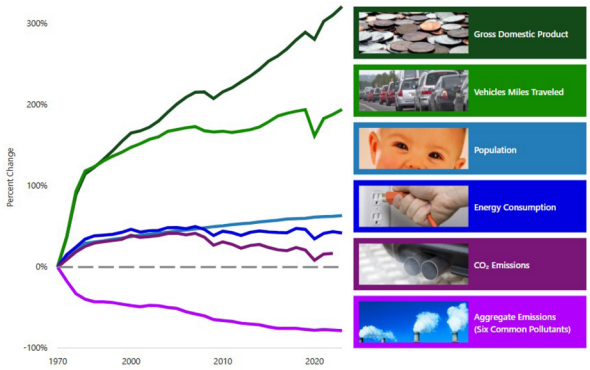

Figure 1. Comparison of Growth Areas and Declining Emissions (1970-2023)[3]

The development and adoption of cleaner technologies have played a crucial role in reducing emissions. Private investment and innovation have driven advancements in emissions control technologies and solutions, enabling businesses to meet stringent environmental standards while maintaining competitiveness.

The combination of steady economic growth and continued reductions in emissions is a testament to what has historically been an effective regulatory framework. But to have successful initiatives and programs, including measures under the Clean Air Act, businesses need a reliable framework to innovate

[2] U.S. Environmental Protection Agency, Our Nation's Air: Status and Trends Through 2023, https://www.epa.gov/air-trends.
[3] Ibid.

and invest in new and better technologies that can result in cleaner air and a stronger economy. It is why regulatory executive orders from both parties have called for well-designed regulations to be written such that they minimize overall costs while seeking to achieve the goal of the underlying law.

The United States has some of the best air quality in the world, thanks to steady reductions in pollutants over the last several decades—by a combined 78 percent across all of the pollutants covered under the NAAQS program.[4] For example, according to the World Health Organization, the average annual PM2.5 concentration in the U.S. is the 11th cleanest of 198th countries, bested only by sparsely populated Canada, Norway, Sweden, Finland, and some small island states.[5] By contrast, PM2.5 concentrations in other major economies are significantly higher than the U.S., including in France (45 percent higher), Germany (49 percent), Japan (51 percent), Italy (98 percent), and China (431 percent). This air quality advantage has been achieved through private investment, technological advances, and cooperative efforts between states, businesses, and the federal government.

Most Fine Particulate Matter Now Comes from Non-Industrial Sources

The 2024 rule further tightened the national ambient PM2.5 standards by 25 percent, dropping them from 12 ug/m3 to 9 ug/m3. This aggressive tightening has raised major concerns within the business community and across the country. For a number of reasons, the new standards are overly stringent and invalid: the standards did not comply with legal and regulatory process requirements,[6] were based on

[4] Ibid.
[5] World Health Organization Air Quality Database: Update 2022. https://www.who.int/data/gho/data/themes/air-pollution/who-air-quality-database/2022#.
[6] Indeed, the Chamber led a coalition of business associations that challenged the 2024 PM2.5 NAAQS rule in the U.S. Court of Appeals for the D.C. Circuit, joining litigation brought by the attorneys general of Kentucky, West Virginia, and 23 other states. As we explained in our briefs, the 2024 rule is subject to serious legal defects. For example, EPA violated the Clean Air Act when it decided to skip the thorough review process required by section 109(d) of the Act to more quickly arrive at a final rule lowering the PM2.5 standards. In so doing, EPA impermissibly circumvented the Act's constraints on EPA's standard-setting authority. The litigation is currently in abeyance to allow agency leadership to review the rule and determine appropriate next steps. The Chamber coalition's briefs in the litigation are available at https://www.uschamber.com/cases/energy-and-environment/epa-rule-revising-pm-naaqs.

questionable scientific conclusions,[7] and are expected to cause permitting gridlock, leading to substantial economic and compliance challenges. As the standards get closer and closer to zero, the lack of cost-effective and achievable compliance options further exacerbates these problems.

Furthermore, the growing contribution of non-industrial sources of emissions, which now make up the majority of the fine particulate matter in the air today, will make compliance even more challenging. As seen in Figure 2 below, EPA's data shows that 84 percent of PM 2.5 emissions now come from sources like wildfires and road dust that are costly and hard to control.[8] While EPA technically offers exemptions for wildfires under the Clean Air Act's exceptional events program, which means these events should not count towards an area's emissions budget, the reality is more complicated. For one state, 70 percent of their past exemption requests[9] were denied. The process for seeking an exemption is time-consuming and difficult for states to navigate, involving extensive documentation and analyses. This makes it difficult for states to manage and often results in these emissions still being counted, despite the statutory mandate, and underlying intent, to provide relief for such uncontrollable events.

On top of the challenges that states and EPA have had managing the exemption process for certain high emissions events like wildfires, there is also concern that the regulatory program in its current form may be construed to unduly restrict exceptional-events emissions exemptions.[10] It is uncertain whether, under the existing program, EPA would conclude that these exemptions could be applied to prescribed

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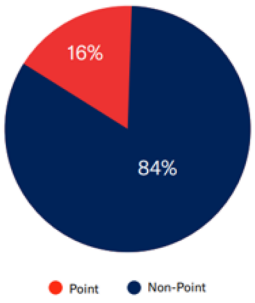
[7] For example, please see the comments of EPA Clean Air Scientific Advisory Committee member Dr. James Boylan, detailing problems with the adequacy and interpretation of scientific evidence used to justify stricter PM2.5 standards. Available at https://www.4cleanair.org/wp-content/uploads/PM-NAAQS-CASAC-Responses-to-EPA-PM-Draft-PA-031822.pdf.

[8] U.S. Environmental Protection Agency, Policy Assessment for the Reconsideration of the National Ambient Air Quality Standards for Particulate Matter, https://www.epa.gov/system/files/documents/2022-05/Final%20Policy%20Assessment%20for%20the%20Reconsideration%20of%20the%20PM%20NAAQS_May2022_0.pdf.

[9] Arizona Department of Environmental Quality, Particulate Matter NAAQS: Perspectives and Challenges – Arizona, https://cleanairact.org/wp-content/uploads/2023/09/19_Brad-Busby-ADEQ-AAPCA-2023-Fall-Meeting-PM-Challenges_Final.pdf.

[10] Clean Air Act Section 319(b)(1)(A).

fires, an important tool to control more severe emissions from wildfires, as indicated by a California delegation of U.S. Senators and Representatives who explained that EPA's exemption "process is unworkable for the scale of prescribed fire that will be necessary to protect our communities from increasingly catastrophic wildfires."[11] Amendments like those included in the CLEAR Act would help avoid counting emissions from activities like prescribed fires, which are intended to reduce larger more catastrophic wildfires.



Point Sources	
Power	11%
Industrial	5%
Total	16%

Non-Point Sources	
Fires	43%
Road Dust	16%
Ag Dust	14%
Other	6%
Cars/Trucks	5%
Total	84%

Figure 2. $PM_{2.5}$ Predominantly from Non-Point Sources

Fires alone are responsible for 43 percent of fine particulate matter emissions, but are difficult for states and localities to abate. This is posing implementation challenges for the NAAQS program today that are expected to increase over time. The Chamber completed an analysis[12] that demonstrates wildfires can be an even larger contributor to fine particulate matter and push more areas into nonattainment.

EPA evaluates three consecutive years of emissions monitoring data to determine which parts of the country meet the national standards and

[11] Letter from U.S. Senators and Representatives from California to EPA on Prescribed Fires, June 13, 2023, https://insideepa.com/sites/insideepa.com/files/documents/2023/jun/epa2023_1088.pdf.
[12] EPA's Proposed Air Quality Standards Will Cause Permitting Gridlock Across Our Economy, U.S. Chamber of Commerce, November 2023, https://www.uschamber.com/energy/new-chamber-report-epas-proposed-air-quality-standards-will-cause-permitting-gridlock-across-our-economy.

which do not. Any one of those three years with high values can significantly skew the results and effectively increase the stringency of the standards.

Due to their small size, these tiny particles can drift long distances so the impacts of fires can be felt across the country. For instance, counties in Arizona may violate EPA's standards because of fires in California. In 2023, the massive Canadian wildfires increased pollution levels across much of the eastern two-thirds of the country. As a result of the Canadian and other fires in that 2023 wildfire season, the number of U.S. counties out of compliance with EPA's tightened PM2.5 standards could increase by as much as 50%, which would result in strict new penalties on American businesses—large and small—and their communities.

Addressing emissions from non-industrial sources, such as wildfires, road dust, and other non-point sources, is crucial. Collaborative efforts between businesses, states, and the federal government can help address these emissions and improve air quality. We recommend that EPA focus on strategies to address non-industrial emissions instead of punishing counties and the private sector for situations largely out of their control.

The 2024 Air Quality Standards Will Cause Permitting Gridlock Across our Economy

Concerns about the availability and cost of newly-mandated control technologies are prevalent among businesses. And when EPA acts based on faulty scientific analyses, and departs from proper regulatory procedures, the reactions range from frustration to bewilderment. The implementation of aggressive new standards without a clear pathway of compliance can stifle innovation and investment. It is crucial to ensure that regulations are based on proven technologies and realistic timelines.

Conveying the full extent of the impact of the tighter 2024 PM2.5 national standards can be challenging, but the county map in Figure 3 below vividly illustrates how much of the country could be thrown into

permitting gridlock. With the prior standard, there were just 15 counties[13] in violation of the national PM2.5 NAAQS, all in California, but the 2024 tightening of the standards could place more than 20 percent of the country in permitting gridlock.[14]

The red shaded counties in Figure 3 show the expected breadth of the country that is likely to fail to meet the lower 9.0 µg/m3 standard. In addition to those counties that are expected to be in violation of the 2024 standards, a large swath of the country, identified by the counties shaded in light red, is so close to violating the tighter standards that these counties too are expected to experience permitting gridlock. Those areas in light red are only 1-3 µg/m3 lower than the new 9.0 µg/m3 standard, leaving little emissions headroom or buffer for additional development to meet growing demands for energy, housing, and manufacturing. Unless the 2024 rule is rescinded, it will block the permitting of new manufacturing facilities and associated good-paying jobs, pushing investment overseas just at a time when we are trying to bring back manufacturing and stronger supply chains. The rule will also prevent and delay the construction of roads, bridges, and other infrastructure funded by recently passed legislation such as the Infrastructure Investment and Jobs Act.

[13] U.S. Environmental Protection Agency, Green Book PM2.5 (2012) Area Information, May 31, 2025, https://www.epa.gov/green-book/green-book-pm-25-2012-area-information.
[14] Ibid.

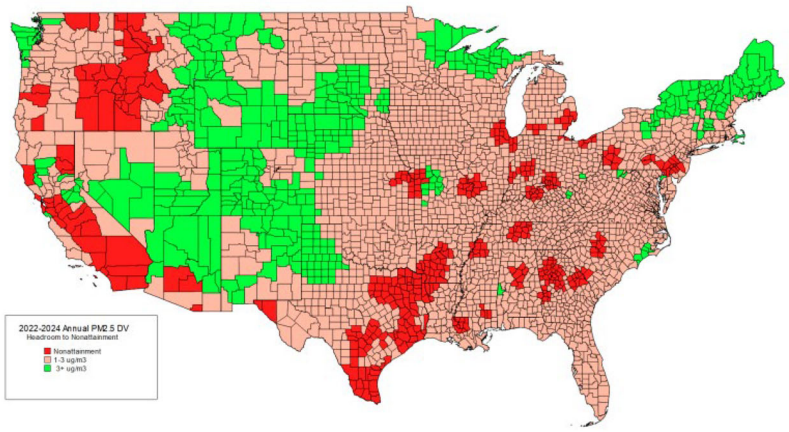


Figure 3. County-Based Map of Areas in EPA Nonattainment or Close to Nonattainment

Communities will soon encounter significant permitting restrictions on development, leaving them with little headroom to build and stimulate economic growth. This is in part because states will be required to perform complicated air dispersion modeling before building any significant new manufacturing and infrastructure projects. These air modeling exercises are designed to over-estimate actual concentrations; for many PM2.5 sources, such models tend to predict the highest potential impacts at the fence line. The result is that these counties too will face tighter permitting requirements.

Recent Congressional testimony highlights how new facilities from the steel, power, cement, brick, paper, and other industries need sufficient emissions headroom to accommodate EPA's conservative modeling approach even with the best available emissions controls installed.[15] Not only would conventional manufacturers bump into the lower air quality ceiling, but other manufacturers spurred by renewable energy investments may face the same challenges. For example, the CS Wind facility, which would

[15] Testimony of Timothy Hunt, American Forest & Paper Association, September 19, 2023, https://d1dth6e84htgma.cloudfront.net/09_19_23_ENV_Testimony_Hunt_4b415cf010.pdf, page 26.

create 800 jobs, would contribute as much as a 1.9 µg/m3 increase in fine particulate emissions based on EPA's modeling. The CS Wind and other manufacturing facilities would be able to build only in increasingly limited geographical areas if EPA tightens the standards. The potential for added costs for these permits and the opportunity costs of a manufacturing facility not being built were not considered in the EPA proposed rule. It is why we support legislative amendments like what is found in the Clean Air and Economic Advancement Reform Act (CLEAR Act) that would allow for the secondary consideration of the attainability of the standard.

Costly Standards for Small Businesses, States, and Even Homeowners

Small businesses often bear a disproportionate burden from new regulations. Increased compliance costs and administrative complexity can be particularly challenging for small businesses, limiting their ability to grow and compete. Examples of small businesses affected by recent regulations highlight the need for a balanced approach that considers the unique challenges faced by these enterprises.

For instance, in the cost analysis that EPA prepared for the final rulemaking,[16] the agency identified various compliance pathways for tighter PM2.5 standards, including the possibility of states requiring small businesses, such as restaurants, to install costly equipment and requiring homeowners to replace wood fireplaces with natural gas logs. Intrusive requirements of this kind would place significant financial burdens on small businesses and homeowners, limiting their ability to invest in growth and innovation.

[16] Final Regulatory Impact Analysis for the Reconsideration of the National Ambient Air Quality Standards for Particulate Matter, U.S. Environmental Protection Agency, January 2024, https://www.epa.gov/system/files/documents/2024-02/naaqs_pm_reconsideration_ria_final.pdf.

Absent a correction in course, the new rule will also require investments in new control technologies for sectors not normally affected by federal air programs. As various industries have implemented increasingly stringent air standards over time, there are fewer cost-effective emissions-control solutions available, causing compliance costs to be imposed on increasingly smaller facilities. Imposing burdens on smaller sources would likely raise the cost of compliance even further and raises questions about the feasibility of installing these technologies.

In addition, the compliance obligations imposed by the 2024 rule will require states to pave unpaved roads, which would be a costly and time-consuming process. This requirement will place a significant financial burden on states and local governments, limiting their ability to invest in other critical infrastructure projects.

In promulgating and justifying the 2024 rule, EPA failed to identify cost effective and technologically achievable pathways for complying with tighter standards, as the agency only analyzed the costs of partial compliance. EPA arbitrarily capped its estimates of costs at $160,000/ton of emissions reductions.[17] But this cap doesn't reflect reality, it simply ignores the even more costly emissions control strategies that are needed to attain tighter standards. The agency stated that "[t]he estimated PM2.5 emissions reductions from these control applications do not fully account for all the emissions reductions needed to reach the proposed and more stringent alternative standard levels in some counties in the northeast, southeast, west, and California."[18] Importantly, lack of identification of all control pathways means that the proposal underestimates regulatory costs and also raises the serious possibility that the only path to compliance in some areas will be closure of existing manufacturing and industrial facilities.

[17] Ibid, page 178.
[18] Ibid, page ES-4.

Finally, it is important to remember that the Clean Air Act requires that NAAQS standard-setting ultimately rest with the judgment of the EPA Administrator. The Administrator's decision must weigh scientific evidence, policy options, and comments from the Clean Air Scientific Advisory Committee (CASAC). In continuing to refine and improve the NAAQS standards-setting process, further consideration should be given to costs and compliance feasibility. The CLEAR Act represents an important step in this direction by providing EPA the opportunity to consider "likely attainability" in setting primary NAAQS standards, which we believe could include consideration of economic as well as technological constraints. This is particularly important as the standards are approaching zero and compliance pathways may be considerably limited.

Summary

In summary, while the business community supports effective efforts to improve air quality, it is essential for such regulations to properly consider the practical implications of different environmental and economic tradeoffs. The recent wave of regulations poses significant economic and compliance challenges, and overly burdensome regulations remove the stability and predictability that businesses need to invest. The recent NAAQS regulations in particular do more – they will impose a barrier to permitting new growth. This is contrary to important Administration and Congressional goals.

The Chamber looks forward to working with policymakers to achieve our shared goals of improving air quality and supporting national prosperity. We believe that a balanced and practical regulatory approach is essential for continued progress in air quality improvement and economic growth.

Mr. GRIFFITH. Thank you, gentleman. I now recognize Dr. Boylan for your 5 minutes of opening statement.

STATEMENT OF JAMES W. BOYLAN, PH.D.

Dr. BOYLAN. Good morning, Chairman Griffith, Ranking Member Tonko, and members of the subcommittee. My name is Jim Boylan, and I am honored to testify before you as the chief of the Air Protection Branch at the Georgia Environmental Protection Division. Today I am here to discuss the National Ambient Air Quality Standards and the impact on State regulatory agencies and the regulated community.

My remarks will focus on two components of the NAAQS: the setting of the NAAQS and the implementation of the NAAQS.

The NAAQS setting process involves the development and review of multiple documents. The time to develop and review each document can be substantial, since some of these documents can be over a thousand pages long.

Currently, the NAAQS review process is required to be repeated for ozone, particulate matter, sulfur dioxide, nitrogen dioxide, carbon monoxide, and lead every 5 years. There simply is not enough time to squeeze in all this work within a 5-year cycle.

As far as I am aware, EPA has only completed a NAAQS review within the statutory 5-year cycle one time since the establishment of the program and the Clean Air Act in 1970. Extending the time lines for NAAQS reviews from 5 to 10 years would give EPA the time needed to develop new standards without being rushed.

In addition, this change would bring about more stability and certainty for State air pollution control agencies and industry.

Protecting public health is the core responsibility of Georgia EPD, and we will always prioritize that. However, there is likely room for some balance in the NAAQS review process.

The proximity of new standards to background levels puts many States in a situation where the new standard is not achievable for reasons that are beyond a State's control. Therefore, the EPA Administrator should be allowed to consider likely attainability of the standard as proposed NAAQS levels approach background concentrations.

The Clean Air Science Advisory Committee, or CASAC, serves a critical role in the NAAQS setting process by providing independent expert feedback on various aspects of the NAAQS.

I had the pleasure to serve on the CASAC from 2017 to 2023 and was one of only two people selected to serve on the CASAC under both the Trump and Biden administrations. I have seen firsthand the imbalance that is caused by stacking the CASAC with mostly academic researchers.

While academic researchers have a good understanding of the underlying science, they do not always have a practical understanding of how science is translated into the NAAQS. State regulatory agencies possess specialized expertise and practical knowledge and skills needed for environmental management. For this reason, the CASAC should include at least three representatives from air pollution control agencies who are well versed in NAAQS implementation to balance the CASAC.

I would now like to turn to the implementation of the NAAQS. Implementation guidance needs to be—guidance needs to be issued concurrently with the issuance of any new NAAQS so that States have the immediate understanding of the requirements and are able to come into attainment quickly. Once a new NAAQS is promulgated, States are required to submit attainment/nonattainment designation recommendations to EPA.

As part of the designation processes, States can submit exceptional event demonstrations to EPA for approval. The State of Georgia issues prescribed burn permits for approximately 1.5 million acres per year. The application of prescribed fires in Georgia has been extremely successful, as shown by the historically low number of wildfires across the straight. However, the current provisions for exceptional events do not explicitly recognize prescribed fires as exceptional events. While the EPA has tried to address this through guidance, it really needs to be addressed through legislation.

There are multiple permitting challenges associated with implementing extremely low NAAQS in both attainment and nonattainment areas. For projects that want to build in areas meeting the NAAQS, the lack of headroom, or the difference between the standard and the background levels, makes it very difficult to approve permits.

For areas found in violation of the NAAQS, they will be required to implement the most restrictive new source review permitting process, not only for new but also for existing sources.

In 2024, the annual PM standard was dropped from 12 micrograms per cubic meter to 9. Many locations in Georgia are currently over the standard or lack enough headroom for new projects. This is especially a concern with the large number of economic development projects looking to locate in Georgia. Specifically, data centers are one of the fastest-growing industries in the State. These data centers need large amounts of energy to operate.

In May, a data center developer announced plans to build a 20-building data center campus costing $16 billion that would require more power than one of Plant Vogtle's nuclear reactors.

Power generation to support all the new data centers will pose multiple permitting challenges under the current NAAQS process.

In closing, I would like to emphasize that there may be ways to modernize the NAAQS process that could help States implement the new standards in a way that continue to protect air quality without restricting economic opportunities.

Again, I would like to thank the Chairman Griffith for the invitation to appear today, and I look forward to your questions.

[The prepared statement of Dr. Boylan follows:]

Testimony of James W. Boylan, Ph.D.

Chief, Air Protection Branch

Georgia Environmental Protection Division

U.S. House Committee on Energy & Commerce

Subcommittee on Environment

June 11, 2025

Good morning Chairman Griffith, Ranking Member Tonko, and members of the Subcommittee. My name is Jim Boylan and I am honored to testify before you today as the Chief of the Air Protection Branch at the Georgia Environmental Protection Division (EPD). The mission of Georgia EPD is to protect and restore Georgia's environment. We take the lead in ensuring clean air, water, and land. With our partners, we pursue a sustainable environment that provides a foundation for a vibrant economy and healthy communities.

Today, I am here to discuss the National Ambient Air Quality Standards (NAAQS) and its impact on state regulatory agencies and the regulated community. The establishment of the NAAQS along with technological advances from American industry has resulted in significant improvements in air quality. In Georgia, total emissions of air pollutants covered by the NAAQS dropped by 68% from 1990 to 2022, while at the same time gross domestic product increased by 437%, vehicle miles traveled increased by 66%, population increased by 69%, and energy consumption increased by 29%. This shows that economic growth and clean air are compatible.

The NAAQS program was developed by EPA and then handed over to States to implement requiring a lot of cooperation. My remarks will focus on two components of the NAAQS: first, I will discuss the setting of the NAAQS, then I will discuss the implementation of the NAAQS.

Setting of the NAAQS

The NAAQS setting process involves the development and review of multiple documents, including the Integrated Science Assessment (ISA) which includes relevant research studies, the Risk and Exposure Assessment (REA) which involves the technical analysis and modeling to evaluate the health impacts of various NAAQS, and the Policy Assessment (PA) which provides policy options and recommendations for the EPA Administrator to consider when setting the NAAQS. The time to develop and review each document can be substantial since some of these documents can be over a thousand pages long, with drafts going out for public comment and being subject to review by independent scientific advisors. Currently, the NAAQS review process covering the primary (health based) and secondary (welfare based) standard is required to be repeated for ozone, particulate matter, sulfur dioxide, nitrogen dioxide, carbon dioxide, and lead every 5 years. There simply is not enough time to squeeze in all this work within a 5-year cycle. As far as I am aware, EPA has only completed a NAAQS review within the statutory 5-year cycle **one time** since the establishment of the program in the Clean Air Act in 1970. Extending the timelines for NAAQS reviews from 5 to 10 years would give EPA the time needed to develop new standards without being rushed to complete the review. In addition, this change would bring about more stability and certainty for state air pollution control agencies and industry. The process to bring an area from nonattainment back into attainment is typically 5 or more years, depending on the amount of emissions that needs to be reduced. Many times, states are on the verge of showing attainment with the current NAAQS and a new, lower NAAQS is promulgated that starts the whole process over. Also, staff resources are stretched extremely thin across states. As NAAQS standards are lowered it requires more resources from states to implement those standards since the more obvious and less-costly emission controls have already

been implemented. As a result, the focus has moved from large industrial sources to smaller point and non-point sources. Extending the NAAQS review cycle from 5 to 10 years would allow more effective allocation of limited federal and state resources.

Protecting public health is the core responsibility of agencies like Georgia EPD and we will always prioritize that. However, there is likely room for some balance in the NAAQS review process. The proximity of new standards to background levels (levels in the absence of human-made emissions) can put many states in a situation where the new standard is not achievable for many impacted areas for reasons that are beyond a state's control, such as wildfires, international transport, and Saharan dust events. Therefore, the EPA Administrator should be allowed to consider likely attainability of the standard as proposed NAAQS levels approach background concentrations.

The Clean Air Act requires the EPA Administrator to appoint an independent scientific review committee composed of seven members, including at least one member of the National Academy of Sciences, one physician, and one person representing state air pollution control agencies to complete a review of the national primary and secondary ambient air quality standards and provide recommendations to the Administrator. For the past four decades, this "independent scientific review committee" role has been fulfilled by the Clean Air Scientific Advisory Committee (CASAC). The CASAC serves a critical role in the NAAQS setting process by providing independent expert feedback on various aspects of the NAAQS.

I had the pleasure to serve on the CASAC from 2017-2023 and was only one of two people selected to serve on the CASAC under both the Trump and Biden Administrations. I have seen first-hand the imbalance that is caused by stacking the CASAC with mostly academic researchers (see Attachment 1). While academic researchers have a good understanding of the

underlying science, they do not always have a practical understanding of how science is translated into the NAAQS to determine if a standard is adequate to protect public health and welfare. This requires extensive knowledge on how ambient monitoring data is transformed into design values and subsequently used to show whether a location meets or violates the standards. It requires a deep understanding of how pollution levels change over time and across different areas, and the resulting impact on exposure and risk. State air regulatory agencies possess specialized expertise, and the practical knowledge and skills needed for environmental management, such as ambient monitoring, data and statistical analysis, dispersion modeling, photochemical modeling, emissions inventory development, toxicology, and/ or risk assessment. CASAC members who understand the importance of EPA's Risk and Exposure Assessment (see Attachment 2), how design values are calculated, and what they represent will help provide more informed advice to EPA. For this reason, the CASAC should include at least three representatives from air pollution control agencies who are well versed in NAAQS implementation to balance the CASAC. Including more CASAC members with hands-on experience implementing the NAAQS at the state level would provide a real-world perspective on the difficulties of implementing and developing future NAAQS.

Implementation of the NAAQS

I'd now like to turn to the implementation of the NAAQS. Currently, new NAAQS standards go into effect once the rule becomes final; however, it may take the EPA months or even years to release implementation guidance. Implementation guidance needs to be issued concurrently with the issuance of any new NAAQS, so that states have an immediate understanding of the requirements and are able to come into attainment quickly.

Once a new NAAQS is promulgated, states are required to submit attainment/nonattainment designation recommendations to EPA one year after promulgation, and EPA is required to finalize designations two years after promulgation. As part of the designation process, states can submit exceptional event demonstrations to EPA for approval. Exceptional events are unusual or naturally occurring events that can affect air quality but are not reasonably controllable (e.g., volcanic activity, wildfires, dust events). When EPA concurs with an exceptional event, that data can be excluded from the comparison to the NAAQS. When enough days are flagged as exceptional events, an area can be designated as attainment rather than nonattainment. Prescribed fires help prevent even more significant air quality concerns by preventing catastrophic wildfires. The state of Georgia issues prescribed burn permits for approximately 1.5 million acres per year. This requires the Georgia Forestry Commission to invest substantial resources to ensure prescribed burning is done under conditions that minimize the impact of smoke and other air emissions on nearby communities. The application of prescribed fires in Georgia has been extremely successful as show by the historically low number of wildfires across the state. Even when wildfires inevitably occur, they are quickly contained with minimal impact to human health and property damage. However, the current provisions for exceptional events do not explicitly recognize prescribed fires as exceptional events. While EPA has tried to address this through guidance, it really needs to be addressed through legislation. As part of Georgia EPD's designation recommendations for the 2024 PM NAAQS, Georgia EPD submitted 129 exceptional event demonstrations for days in 2021, 2022, and 2023 in six different Metropolitan Statistical Areas. Of those 129 exceptional events, 89 were associated with prescribed fires. Section 319(b) of the Clean Air Act should include prescribed fires and other

actions to mitigate wildfire risk as eligible events for excluding air monitoring data for regulatory determinations.

There are multiple permitting challenges associated with implementing extremely low NAAQS in both attainment and nonattainment areas. For manufacturing or other projects that want to be built in an area meeting the NAAQS, they must comply with stringent prevention of significant deterioration (PSD) program requirements. These PSD requirements apply upon the effective date of the new NAAQS. For the most recently tightened PM NAAQS, the effective date was May 6, 2024. There is no grandfathering of PSD projects that were submitted before the effective date so any project permitting process that was already underway and not yet finalized, regardless of the resources invested, will need to update their PSD permitting based on the newly tightened standards. This is an inefficient and costly provision of the program for both industry and states. An even bigger issue is the lack of headroom (difference between the standard and the background levels), making it very difficult to approve permits especially when more than one new source of emissions or facility is modeled based on their cumulative impact.

For areas found to be in violation of the NAAQS, they will be required to implement the most restrictive New Source Review (NSR) permitting process not only for new but also for existing sources. Existing sources will be required to install Reasonably Available Control Measures (RACM) and Reasonably Available Control Technology (RACT). New sources will be required to install Lowest Achievable Emissions Rate (LAER) controls and purchase expensive emission offsets for the precursor pollutants. In many nonattainment areas, industrial sources have dramatically reduced their emissions, yet are still subject to the enhanced controls that come with nonattainment. This will add resource burdens on states as a significant number

of states will be required, for the first time, to implement nonattainment permitting programs and emissions offset programs.

For many years, I was the Georgia EPD liaison to the Georgia Department of Economic Development and met with many companies looking to locate in Georgia. I quickly learned that companies in Georgia and other states avoided nonattainment areas and attainment areas with little headroom for PSD modeling. In 2012, the annual $PM_{2.5}$ standard was dropped from 15 micrograms per cubic meter to 12 micrograms per cubic meter. Typically, a new PSD project will need 1.0 to 3.0 micrograms per cubic meter of headroom. However, the headroom was less than 0.5 micrograms per cubic meter in a number of locations, which makes it nearly impossible to pass PSD modeling for $PM_{2.5}$ when trying to build new manufacturing facilities in those locations. For example, we had no new large permitting projects in the four nonattainment areas until those areas were redesignated back to attainment. Also, the number of PSD applications were significantly reduced in the attainment areas due to the lack of headroom between the background values and the standard.

In 2024, the annual $PM_{2.5}$ standard was dropped from 12 micrograms per cubic meter to 9 micrograms per cubic meter. Again, many locations in Georgia are currently over the standard or lack enough headroom for new projects. This is especially a concern with the large number of economic development projects looking to locate in Georgia. Specifically, data centers are one of the fastest growing industries in the state. These data centers need large amounts of energy to operate. In May, a data center developer announced plans to build one of Georgia's largest data centers, a 20-building campus costing $16 billion that will require more power than one of Plant

Vogtle's nuclear reactors (1.2-gigawatt)[1]. Power generation to support all the new data centers will pose multiple permitting challenges under the current NAAQS process.

In closing, I would like to emphasize that Georgia EPD takes its responsibility of ensuring clean air in our state very seriously. In fact, the air in Georgia is the cleanest it has ever been since we started monitoring air quality decades ago. The Clean Air Act has provided great benefits in Georgia and across the country. There may be ways to modernize the NAAQS process that could help states implement the new standard in a way that continues to protect air quality without restricting economic opportunities. Again, I would like to thank Chairman Griffith for the invitation to appear before the subcommittee this morning, and I look forward to your questions.

[1] https://www.ajc.com/news/business/t5-data-centers-plans-campus-spanning-20-buildings-in-georgia/P7OWRM6AQJCFTAFM5NHRNZPWMA/

Perspective:

The Need for a Balanced CASAC in the NAAQS Review Process

by James W. Boylan

As a member of CASAC that reviewed the 2020 particulate matter and ozone standards and the recent reconsiderations, the author provides his perspective about the importance of a balanced CASAC in the NAAQS review process.

Section 109(d)(1) of the U.S. Clean Air Act (CAA) requires the U.S. Environmental Protection Agency (EPA) Administrator to every five years "…complete a thorough review of the criteria published under Section 108 and the national ambient air quality standards…and shall make such revisions in such criteria and standards and promulgate such new standards as may be appropriate…." Section 109(d)(2)(A) requires the EPA Administrator to "appoint an independent scientific review committee composed of seven members, including at least one member of the National Academy of Sciences, one physician, and one person representing state air pollution control agencies." Section 109(d)(2)(B) provides that this committee "shall complete a review of the criteria… and the national primary and secondary ambient air quality standards…and shall recommend to the Administrator any new…standards and revisions of existing criteria and standards as may be appropriate…." For the past four decades, this "independent scientific review committee" role has been fulfilled by the Clean Air Scientific Advisory Committee (CASAC).

It is critically important to keep a balanced set of perspectives on the chartered CASAC and the panel members. The charge to the CASAC is to review the science, review the risk and exposure assessment, and review EPA's policy recommendations. While university researchers will typically be most capable of reviewing the science, it is equally important to include members with expertise in risk and exposure assessments and policy assessments. The CAA requires at least one person representing state air pollution control agencies on the CASAC because it is crucial to have someone who has hands-on experience and practical knowledge in the implementation of the National Ambient Air Quality Standards (NAAQS). This allows for a real-world implementation perspective rather than a purely academic research perspective.

The topics for discussion in the CASAC deliberations are complex and there is usually not a clear right or wrong answer since the CAA does not require the standard to be set at zero risk. Rather, multiple lines of evidence and associated uncertainties must be evaluated and weighed to come to a determination of what is an acceptable risk when determining if the current standards are adequate or need to be lowered. Based on the 2020 particulate matter (PM) and ozone reviews and the recent PM and ozone reconsideration reviews, it is clear from the large variation in recommendations between reviews that the previous and recent CASAC both lacked a proper balance of scientific perspectives. Since the chartered CASAC and panel members are selected by the EPA Administrator, a political appointee, the "majority" and "minority" opinions can be directly determined by those selections.

Unbalanced CASAC

In the 2020 PM review, the chartered CASAC was appointed by a Republican EPA Administrator and consisted of one independent consultant, four state/local air pollution control agency representatives, one research professor, and a

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representative from the U.S. Army Corps of Engineers. The U.S. Army Corps of Engineers representative resigned during the deliberations, leaving only six CASAC members to complete the review. In the 2019 CASAC recommendations,[1] five CASAC members supported retaining the current annual $PM_{2.5}$ NAAQS, while only one member supported lowering it; and all six CASAC members unanimously supported retaining the current daily $PM_{2.5}$ NAAQS.

In the most recent PM reconsideration review, the chartered CASAC was appointed by a Democratic EPA Administrator and consisted of one state air pollution control agency representative and six research professors. In the 2022 CASAC recommendations,[2] all seven CASAC members unanimously supported lowering the current annual $PM_{2.5}$ NAAQS (however, they could not agree on the range); six CASAC members supported lowering the current daily $PM_{2.5}$ NAAQS, while only one member supported retaining it. The "Introduction" to the 2021 PM Policy Assessment (PA)[3] states: "Much of the information in this draft PA is drawn directly from information included in the 2019 ISA [Integrated Science Assessment] and the 2020 PA", indicating that the science and policy assessment did not change significantly between these two reviews. However, the "majority" and "minority" opinions drastically changed simply based on who was appointed to the CASAC.

In the 2020 ozone review, the chartered CASAC was appointed by a Republican EPA Administrator and consisted of one independent consultant, four state/local air pollution control agency representatives, and two research professors. In the 2020 CASAC recommendations,[4] six CASAC members supported retaining the current primary ozone NAAQS, while only one member supported lowering it; and all seven CASAC members unanimously supported retaining the current secondary ozone NAAQS. In the most recent ozone reconsideration review, the chartered CASAC was appointed by a Democratic EPA Administrator and consisted of one state air pollution control agency representative and six research professors. In the 2023 CASAC recommendations,[5] six CASAC members supported lowering the current primary ozone NAAQS, while only one member supported retaining it; and six CASAC members supported lowering the current secondary ozone NAAQS, while only one member supported retaining it. The "Introduction" to the 2023 Ozone Policy Assessment[6] states: "this document draws heavily on information presented in the 2020 PA," indicating that the science and policy assessment did not change significantly between these two reviews. However, the "majority" and "minority" opinions drastically changed simply based on who was appointed to the CASAC.

In all these reviews, the CASAC members consisted of highly creditable nationally recognized scientists, but the CASAC was clearly unbalanced in perspectives. While academic researchers have a good understanding of the underlying science, they do not always have a good understanding of how science is translated into the NAAQS to determine if a standard is adequate or not. This requires extensive knowledge on how design values are calculated and used to show attainment, a deep understanding of the resulting temporal and spatial concentration distributions, and the resulting impact on exposure and risk. However, many CASAC members don't understand how design values are calculated or what they represent. In fact, during the 2023 ozone deliberations, one chartered CASAC member asked EPA "What is a design value"? For this reason, the CASAC should include a balance of people representing state air pollution control agencies and academic researchers.

Minority Opinions

Since the CAA requires seven uniquely qualified members on the CASAC, each member's recommendation (consisting of 14.3% of the total) is critically important to the EPA Administrator. Therefore, the recommendation of the minority should not be dismissed, especially when the minority recommendations are sound and directly supported by evidence presented in the Integrated Science Assessment and Policy Assessment documents. However, that is exactly what happened during the recent ozone review. The chair of the CASAC decided that the minority opinion was not worthy of being included in the letter to the Administrator or the main response to charge questions. Instead, the minority opinion was relegated to an obscure appendix at the back of the document. This new policy was contrary to the precedent that was set during the 2020 ozone review, the 2020 PM review, and the 2022 PM reconsideration, which allowed both minority and majority opinions in the main documents. As a result, the recommendations by the one person representing state air pollution control agencies (a specific perspective required by the CAA to be included in the recommendations to the EPA Administrator) were buried in an obscure appendix so that the majority opinion consisting of academic researchers would appear to be undisputed.

Outcome of EPA's PM and Ozone Reconsiderations

During the CASAC's 2022 PM policy assessment review,[2] the CASAC majority recommended that the annual $PM_{2.5}$ NAAQS be lowered to 8–10 micrograms per cubic meter ($\mu g/m^3$), while the CASAC minority recommended that the annual $PM_{2.5}$ NAAQS be lowered to 10–11 $\mu g/m^3$. Also, the CASAC majority recommended that the daily $PM_{2.5}$ NAAQS be lowered to 25–30 $\mu g/m^3$, while the CASAC minority recommended that the daily $PM_{2.5}$ NAAQS be retained at 35 $\mu g/m^3$. In the recently published 2024 PM NAAQS final rule,[7] EPA agreed with the CASAC majority that the annual $PM_{2.5}$ NAAQS should be lowered to 9.0 $\mu g/m^3$. However, EPA agreed with the CASAC minority that

the daily $PM_{2.5}$ NAAQS should be retained at 35 µg/m³.

During the CASAC's 2023 ozone policy assessment review,[5] the CASAC majority recommended that the primary ozone NAAQS be lowered to 55–60 part per billion (ppb), while the CASAC minority recommended that the primary ozone NAAQS be retained at 70 ppb since the risk and exposure assessment presented in the Policy Assessment6 did not support lowering the primary standard. Also, the CASAC majority recommended that the secondary ozone NAAQS be lowered to a W126 index value of 7–9 parts per million-hours (ppm-hrs), while the CASAC minority recommended that the secondary ozone NAAQS be retained at 70 ppb since there was no evidence presented in the Policy Assessment[6] to support lowering the secondary standard.

On August 18, 2023, Administrator Regan wrote a response letter[8] to the CASAC Chair, which stated, "In particular, I have taken note of the CASAC advice that the draft policy assessment is missing important analyses and information and that the draft policy assessment '… does not provide sufficient information to adequately consider alternative form and level combinations.'" Administrator Regan's letter concludes by stating, "…I have decided that the best path forward is to initiate a new statutory review of the ozone NAAQS and the underlying air quality criteria and to wrap the EPA's reconsideration process of the 2020 ozone NAAQS decision into that review." In essence, the recent ozone reconsideration was dropped because there was not enough evidence to support lowering the ozone NAAQS. This was consistent with the CASAC minority recommendation.

Conclusion

A CASAC that lacks a proper balance of scientific perspectives can result in science being driven by politics. EPA should make a conscious decision to appoint CASAC members and panel members with a balance of perspectives from a variety of backgrounds. This includes adding more people representing state air pollution control agencies. In fact, the U.S. House of Representatives recently proposed a bill,[9] titled "Air Quality Standards Implementation Act of 2024," which would amend Section 109(d)(2)(A) of the CAA by striking "one person representing state air pollution control agencies" and inserting "three persons representing state air pollution control agencies". While it is admirable to try to achieve unanimous consensus, it is even more important to include a fair balance of scientific viewpoints so that the Administrator can make an unbiased and informed decision on the adequacy of the standards. In addition, the CASAC's new policy for removing dissenting opinions from the letter to the EPA Administrator and placing them in an obscure appendix is wholly inappropriate and only adds to the imbalance that already exists. The first action taken by the next CASAC chair should be to reverse this prejudicial policy. **em**

James W. Boylan, Ph.D., is Chief of the Air Protection Branch at the Georgia Department of Natural Resources Environmental Protection Division. He has been implementing U.S. Clean Air Act requirements for more than 30 years and is a national expert in regulatory air quality modeling and NAAQS risk assessments. He was appointed to the chartered Clean Air Scientific Advisory Committee (CASAC) in 2017 and reappointed in 2020. He was actively involved in the 2020 review of the particulate matter and ozone standards, as well as the recent particulate matter and ozone reconsiderations. Email: **james.boylan@dnr.ga.gov**.

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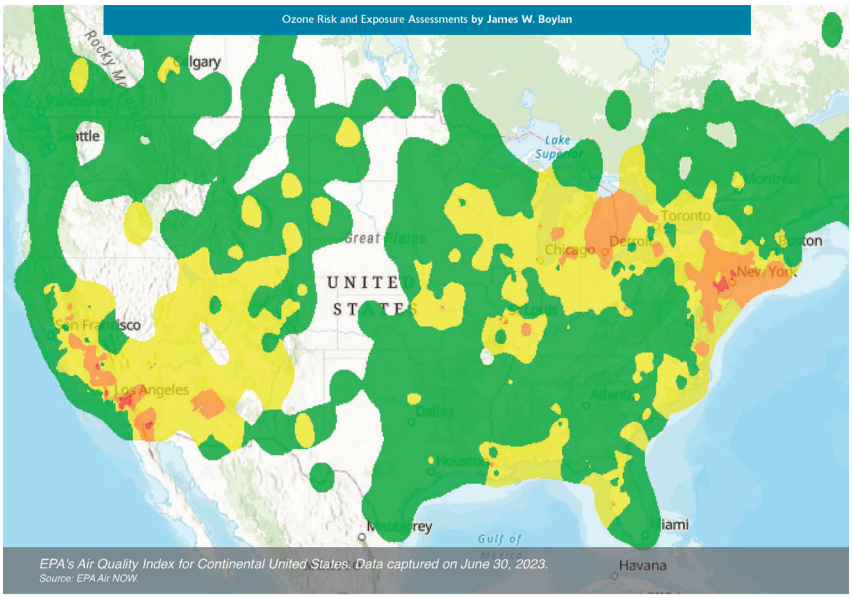

The Importance of Risk and Exposure Assessments in Setting the Ozone NAAQS

by James W. Boylan

As a member of CASAC that reviewed the 2020 ozone standard and the recent reconsideration, the author provides his perspective about the importance of developing a formal risk and exposure assessment for the committee's review of the ozone NAAQS.

Section 109(b)(1) of the U.S. Clean Air Act defines primary National Ambient Air Quality Standards (NAAQS) as ones that "the attainment and maintenance of which in the judgment of the Administrator, based on such criteria and allowing an adequate margin of safety, are requisite to protect the public health." NAAQS are not required to be set at a zero-risk level or background levels. Therefore, the U.S. Environmental Protection Agency (EPA) Administrator must set the standard at a level that provides protection at an acceptable risk level. Determining an acceptable risk is a policy decision that is subjective (i.e., what is an acceptable risk to one person may not be an acceptable risk to another person). To determine whether the current or alternative standards provide protection at an acceptable risk level, the risk associated with the current and alternative standards must be determined considering the indicator, averaging time, level, and form of the standard. The best way to estimate risk is to conduct a risk and exposure assessment (REA).

Every NAAQS has four elements: indicator, averaging time, level, and form. For the primary ozone standard, the current indicator is ozone, the current averaging time is 8 hours, the current level is 0.070 ppm, and the current form is the annual fourth-highest daily maximum 8-hr concentration, averaged over three years. The ozone design value (DV) for an area is the highest site-specific annual fourth-highest daily maximum 8-hr concentration, averaged over three years, from the monitors located in the Core Based Statistical Area (CBSA). Design values are updated annually as new data becomes available. A violation of the NAAQS occurs when the DV for an area is greater than the standard.

The results of the scientific evidence (e.g., epidemiologic studies and human exposure studies) that provide the foundation for the NAAQS can't be used directly to set the standards because this evidence has not been evaluated in the proper context of the standard to determine the actual exposure and risk associated with the current and alternative standards. All elements of the standard (indicator, averaging time, level, and form), the way attainment with the standard is determined (i.e., highest site-specific design value in the CBSA), temporal and spatial distributions of people and ambient air ozone concentrations throughout an area, the variation of ambient air-related ozone concentrations within various microenvironments in which people conduct their daily activities (indoor, outdoor, and in-vehicle), and the effects of activities involving different levels of exertion on breathing rate (or ventilation rate) for the exposed individuals should be considered when determining the appropriate level for the standard.

The most common way to do this analysis is to perform a REA to determine the spatial and temporal concentration distributions that individuals are exposed to in a study area and the resulting risk at the current and alternative standards. A REA estimates health effects based on modeled or monitored air quality changes, population distributions, concentration-response (C-R) functions (from epidemiologic studies or human exposure studies), and other factors that impact expose and risk. Typically, REA results are presented as the number of adverse health effects (e.g., number of additional asthma attacks), number of hospital visits, number of morbidities, and/or number of mortalities.

Setting Standards

It is important to note that setting standards based on the highest site-specific design value in an area can result in spatial and temporal concentration distributions across the area that are well below the level of the standard. For example, 2018–2020 ozone data from the Atlanta–Sandy Springs–Alpharetta CBSA (Atlanta CBSA) in Georgia was examined to look at the distribution of ozone measurements in the Atlanta CBSA. The 2018–2020 ozone data was examined because that three-year period resulted in a design value of exactly 70 ppb for the Atlanta CBSA. The Atlanta CBSA has nine monitors that measure ozone during Georgia's ozone season (March 1–October 31).

Figure 1 contains the 2018–2020 ozone site-specific design values for each of the nine monitors in the Atlanta CBSA (Athens is outside the Atlanta CBSA), along with interpolated design values using an inverse distance weighted method. The 8-hr daily maximum ozone concentration for each monitor and each day was compiled into a single data set

In Next Month's Issue…

CMAQ 25th Anniversary

June 2023 marked the 25th anniversary of the U.S. Environmental Protection Agency's (EPA) Community Multiscale Air Quality (CMAQ). CMAQ is EPA's premier modeling system for studying air pollution from global to local scales, and it has thousands of users across six continents for air quality management, forecasting, and research. The January issue looks back on elements of CMAQ's storied history from various perspectives and offers thoughts on the new directions that drive continued development.

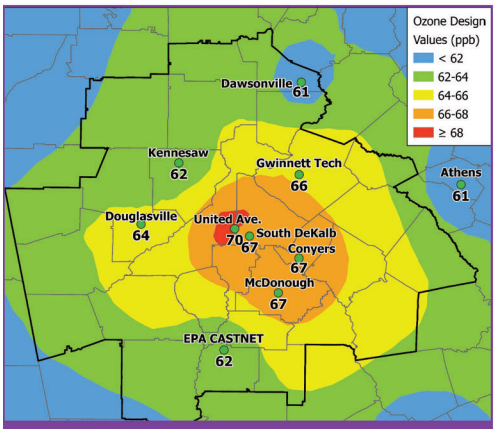

Figure 1. 2018–2020 ozone site-specific design values (ppb) in the Atlanta CBSA (outlined in the thick black solid line), along with interpolated design values using an inverse distance weighted method.

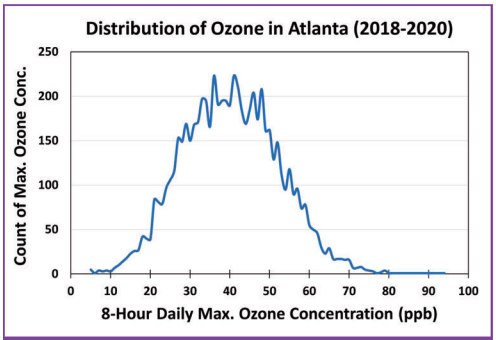

Figure 2. Distribution of 2018–2020 8-hr daily maximum ozone concentrations for the nine monitors in the Atlanta CBSA.

consisting of 6,615 (9 monitors x 245 days/year x 3 years) 8-hr daily maximum ozone concentrations. The resulting distribution of ozone was graphed in Figure 2 by counting the number of values at each 8-hour daily maximum ozone concentration.

Based on this data:

- 99.3% of the 8-hr daily maximum ozone concentrations were at or below 70 ppb;
- 98.0% of the 8-hr daily maximum ozone concentrations were at or below 65 ppb;
- 95.3% of the 8-hr daily maximum ozone concentrations were at or below 60 ppb; and
- 89.3% of the 8-hr daily maximum ozone concentrations were at or below 55 ppb.

The overall average 8-hr daily maximum ozone concentration was 40.3 ppb. This demonstrates that the current standard of 70 ppb will provide protection at concentrations well below the level of the standard.

Risk and Exposure Assessments

In EPA's most recent ozone policy assessment,[1] the REA was based on human exposure studies of 6.6-hr exposures with quasi-continuous exercise with concentrations ranging from 60 to 80 ppb. At a standard of 70 ppb, the REA estimates that: (a) more than 99.9% of children with asthma are protected from a single exposure during moderate to heavy exercise at/above 80 ppb and 100% are protected from multiple exposures; (b) more than 99% of children with asthma are protected from a single such exposure at/above 70 ppb and more than 99.9% are protected from experiencing multiple exposures; and (c) more than 95% of children with asthma are protected from experiencing multiple such exposures at/above 60 ppb. EPA staff concluded that the available evidence does not call into question the adequacy of protection provided by the existing standard and the current primary ozone standard should be retained without revision.

Unfortunately, a risk and exposure assessment using concentration–response (C–R) functions from epidemiological studies was not conducted by EPA; therefore, the policy assessment is limited in its ability to use epidemiological studies to provide insights regarding health outcomes that might be expected under air quality conditions that meet the current and alternative standards. It should be noted that a REA based on epidemiological studies was included in the 2014 ozone policy assessment.[2] In the associated REA,[3] alternative ozone standards tended to reduce concentration levels at the upper ends of the ambient distributions and increase concentration levels at the lower ends of the ambient distributions. Seasonal means of daily concentrations show minimal changes upon air quality adjustment, reflecting the seasonal balance between daily decreases and increases in ambient concentrations. The resulting compression in distributions of ambient ozone concentrations is evident in all of the urban case study areas that were evaluated. In fact, there were some locations where lower ozone standards resulted in an increase in the number of ozone related hospital admissions and deaths. Therefore, it is not appropriate to skip the REA and simply assume that lower ozone standards will result in significant health benefits.

CASAC Letter

In CASAC's letter to EPA Administrator Regan regarding the 2023 draft ozone policy assessment,[4] the majority of the committee recommended lowering the level of the ozone standard to 55–60 ppb. However, this recommendation was not supported by a REA. The one dissenting CASAC member wrote,[4] "Recommending a standard without the support of a REA is inappropriate and should be viewed with extreme skepticism."

On August 18, 2023, Administrator Regan wrote a response letter[5] to the CASAC Chair, which stated:

"In particular, I have taken note of the CASAC advice that the draft policy assessment is missing important analyses and information and that the draft policy assessment '… does not provide sufficient information to adequately consider alternative form and level combinations.' CASAC also advised '…that the EPA incorporate the information available from the epidemiological studies in the risk assessment.'"

This statement clearly demonstrates the importance of risk and exposure assessments in setting the ozone NAAQS. Administrator Regan's letter concludes by stating, "…I have decided that the best path forward is to initiate a new statutory review of the ozone NAAQS and the underlying air quality criteria and to wrap the EPA's reconsideration process of the 2020 ozone NAAQS decision into that review." The next ozone review should include REAs based on both the epidemiological studies and the human exposure studies. Since epidemiological studies and human exposure studies both have different strengths and weaknesses, this would allow the EPA staff and CASAC to make policy recommendations to the EPA Administrator based on all the available evidence. em

James W. Boylan, Ph.D., is Chief of the Air Protection Branch at the Georgia Department of Natural Resources Environmental Protection Division. He has been implementing U.S. Clean Air Act requirements for more than 30 years and is a national expert in regulatory air quality modeling. He was appointed to the Chartered Clean Air Scientific Advisory Committee (CASAC) in 2017 and reappointed in 2020. He was actively involved in the 2020 review of the particulate matter and ozone standards, as well as the recent particulate matter and ozone reconsiderations. Email: **James.Boylan@dnr.ga.gov**.

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Mr. GRIFFITH. Thank you very much. The gentleman yields. I now recognize Mr. Walke for his 5-minute opening statement.

STATEMENT OF JOHN D. WALKE

Mr. WALKE. Thank you, Chairman Griffith and Ranking Member Tonko, for the opportunity to testify today. My name is John Walke with NRDC.

All Americans want safe, clean air. All Members of Congress want the same. That consensus should unite us, not divide us.

Today's draft bills unfortunately are divisive because they end Americans' legal right to safe, clean air that the Clean Air Act has guaranteed for 55 years.

Today's law ensures safe air quality based on medical science, how much air pollution is unsafe for people to breathe, not based on company profits or economics.

The draft CLEAR Act before you first would eliminate the obligation to establish health standards for air pollution like smog and soot based solely on medical science and what is required to protect public health with an adequate margin of safety for vulnerable groups like children and the elderly, without any consideration of profits for regulated companies or economic impacts. Then the bill for the first time would authorize EPA to consider company profits and costs to set unprotective standards, sanction continuing health hazards, and even premature death from PM 2.5.

Both steps would overturn a unanimous Supreme Court decision by the late Justice Scalia upholding Americans' right to safe air based on science, not unsafe air tainted by economics.

After that 2001 Supreme Court decision, a lawyer for the Chamber of Commerce said, "Now we will see if we can get the magic word 'cost' put into the statute." That is what this legislation is about, that long-time corporate campaign. Mr. Tonko is right, the sky has never fallen.

Americans are not asking Congress to take away their 55-year-old legal right to safe, clean air. Americans are not asking the Government to lie to us about whether the air is safe to breathe. I suspect the Make America Healthy Again movement would be shocked to learn that is being considered for the third time in 8 years before this subcommittee.

Take the example of the health standard for ozone pollution, last updated in 2015 to 70—seven zero—parts per billion. A strong majority of EPA science advisors found in 2023 that 70 was badly unsafe and needed strengthening to guarantee safe air for Americans.

Suppose EPA, in the future, then considers a range of standards as high as 70, the draft Clear Air Act—the draft CLEAR Act would let EPA for the first time refuse to strengthen the ozone health standard to a safe level by invoking economic impacts, or attainability, of the standard and keep the unsafe level of 70, denying Americans safe, clean air and allowing preventable asthma attacks, forcing parents to take their children to the ER and causing hospital admissions for respiratory distress.

The implementation issues addressed in both bills, and in much of the other testimony, are complex, but the proposed solutions are the wrong ones. They would let air pollution increase by legal definition, roll back safeguards under current law, increase the burden

on existing businesses and facilities to reduce their pollution to accommodate the new pollution increases, force Americans to breathe unsafe air longer, then change the law to declare unsafe air pollution levels acceptable.

Over 156 Americans live in areas that suffer unsafe levels of smog pollution or fine particle pollution. More than 88,000 Americans die prematurely every year due to just fine particle pollution—over twice as many deaths as auto accidents cause.

Over 100 leading public health and environmental organizations have urged Congress not to pass nearly identical earlier versions of these harmful bills, including the American Heart Association, the American Lung Association, the National Medical Association, and the National Public Health Association. Like me, they object to authorizing more air pollution, weakening the Clean Air Act in numerous ways, taking away Americans' 55-year-old right to safe, clean air, worsening Americans' health, and overturning multiple court decisions, all without doing one thing, unfortunately, to improve air quality, reduce air pollution, or make Americans healthier.

Similar to these health experts, I urge Members to decline to advance both bills. Thank you.

[The prepared statement of Mr. Walke follows:]

TESTIMONY OF JOHN D. WALKE

FEDERAL CLEAN AIR DIRECTOR

NATURAL RESOURCES DEFENSE COUNCIL

LEGISLATIVE HEARING ON

H.R. ___, THE CLEAN AIR AND ECONOMIC ADVANCEMENT REFORM ACT &

H.R. ___, THE CLEAN AIR AND BUILDING INFRASTRUCTURE IMPROVEMENT ACT

BEFORE THE SUBCOMMITTEE ON ENVIRONMENT

COMMITTEE ON ENERGY AND COMMERCE

U.S. HOUSE OF REPRESENTATIVES

June 11, 2025

Thank you, Chairman Griffith and Ranking Member Tonko for the opportunity to testify today. My name is John Walke, and I am the Federal Clean Air Director and a senior attorney for the Natural Resources Defense Council (NRDC). NRDC is a nonprofit organization of scientists, lawyers, and environmental specialists dedicated to protecting public health and the environment. Founded in 1970, NRDC has more than 3 million members and online activists nationwide, served from offices in New York, Washington, Santa Monica, San Francisco, and Chicago.

I have worked at NRDC since 2000. Before that I was a Clean Air Act attorney in the Office of General Counsel for the U.S. Environmental Protection Agency ("EPA"). Prior to that I was an attorney in private practice where I represented corporations, industry trade associations and individuals. Having worked on air pollution issues for the entirety of my career, I believe today's two bills are harmful to U.S. air quality and Americans' health and welfare. Both bills would weaken the Clean Air Act and would fail to improve air quality or public health. Both are unjustified. The Subcommittee and Committee should not advance the "Clean Air and Economic Advancement Reform Act" (CLEAR Act) or the "Clean Air and Building Infrastructure Improvement Act."

I. INTRODUCTION

All Americans want safe, clean air. All members of Congress want the same. That consensus should unite us, not divide us. Today's draft bills, unfortunately, are divisive because they end Americans' legal right to safe, clean air that the Clean Air Act has guaranteed for 55 years. How has the law guaranteed that? By ensuring safe air quality is based on medical science, not money or markets.

And how do the draft bills eliminate the legal right to safe, clean air? First, one of the bills would eliminate the obligation to establish health standards for air pollutants like smog and soot based solely on medical science and what is required to protect public health with an adequate margin of safety for vulnerable groups like children and the elderly—*without* any consideration of profits for regulated companies or economic impacts from implementation. In doing so, the draft bill would overrule a unanimous Supreme Court decision by the late Justice Antonin Scalia that requires clean air health standards to be based solely on medical science and health considerations, not compliance costs.[1]

And second, the same bill for the first time would authorize EPA to consider company profits and compliance costs to set the least protective, least safe standards under consideration. Again, overruling Justice Scalia's unanimous Supreme Court decision in *American Trucking v. Whitman.*[2] The consequences are predictable: Americans would be denied safe, clean air that the Clean Air Act has guaranteed for 55 years based solely on what medical science considers unsafe for people to breathe, including the most vulnerable Americans. For the first time, Congress would authorize EPA to expose American communities to unhealthy levels of smog and soot and sulfur dioxide and even toxic lead pollution, by prioritizing corporate compliance costs, profits, energy, or other non-safety factors.

This is not hard for Americans to get: safe air should be defined based on medical science, not money or markets.

The draft bills also weaken the Clean Air Act and worsen clean air safeguards in other respects that will make Americans sicker, and keep the United States' air more polluted, for longer. This is also the consensus of the leading public health and air quality experts in the country, who in 2017 and 2024 criticized and opposed earlier drafts of both bills with near-identical elements to today's draft bills.[3]

I submit the following testimony as a clean air expert and attorney for 32 years in the spirit of identifying elements that weaken the law and worsen clean air protections. I do so guided by the certainty that all Americans deserve the right to safe, clean air. And the certainty that all Americans want lawmakers to continue to guarantee that right, along with strong, effective, timely safeguards against harmful air pollution.

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[1] *See Whitman v. Am. Trucking Ass'ns*, 531 U.S. 457, 471 (2001) (noting that the text of § 109(b) "unambiguously bars cost considerations from the NAAQS-setting process, and thus ends the matter for us as well as the EPA").

[2] *Id.*

[3] *See, e.g.*, Open Letter to U.S. Senators Opposing the Ozone Standards Implementation Act of 2017 (May 22, 2017) *available at* https://www.naccho.org/uploads/downloadable-resources/Health-Groups-Oppose-S.-263-the-Smoggy-Skies-Act.pdf.

II. BACKGROUND

A. The National Ambient Air Quality Standards-Setting Process

National ambient air quality standards (NAAQS) establishing medical science-based health and welfare standards for air pollution have been the foundation of the Clean Air Act—the very heart of this historically successful law—since 1970: "The Clean Air Act Amendments of 1970 first introduced the requirement to establish enforceable NAAQS. … The 1970 amendments "carrie[d] the promise that ambient air in all parts of the country shall have no adverse effects upon any American's health." 116 Cong. Rec. 42,329, 42,381 (Dec. 18, 1970) (remarks of Senator Muskie)."[4]

Primary NAAQS, often called the health standards, "must be set to be 'requisite to protect the public health' with 'an adequate margin of safety.' 42 U.S.C. § 7409(b)(1). To ensure that the NAAQS keep pace with scientific understanding and continue to provide the necessary protection, EPA must review and revise as appropriate the underlying air quality criteria and the NAAQS themselves at least every five years. *Id.* § 7409(d)(1). Any primary NAAQS that EPA promulgates under these provisions must be adequate to protect public health and provide an adequate margin of safety, in order to prevent not only any known or anticipated adverse health effects from polluted air, but also those that are scientifically uncertain or that research has not yet uncovered. 88 Fed. Reg. at 5562."[5]

"Further, the statute makes clear that there are significant limitations on the discretion granted to EPA in setting the NAAQS. In exercising its judgment, EPA must err on the side of protecting public health and may not consider cost or feasibility in connection with establishing the level of the NAAQS and its other elements (*e.g.*, indicator, the form of the standard, and averaging time). The D.C. Circuit Court summed up EPA's mandate succinctly: Based on these comprehensive [air quality] criteria and taking account of the 'preventative' and 'precautionary' nature of the [Clean Air A]ct, the Administrator must then decide what margin of safety will protect the public health from the pollutant's adverse effects—not just known adverse effects, but those of scientific uncertainty or that 'research has not yet uncovered.' Then, and without reference to cost or technological feasibility, the Administrator must promulgate national standards that limit emissions sufficiently to establish that margin of safety. *Am. Lung Ass'n v. EPA*, 134 F.3d 388, 389 (D.C. Cir. 1998) (citations omitted); *see also Whitman v. Am. Trucking Ass'ns*, 531 U.S. 457, 464-71 (2001)." *Id.* "Because EPA must set the NAAQS to provide an adequate margin of safety for all, the NAAQS must be set at a level that protects against adverse effects in vulnerable subpopulations, such as children, the elderly, pregnant women, the socially disadvantaged, and

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[4] Comments by environmental nongovernmental organizations on the Reconsideration of the National Ambient Air Quality Standards for Particulate Matter, 88 Fed. Reg. 5558 *et seq.* (Jan. 27, 2023), EPA-HQ-OAR-2015-0072, https://www.nrdc.org/sites/default/files/2023-03/epa-pm-naaqs-proposal-coalition-comments-20230328.pdf ("NGO Particulate Matter Comments").

[5] *Id.* at 5.

people with heart and lung disease and other pre-existing health conditions. The D.C. Circuit has repeatedly found that if a certain level of a pollutant 'adversely affects the health of these sensitive individuals, EPA must strengthen the entire national standard.' *American Lung*, 134 F.3d at 389 (citation omitted); *accord Coal. of Battery Recyclers Ass'n v. EPA*, 604 F.3d 613, 618 (D.C. Cir. 2010); *Am. Farm Bureau Fed'n v. EPA*, 559 F.3d 512, 524 (D.C. Cir. 2009). Thus, EPA must build into the NAAQS an adequate margin of safety for these sensitive subpopulations. *See Am. Farm Bureau Fed'n*, 559 F.3d at 525-26."[6] The drafters of the 1970 Clean Air Act Amendments made clear that the millions of people subject to respiratory ailments are entitled to the protection of the NAAQS: "Included among those persons whose health should be protected by the ambient standard are particularly sensitive citizens such as bronchial asthmatics and emphysematics who in the normal course of daily activity are exposed to the ambient environment." S. Rep. No. 91-1196, at 10 (1970). As the D.C. Circuit has explained:

> In its effort to reduce air pollution, Congress defined public health broadly. NAAQS must protect not only average healthy individuals, but also "sensitive citizens"—children, for example, or people with asthma, emphysema, or other conditions rendering them particularly vulnerable to air pollution.

Am. Lung Ass'n, 134 F.3d at 390 (citations omitted); *Nat'l Envtl. Dev. Ass'n's Clean Air Project v. EPA*, 684 F.3d 803, 810 (D.C. Cir. 2012). NAAQS must 'be set at a level at which there is "an absence of adverse effect" on these sensitive individuals.' *Lead Indus. Ass'n v. EPA*, 647 F.2d 1130, 1153 (D.C. Cir. 1980)."[7]

Following establishment of protective standards based on health considerations and medical science alone, the Clean Air Act and state laws work together to meet or "attain" those standards in the most effective and cost-effective ways—taking into account economic and technological feasibility across statutory programs.[8]

B. Clean Air Progress Coupled with Strong Economic Growth

The Clean Air Act has been a remarkably successful and cost-effective law *because* its foundation is clean air standards based on health considerations and medical science alone. From 1980 to 2023, the "criteria air pollutants" that the Clean Air Act regulates have dropped by impressive amounts: 75% reductions in smog-forming nitrogen oxides, 58% reductions in smog-forming volatile organic compounds (VOCs), and 62% reductions in direct fine particle pollution ($PM_{2.5}$).[9]

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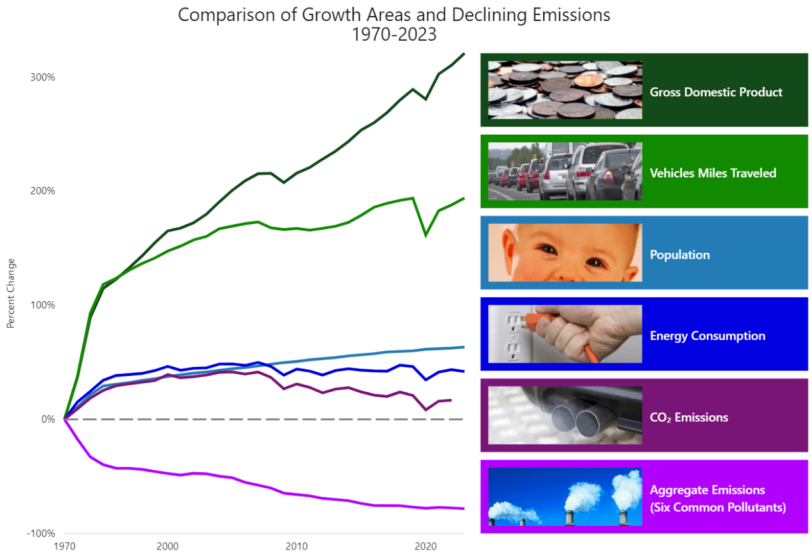
[6] *Id.* at 6–7.
[7] *Id.*
[8] *See, e.g.*, 42 U.S.C. §§ 7410(a)(2), 7470-7479, 7501-7515.
[9] *See, e.g.*, https://www.epa.gov/air-trends/air-quality-national-summary.

Percent Change in Emissions

Pollutant	1980 vs 2023	1990 vs 2023	2000 vs 2023	2010 vs 2023
Carbon Monoxide	-76	-71	-59	-28
Lead*	-99	-88	-78	-36
Nitrogen Oxides (NO_x)	-75	-73	-69	-55
Volatile Organic Compounds (VOC)	-58	-46	-26	-5
Direct PM_{10}	-62	-27	-24	-14
Direct $PM_{2.5}$	---	-28	-35	-11
Sulfur Dioxide	-94	-93	-90	-76

That success in reducing harmful emissions and improving Americans' health has occurred during periods of impressive U.S. economic growth and steady population growth:



(Charts taken from https://www.epa.gov/air-trends/air-quality-national-summary)

In fact, the Clean Air Act, in section 812, requires EPA to undertake regular studies and report on the impacts of the Act. In the first twenty years of the Clean Air Act, EPA estimated that the

benefits of the Act exceeded its costs by approximately 42:1.[10] From 1990-2010, EPA undertook a prospective study, and, after an "extensive peer review during which independent panels of distinguished economists, scientists, and public health experts provided in-depth assessment and advice throughout the study's design, implementation, and documentation", the Agency concluded that:

> in the year 2010 the Amendments of 1990 will prevent 23,000 Americans from dying prematurely and avert over 1,700,000 incidences of asthma attacks and aggravation of chronic asthma. In addition, in 2010, they will prevent 67,000 incidences of chronic and acute bronchitis, 91,000 occurrences of shortness of breath, 4,100,000 lost workdays, and 31,000,000 days in which Americans would have had to restrict activity due to air pollution related illness. Plus, 22,000 respiratory-related hospital admissions would be averted, as well as 42,000 cardiovascular (heart and blood) hospital admissions, and 4,800 emergency room visits for asthma.[11]

The most recent prospective study, done in 2011, followed up on this work and examined the period from 2010 to 2020. EPA found that their "central benefits estimate exceeds costs by a factor of more than 30 to one, and the high benefits estimate exceeds costs by 90 times. Even the low benefits estimate exceeds costs by about three to one."[12] Looking forward to 2020, the report found that "[in] 2020, the Clean Air Act Amendments will prevent over 230,000 early deaths. Most of the economic benefits (about 85 percent) are attributable to reductions in premature mortality associated with reductions in ambient particulate matter."

Economists studying the Clean Air Act and its costs and benefits have reached another revealing conclusion that has proven true time and time again: "One defining feature of the research on the costs of the Clean Air Act is that predicted costs of the regulations are often higher than the costs that actually occur."[13]

There is still much work to be done, however. Over 156.1 million Americans live in areas that suffer unsafe levels of ozone (smog) pollution or fine particle ($PM_{2.5}$) pollution or both.[14] Over

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[10] U.S. EPA, "The Benefits and Costs of the Clean Air Act, 1970 to 1990," prepared for U.S. Congress, October 1997 *available at* https://www.epa.gov/sites/default/files/2015-06/documents/contsetc.pdf.
[11] U.S. EPA, "The Benefits and Costs of the Clean Air Act Amendments of 1990," prepared for U.S. Congress, November 1999, EPA-410-R-99-001*available at* https://www.epa.gov/sites/default/files/2015-07/documents/fullrept.pdf.
[12] U.S. EPA, "Benefits and Costs of the Clean Air Act 1990-2020, the Second Prospective Study," March 2011, *available at* https://www.epa.gov/clean-air-act-overview/benefits-and-costs-clean-air-act-1990-2020-second-prospective-study.
[13] Janet Currie & Reed Walker, What Do Economists Have to Say about the Clean Air Act 50 Years after the Establishment of the Environmental Protection Agency?, 33 J. of Econ. Perspectives 3, 19 (2019), https://pubs.aeaweb.org/doi/pdfplus/10.1257/jep.33.4.3.
[14] American Lung Association, *State of the Air 2025 Report* (2025), at 12, *available at* https://www.lung.org/research/sota/key-findings.

88,000 Americans die prematurely every year due to just fine particle pollution, according to the renowned Global Burden of Disease report.[15] Hazardous air pollution (regulated outside the NAAQS program) causes cancer, brain damage, birth defects, infertility, heart diseases and a wide range of other chronic conditions including premature death.[16]

C. H.R. 806 – Ozone Standards Implementation Act of 2017

This Subcommittee held a hearing in March 2017 on a bill called the "Ozone Standards Implementation Act of 2017," whose key elements were substantially similar to features of today's two draft bills.[17]

The nation's leading public health organizations[18] criticized and opposed the Senate version of the 2017 bill for worsening safeguards against ozone (smog) pollution, weakening the Clean Air Act, and eliminating Americans' right to safe, clean air based on medical science alone. The same critiques applied to the counterpart House version, H.R. 806:

- "The Smoggy Skies Act also reaches far beyond implementation of the current ozone standards. It permanently weakens the Clean Air Act and future air pollution health standards for all criteria pollutants. Specifically, the Smoggy Skies Act weakens implementation and enforcement of all lifesaving air pollution health standards, including those for carbon monoxide, lead, nitrogen dioxide, ozone, particulate matter, and sulfur dioxide. It would also permanently undermine the Clean Air Act as a public health law."
- "The Smoggy Skies Act would lengthen the review period of the air pollution health standards from once every five years to once every ten years for all criteria pollutants. As the science continues to evolve, the public deserves that their protections be based on the

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[15] Cohen AJ, *et al.*, Estimates and 25-year trends of the global burden of disease attributable to ambient air pollution: an analysis of data from the Global Burden of Diseases Study 2015 (May 13, 2017).

[16] *See generally Notice of Source Category Listings for the Specific Pollutants (Section 112(c)(6))*, ENVTL. PROT. AGENCY, https://www3.epa.gov/airtoxics/112c6/112c6fac.html (hereinafter "EPA Listing Notice") ("Hazardous air pollutants are also known as air toxics; these are pollutants which are known or suspected to cause cancer or other serious health effects such as birth defects or reproductive effects."); 42 U.S.C. § 7412.

[17] *See* H.R. 806, "Ozone Standards Implementation Act of 2017," https://democrats-energycommerce.house.gov/sites/evo-subsites/democrats-energycommerce.house.gov/files/BILLS-115-HR-806ih.pdf; *see generally* https://democrats-energycommerce.house.gov/committee-activity/hearings/hearing-on-hr-806-ozone-standards-implementation-act-of-2017.

[18] The groups were the Allergy & Asthma Network, Alliance of Nurses for Healthy Environments, American Lung Association, American Public Health Association, American Thoracic Society, Asthma and Allergy Foundation of America, Center for Climate Change and Health, Children's Environmental Health Network, Health Care Without Harm, National Association of County & City Health Officials, National Environmental Health Association, National Medical Association, Physicians for Social Responsibility, and Trust for America's Health. *See* May 22, 2017 Letter opposing S.263, the "Ozone Standards Implementation Act of 2017," from Allergy & Asthma Network *et al.* to U.S. Senators, https://www.naccho.org/uploads/downloadable-resources/Health-Groups-Oppose-S.-263-the-Smoggy-Skies-Act.pdf.

> most up-to-date science, certainly not a schedule that is twice as long as they currently have under the law."

At the 2017 hearing before this subcommittee addressing H.R. 806, a witness from the California Air Resources Board summarized well why the backward steps in today's draft legislation are both unnecessary and harmful:

> [The legislation] would inappropriately insert control costs into EPA's science-based process for setting air quality standards. How healthful the air is to breathe is not determined by the cost to clean it up. It is a question of science and what air pollution does to the human body.
>
> H.R. 806 would mean more people would breathe dirty air longer. It would unwisely mandate that we ignore the air pollution impacts of weather conditions made worse by man-made climate change.
>
> It would push off deadlines, erode requirements for incremental progress, and undermine the Clean Air Act's requirements for comprehensive air quality strategies.[19]

Clean air is fully compatible with economic growth, as the CARB witness testified:

> At the same time we have been cleaning the air, California's economy has continued to grow and prosper. Last year, California grew to be the world's sixth largest economy. In 2016, California nonfarm employment increased by 2.6 percent, compared to 1.7 percent nationwide. In 2009, the California clean energy industry generated $27 billion dollars and employed 123,000 people. By 2020, we expect it will grow to over $140 billion with 345,000 employed.

And despite the state's continuing air pollution challenges, and fully compatible with its continuing progress delivering safer air to its citizens, California's economy is now the *fourth* largest in the world.[20]

The White House Office of Management and Budget has confirmed that "[p]rojections of the health impact of reducing particulate matter exposure are often a major part of the total

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[19] Ozone Standards Implementation Act of 2017: Hearings on H.R. 806 Before the Subcomm. on Env't of the H.R. Comm. on H.R. Comm. on Energy and Com., 115th Cong. (2017) (statement of Kurt Kaperos).,https://democrats-energycommerce.house.gov/sites/evo-subsites/democrats-energycommerce.house.gov/files/Testimony-Karperos-ENV-Hrg-HR-806-Ozone-Stds-2017-03-22.pdf.

[20] *See, e.g.,* Governor Gavin Newsome, *California is Now the 5th Largest Economy in the World* (Apr 23, 2025) https://www.gov.ca.gov/2025/04/23/california-is-now-the-4th-largest-economy-in-the-world/#:~:text=According%20to%20the%20IMF's%202024,to%20surpass%20California%20by%202026

monetized benefits of regulations summarized in OMB's annual reports."[21] That is for the total monetized benefits of *all* regulations issued under *all* U.S. regulatory laws across *all* federal agencies and departments, making the Clean Air Act more than arguably the most cost-effective and one of the most successful U.S. regulatory laws. The medical science-based, health-based air quality standards are the very foundation of that success.

D. H.R. 7650 – the Air Quality Standards Implementation Act of 2024

In 2024, an even bigger coalition of public health groups led by the Allergy and Asthma Network reiterated their objections to the substantially similar bill, H.R. 7650, the "Air Quality Standards Implementation Act of 2024."[22] Forty-eight of the nation's leading health and environmental organizations, including NRDC, also opposed H.R. 7650 for the same reasons.[23] The latter organizations noted that the "legislation would weaken the Clean Air Act radically without a single improvement, rob Americans of their 54-year right to healthy air based on medical science, and delay life-saving health standards already years overdue." *Id.*

Disappointingly, industry letters supporting H.R. 7650 did not so much as acknowledge that the bill eliminated Americans' right to safe, clean air based on medical science alone, or acknowledge that the bill overturned the leading Supreme Court decision and multiple D.C.

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[21] Office of Management and Budget, "2018, 2019,and 2020 Report to Congress on the Benefits and Costs of Federal Regulations and Agency Compliance with the Unfunded Mandates Reform Act," at 6, Appendix C, *available at* https://bidenwhitehouse.archives.gov/wpcontent/uploads/2021/01/2018_2019_2020-OMB-Cost-Benefit-Report.pdf.

[22] *See* Letter from health stakeholders to Chair Carter and Ranking Member Tonko, March 5, 2024, https://www.congress.gov/118/meeting/house/116939/documents/HMKP-118-IF18-20240306-SD072.pdf (joined by Allergy & Asthma Network, Alliance of Nurses for Healthy Environments, American Heart Association, American Lung Association, American Public Health Association, American Thoracic Society, Asthma and Allergy Foundation of America, Asthma & Allergy Foundation of America – Michigan Chapter, Children's Environmental Health Network, Climate Psychiatry Alliance, Health Care Without Harm, Medical Students for a Sustainable Future, MI Air MI Health, Michigan Clinicians for Climate Action, Montana Health Professionals for a Healthy Climate, National Association of Pediatric Nurse Practitioners, National Environmental Health Association, National Hispanic Health Foundation, National Hispanic Medical Association, National League for Nursing Oncology, Advocates United for Climate and Health – International, Physicians for Social Responsibility, Physicians for Social Responsibility Maine, Public Health Institute, Respiratory Health Association, San Francisco Bay Physicians for Social Responsibility, Texas Physicians for Social Responsibility, Virginia Clinicians for Climate Action, and Washington Physicians for Social Responsibility).

[23] *See* Letter from environmental organizations to members of the U.S. House of Representatives, March 5, https://www.congress.gov/118/meeting/house/116939/documents/HMKP-118-IF18-20240306-SD072.pdf.

Circuit decisions. Accordingly, these industry letters did not defend or even address the bill's harmful outcomes, avoiding its dangerous implications altogether.[24]

III. The Clean Air and Economic Advancement Reform Act (Draft)

The draft "Clean Air and Economic Advancement Reform Act" (draft CLEAR Act) retains the central objectionable elements of H.R. 806 and H.R. 7650, so the criticisms directed at those bills remain true for the draft CLEAR Act:

> [T]he legislation would abolish the Clean Air Act's exclusive consideration of health and medical science to determine how much air pollution is unsafe for people to breathe. For the first time, Congress would authorize EPA to expose American communities to unhealthy levels of smog and soot and sulfur dioxide and even toxic lead pollution, by prioritizing corporate compliance costs, profits, technological feasibility or other non-safety factors. The medically-based health standards that the Clean Air Act has been founded on for [55] years instead could become a political football weakened by polluters' predicted compliance costs—costs that often are overestimated.[25]

The draft CLEAR Act would impose these harmful results by drastically weakening the 55-year-old Clean Air Act and taking away Americans' legal right to safe, clean air, in addition to the following weakening amendments to the Clean Air Act:

- Sec. 2(a): authorizes delay in the NAAQS review-and-revise-as-appropriate process from five-year intervals to 10-year intervals (*see infra*, sec. III.A.);
- Sec. 2(b): specifies that a "range of levels of air quality for an air pollutant are requisite to protect public health with an adequate margin of safety" (*see infra*, sec. III.B.);
- Sec. 2(b): authorizes the EPA Administrator to "consider likely attainability of the standard"—rather than just what is "requisite to protect public health with an adequate margin of safety"—when establishing and revising the primary (health) NAAQS (*see infra*, sec. III.B.);
- Sec. 2(c): delays state air pollution control measures to meet national health standards by one year, and delays federal air pollution cleanup and control measures to meet national health standards by one additional year, forcing Americans to breathe unsafe air pollution for longer than the Clean Air Act allows today;
- Sec. 2(d): eliminates additional air pollution control measures (called "contingency measures") for areas suffering the worst smog levels in the U.S. (extreme nonattainment

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[24] *See, e.g.*, Letter from the National Association of Manufacturers to Chair Carter and Ranking Member Tonko, March 6, 2024, https://www.congress.gov/118/meeting/house/116939/documents/HMKP-118-IF18-20240306-SD072.pdf.

[25] *See* Letter from environmental organizations to members of the U.S. House of Representatives, March 5, https://www.congress.gov/118/meeting/house/116939/documents/HMKP-118-IF18-20240306-SD072.pdf.

areas), when those areas fail to make reasonable further progress toward meeting the ozone health standard;

- Sec. 2(e): weakens additional air pollution control measures required in areas suffering unsafe ozone (smog) levels, by adding a new factor ("economic feasibility") to diminish the effectiveness of the control measures;
- Sec. 2(f): weakens additional air pollution control measures required in areas suffering unsafe particulate matter levels, by adding two new factors ("technological achievability" and "economic feasibility") to diminish the effectiveness of the control measures;
- Sec. 3(a): expands the exemptions from clean air health standards for "exceptional events" that the current Clean Air Act specifically says are *not* exceptional events, such as "a meteorological event involving high temperatures or lack of precipitation";
- Sec. 3(a): amends the Clean Air Act unnecessarily, by redundantly allowing so-called "prescribed burns" to be "exceptional events" exempt from clean air health standards, when EPA always has defined prescribed fires to be exceptional events (and no litigant has challenged that sensible decision);
- Sec. 3(a): adopts a new, unjustified exemption for States that fail to submit clean air cleanup plans, or fail to submit plans that meet Clean Air Act requirements, concerning areas with unsafe air quality—*if* 'the State would have avoided such deficiency or would have attained the health standard,' but for 'emissions from outside the nonattainment area.' Unaccountably, this would allow a state to avoid sanctions or fees for failing to meet clean air health standards or Clean Air Act requirements due to 'emissions from outside the nonattainment area' that originate in the *same state*, either from an attainment area or another nonattainment area, when those emissions are subject to control by the same state or a local air quality district in that state. There is no justification for this treatment. By the same token, there is no justification for industrial sources in severe and extreme nonattainment areas to avoid section 185 fees (42 U.S.C. § 7511d) due to emissions that originate in the *same state*, either from an attainment area or another nonattainment area, when those emissions are subject to control by the same state or a local air quality district in that state. These unjustified changes will weaken Clean Air Act measures designed to speed the delivery of safe, clean air for Americans;
- Sec. 4(a): reduces the number of members of EPA's Clean Air Scientific Advisory Committee who are medical and health experts, in favor of geographic representation among state officials with greater expertise implementing air quality standards than setting them. Nothing in any prior hearing on these bills demonstrated that CASAC or the NAAQS standard-setting process is improved by replacing medical experts with state officials from "geographically diverse areas" of the country; and
- Sec. 4(b): eliminates Americans' right to safe, clean air; lets EPA set unsafe standards, downgraded due to corporate profits, compliance costs and economics; then lets EPA lie to Americans that air quality is safe (*see infra*, sec. III.B.).

A. Timing of NAAQS Reviews

As noted above, "[t]o ensure that the NAAQS keep pace with scientific understanding and continue to provide the necessary protection, EPA must review and revise as appropriate the underlying air quality criteria and the NAAQS themselves at least every five years. 42 U.S.C. § 7409(d)(1)." NGO Particulate Matter Comments, at 5. Let us be clear what the reality has been, however, in sharp contrast to this five-year statutory review-and-revise-as-appropriate timeline.

Take the example of the ozone NAAQS reviews. EPA last updated the ozone health standard in 2015, when it was strengthened from a level of 75 parts per billion (ppb) in the air to 70 ppb. 80 Fed. Reg. 65,292 *et seq.* (Oct. 26, 2015). Following an abbreviated and inadequate review, the Trump EPA refused to strengthen the ozone health and welfare standards in a last-minute decision on December 23, 2020, despite clear evidence that both failed to protect Americans' health, ecosystems and the environment. 85 Fed. Reg. 87,256 *et seq.* (Dec. 31, 2020).

And now, EPA under the current administration has quietly announced the agency will not complete its next review of the ozone health and welfare standards until *2030*.[26] This 10-year period following the 2020 standards review defies the law's five-year deadline. The delay also flies in the face of a strong consensus among EPA's clean air science advisors in 2023 that: (1) the 2015 ozone health standard of 70 ppb is insufficiently protective of air quality, and should be lowered to between 55 and 60 ppb to protect public health with an adequate margin of safety; and (2) the ozone welfare standard should be strengthened to improve protections for agricultural crops and trees.[27]

Just as justice delayed is justice denied, safe air delayed is safe air denied. Americans have been forced to continue to breathe unsafe ozone levels lower than 70 ppb, and been denied safe, cleaner air under the law's current five-year review cycles for two basic reasons: (1) delays, a cumbersome process, and changes in administrations have turned that five-year cycle into closer to an eight- to ten-year cycle in the real world; and (2) political refusals by various administrations to follow the medical science and law have resulted in the continuation of unprotective standards and forced Americans to breathe unsafe air for as long as *15 years and longer*. The current ozone health and welfare standards reveal both of these forces at play. And

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[26] U.S. EPA, Integrated Review Plan for the National Ambient Air Quality Standards for Ozone and Related Photochemical Oxidants Volume 1: Background Document, (cont.) *available at* https://www.epa.gov/system/files/documents/2024-12/o3_irp-vol-1_final_1.pdf, at 2-2 (Table 2-1).

[27] Letter from CASAC to Administrator Regan, Re: CASAC Review of the EPA's Policy Assessment (PA) for the Reconsideration of the Ozone National Ambient Air Quality Standards (External Review Draft Version 2) EPA-CASAC-23-002, June 9, 2023, pgs. 2-3 *available at* https://casac.epa.gov/ords/sab/r/sab_apex/casac/activity?p18_id=2636&clear=18&session=5978292504897#doc ("All of the CASAC members,[] except for one, conclude that the scientific evidence indicates that the level of the current primary standard is not sufficiently protective of public health… All of the CASAC members, [] except one, recommend a revised NAAQS level in the range of 55 to 60 ppb to be protective of public health.")

bear in mind, these are the realities with a *five-year* statutory review deadline. By doubling the five-year statutory deadline to ten years, Sec. 2(a) of the draft CLEAR Act would only make matters worse, ensuring delays beyond ten years, because an insufficiently funded and under-staffed EPA also has a consistent history of missing ten-year statutory deadlines.[28]

B. The Draft CLEAR Act Eliminates Americans' Right to Safe, Clean Air; Lets EPA Set Unsafe Standards, Downgraded Due to Profits & Economics; then Lets EPA Lie to Americans That Air Quality is Safe.

The Clean Air Act always has directed EPA to set a primary health standard (either their establishment or revision) for each criteria air pollutant based on what is "requisite to protect the public health," "allowing an adequate margin of safety." 42 U.S.C. § 7409(b)(1). Under that longstanding legal standard, it is not permissible, or even coherent, for there to be a *range* of standards in which each and all are "requisite to protect the public health," "allowing an adequate margin of safety." The statutory terms "requisite" and "adequate margin of safety" foreclose standards less protective than the statutory test, *even if* an EPA Administrator or CASAC is considering a range. By declaring that a "range of levels of air quality for an air pollutant" *could be* "requisite to protect public health with an adequate margin of safety," Sec. 2(b) of the draft CLEAR Act (and its earlier iterations) weakens the existing Clean Air Act. The draft CLEAR Act departs from the Clean Air Act's insistence on there being *one* health standard that *defines* safe, clean air under the law and for all Americans, based on the weight of the scientific record before EPA and CASAC—not based on the convenience or practice of presenting the Administrator with a range of standards to consider. It is simply not the case that past 'ranges' of standards considered by CASAC and former Administrators satisfied the singular statutory standard based on the scientific records for those rulemakings.

Next, Sec. 2(b) of the draft CLEAR Act weakens the Clean Air Act and worsens health protections by authorizing the Administrator to "consider likely attainability of the standard" when establishing or revising primary health standards. It is important to understand that the Clean Air Act reserves the concept of "attainment" ("attainability of the standard") for the *implementation* of health-based standards, not the *establishment or revision* of health-based standards. Indeed, Section 2 of the draft CLEAR Act is titled (misleadingly) "Facilitating State Implementation of National Ambient Air Quality Standards," but the actual legislative text in Sec. 2(b) amends the Clean Air Act's *standard-setting* process in 42 U.S.C. § 7409(b). The actual

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[28] In the 1990 Clean Air Act amendments, Congress directed EPA to adopt hazardous air pollutant standards for all relevant industrial source categories "not later than 10 years after November 15, 1990." 42 U.S.C. § 7412(e)(1)(E). In very many cases, EPA still had not promulgated such standards 10 or even 15 years following the law's statutory deadline of November 15, 2000. *See generally*, National Emissions Standards for Hazardous Air Pollutants, https://www.epa.gov/stationary-sources-air-pollution/national-emission-standards-hazardous-air-pollutants-neshap-8. EPA also has missed a similar eight-year deadline in section 112 of the Act far more often than it has met that deadline, sometimes by 10 years longer than the eight-year deadline. *See* 42 U.S.C. § 7412(d)(6).

text makes clear just how the draft CLEAR Act weakens the Clean Air Act dramatically by authorizing factors unrelated to health, safety and medical science to be considered when setting primary health standards. The draft legislation reinforces this conclusion by importing an implementation concept (attainability) into the process to set and revise standards, thereby allowing 'attainability' to be a legal justification to *retreat* from safe standards.

In this respect, the draft CLEAR Act would eliminate Americans' legal right to safe, clean air based solely on health considerations and medical science just as much as H.R. 806 and H.R. 7650 would have done in previous Congresses. The concept of 'attainability' is of course unrelated to how much air pollution is unsafe for people to breathe. The concept thereby allows EPA to consider a non-safety factor and set unsafe, unprotective air quality standards. Indeed, attainment strategies during NAAQS implementation consider economic, energy and technological factors, and future EPA Administrators could simply choose to consider these currently unlawful factors when "consider[ing] likely attainability of the standards." The draft CLEAR Act slips in non-safety, economic considerations through the backdoor under the guise of 'attainability.'

This is not a novel concept when it comes to avoiding the Clean Air Act's exclusive health foundation. In fact, when corporations filed lawsuits challenging the 2015 EPA ozone health standards, they argued unsuccessfully that EPA should have been required to consider 'attainability' of the standards rather than considering health factors and medical science alone.[29] The D.C. Circuit Court of Appeals unanimously rejected the industry arguments:

> Accepting Petitioners' [attainability] argument would mean that, if the level of background ozone in any part of the country exceeds the level of ozone that is "requisite to protect the public health," EPA must set the NAAQS at the *higher, unhealthy level*. The statutory text leaves no room for this hidden caveat: "[W]hen Congress directs an agency to consider only certain factors in reaching an administrative decision, the agency is not free to trespass beyond the bounds of its statutory authority by taking other factors into account." *Lead Indus.*, 647 F.2d at 1150.

Murray Energy Corp., 936 F.3d at 622-23 (emphasis added). The court then went on to identify three different ways that Congress had addressed attainability concerns in the Clean Air Act's *implementation* programs, not the law's *health standard-setting* program. *Id.* at 623. The court even quoted an earlier D.C. Circuit ruling dating to 1981 holding that "'[a]ttainability and technological feasibility are not relevant considerations in the promulgation of [NAAQS].'" *Id.*, at 623-24 (citing *American Petroleum Institute v. Costle*, 665 F.2d 1176, 1185 (D.C. Cir. 1981)). Attainability, technological feasibility and economic factors should remain irrelevant considerations when deciding how much air pollution is unsafe for Americans to breathe and

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[29] *See Murray Energy Corp. v. Env't Prot. Agency*, 936 F.3d 597, 622–23 (D.C. Cir. 2019).

truthfully guaranteeing the promise of safe air to all Americans, based solely on what medical science says is unsafe.

The most egregious attacks on the exclusive health foundation of the Clean Air Act, Americans' legal right to safe, clean air, and truth-telling to Americans about air quality are reflected in Sec. 4(b) of the draft CLEAR Act. There, the draft legislation would drastically weaken the Clean Air Act by authorizing the EPA Administrator and CASAC to consider *during* the process to establish or revise any air quality standard "any adverse public health, welfare, social, economic or energy effects" that may result from *implementation* of such standard. As stated previously, the legislation thus would:

> abolish the Clean Air Act's exclusive consideration of health and medical science to determine how much air pollution is unsafe for people to breathe. For the first time, Congress would authorize EPA to expose American communities to unhealthy levels of smog and soot and sulfur dioxide and even toxic lead pollution, by prioritizing corporate compliance costs, profits, technological feasibility or other non-safety factors. The medically-based health standards that the Clean Air Act has been founded on for [55] years instead could become a political football weakened by polluters' predicted compliance costs—costs that often are overestimated.[30]

The draft CLEAR Act accordingly would overturn the Supreme Court's unanimous decision in *American Trucking v. Whitman*,[31] which recognized and guaranteed Americans' legal right to safe, clean air based exclusively on health considerations and medical science. Furthermore, the draft CLEAR Act simultaneously would overturn the D.C. Circuit decisions in *Murray Energy*,[32] *American Petroleum Institute*,[33] *Am. Lung Ass'n v. EPA*,[34] and several others.

During the American Trucking litigation, industry challengers argued that language in section 109(d)(2)(c)(iv) of the Clean Air Act already required EPA to consider "adverse public health, welfare, social, economic, or energy effects which may result from various strategies for attainment and maintenance" of NAAQS. They argued that:[35]

> § 109(d)(2)(C)(iv) requires the Clean Air Scientific Advisory Committee to "advise the Administrator of any adverse public health, welfare, social, economic, or energy effects which may result from various strategies for attainment and maintenance" of NAAQS. 42 U. S. C. § 7409(d)(2)(C)(iv). Respondents argue that these provisions make no sense

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[30] *See* Letter from environmental organizations to members of the U.S. House of Representatives, March 5, https://www.congress.gov/118/meeting/house/116939/documents/HMKP-118-IF18-20240306-SD072.pdf.
[31] *Whitman v. Am. Trucking Ass'ns*, 531 U.S. 457, 121 S.Ct. 903 (2001).
[32] *Murray Energy Corp. v. Env't Prot. Agency*, 936 F.3d 597, 622–23 (D.C. Cir. 2019).
[33] *American Petroleum Institute v. Costle*, 665 F.2d 1176 (D.C. Cir. 1981).
[34] 134 F.3d 388, 389 (D.C. Cir. 1998).

> unless costs are to be considered in setting the NAAQS. That is not so. These provisions enable the Administrator to assist the States in carrying out their statutory role as primary *implementers* of the NAAQS. [36]

The justices unanimously rejected these industry arguments and all others.

But another key passage in the opinion makes clear exactly *how* the draft CLEAR Act is attempting to weaken the Clean Air Act and eliminate Americans' right to safe, clean air. The Court continued by summarizing another argument by the industry challengers: "Respondents contend that this [CASAC] advice is required to be included in the NAAQS rulemaking record-which, if true, would suggest that it was relevant to the standard-setting process."[37] That's what the draft CLEAR Act does: it makes the CASAC advice regarding "any adverse public health, welfare, social, economic, or energy effects which may result from various strategies for attainment and maintenance" of NAAQS part of the NAAQS rulemaking record when EPA establishes or revises standards. With that one subtle, damaging, and indefensible change, Sec. 4(b) of the draft legislation would authorize the EPA Administrator to consider any adverse economic, energy or social impacts arising from implementation of air quality standards, *during* the process of setting those air quality standards.

Future EPA Administrators could set unsafe health standards—ones not requisite to protect public health with an adequate margin of safety; allow Americans to continue dying from dangerous air pollution at concentrations that medical science shows to be deadly; fail to protect vulnerable populations like children, the elderly and persons suffering from asthma; then *lie* to Americans that national clean air health standards guarantee safe, clean air for all Americans. The draft legislation would give EPA Administrators the ability to retreat from the safer, science-based air quality standards that met the exclusive, health-based legal test in today's law, after considering (allegedly) adverse economic or energy impacts from *implementing* such standards.

Rather than abolishing Americans' right to safe, clean air, weakening a landmark, 55 year-old public health law so dramatically, and overturning decades of federal caselaw in the process, Congress should decline to pass the CLEAR Act or earlier, harmful versions of the legislation.

IV. The Clean Air and Building Infrastructure Improvement Act (Draft)

The draft Clean Air and Building Infrastructure Improvement Act weakens the Clean Air Act by denying Americans the health benefits of safer air quality standards guaranteed by today's law. Sections 2 and 3 of the draft bill would let new or expanded industrial facilities in communities across the country fail to comply with safer health standards after they have been adopted, if EPA fails to publish final regulations and guidance for implementing the new standard. Section 3 weakens the existing Clean Air Act by simply declaring that the newly strengthened $PM_{2.5}$ health

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[36] *American Trucking*, 531 U.S. at 470.
[37] *Id.*

standard shall not apply to preconstruction permits in two situations where those standards *do apply* to better protect Americans under today's stronger law and regulations. There are several problems with these approaches.

First, the approaches weaken the current Clean Air Act, which does not deny Americans the benefit of safer clean air standards in such situations. The law never has allowed new or expanded facilities to emit at levels that would *violate* safer health standards after those standards have been adopted. Second, addressing section 2 of the draft legislation, EPA never has 'concurrently published final regulations and guidance for implementing' revised air quality standards, to my knowledge, which means one of two things as a practical matter: (1) either EPA will fail to concurrently publish such final regulations or guidance, in which case communities surrounding new and expanding industrial facilities will be unjustifiably harmed by the weaker approach in the draft bill; or (2) EPA will delay adoption of safer air quality standards in order to finalize implementation regulations and guidance, concurrently, in which case *all* Americans will be harmed by the delay. Neither outcome is justified, and neither outcome is permissible under longstanding, existing law.

Finally, there is no historic showing, and no factual record in the two earlier hearings, demonstrating that 'concurrent final regulations and guidance' are even needed to issue preconstruction permits. The preconstruction permitting program has been in the Clean Air Act since 1977 and the implementing regulations in effect since 1981. Its requirements are well-known and do not change with the adoption of new air quality standards, nor do those requirements depend upon new final regulations or guidance for implementing the NAAQS. Rather, Sec. 2 of the bill diminishes concerns over unsafe air quality for the public, and prioritizes occasional industry complaints about meeting strengthened air quality standards before final preconstruction permits are issued. Such complaints do not justify weakening the Clean Air Act and allowing unsafe air pollution levels to be added to American communities.

Sections 2 and 3 weaken the Clean Air Act in other ways. A new Clean Air Act section 109(e)(3)(B) in section 2 of the draft bill, and section 3(b) of the bill, state that "[n]othing in this subsection shall be construed to eliminate the obligation of a preconstruction permit applicant to install best available control technology and lowest achievable emission rate technology, as applicable." But that is a badly incomplete list of the statutory and regulatory obligations that preconstruction permits must contain. Such permits in nonattainment areas also must contain, for example, sufficient offsetting emissions reductions, in varying ratios depending upon the severity of unsafe air quality, in addition to controls satisfying lowest achievable emission rate technology.[38] In attainment areas, preconstruction permits must be accompanied by an air quality impacts analysis in addition to satisfying best available control technology.[39] By indicating

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[38] 42 U.S.C. § 7503(a)(1).
[39] 42 U.S.C. § 7475(a)(2).

instead that preconstruction permits need not continue to meet *all* preconstruction permit requirements under the Act and implementing regulations, the draft bill would further weaken the Clean Air Act and worsen air quality and health safeguards. Congress should decline to adopt the draft Clean Air and Building Infrastructure Improvement Act or earlier, harmful versions of the legislation.

Mr. GRIFFITH. Thank the gentleman. I now recognize Mr. Noe for his 5-minute opening.

STATEMENT OF PAUL NOE

Mr. NOE. Thank you. Chairs Griffith and Guthrie, Ranking Members Tonko and Pallone, and distinguished members of the committee, I am here today on behalf of the American Forest & Paper Association and the American Wood Council. AF&PA represents manufacturers of sustainable paper products, and AWC represents manufacturers of structural wood products.

Our forest products industry directly employs over 925,000 people, and we are a top-10 manufacturing sector employer in 44 States. The industry supports over 1.6 million more jobs across its suppliers and in local communities, many in rural America.

These hard-working people are sourcing from sustainably managed forests and making products right here in America representing nearly 5 percent of U.S. manufacturing GDP.

In February of last year, I testified before this committee that our air permit program is broken. While it remains true, I am heartened to sit before you today knowing critical steps are being taken to modernize the underlying permit program to be achievable, and I want to express our gratitude.

We strongly support Congressman Rick Allen and Buddy Carter in their efforts to address the impacts of air permitting issues on U.S. manufacturing. The proposed legislation you are considering today would greatly improve the NAAQS program.

We would especially like to applaud that the legislation requires a workable implementation plan when the standards are issued so they can be successfully achieved, establishes a 10-year review cycle to increase certainty and reduce wasteful litigation, and reforms the exceptional events program to facilitate prescribed burns to prevent wildfires, by far the largest source of particulate matter in our country.

We look forward to continuing to work with you on this legislation, and we have included some additional suggestions in our written testimony.

Only through commonsense solutions will we truly enable the onshoring of American innovators, and we thank Congressmen Allen and Carter for their leadership, and all the Members helping us.

We are also grateful that in March EPA Administrator Zeldin recognized the specific problems manufacturers are facing when he announced the Agency will quickly revisit the unworkable 2024 PM NAAQS standard.

Under previous PM standards, our industry could make substantial capital investments to modernize, but the new PM standard is a perfect storm for permit gridlock, making it much harder to modernize our facilities and continue reducing emissions.

The previous EPA rushed to tighten the PM NAAQS close to background levels using dubious legal authority, ahead of schedule, and without a workable implementation plan. Notably, the 2024 rule doesn't address at all 84 percent of particulate matter emissions, which come from nonindustrial sources such as wildfires and

road dust. Pulp, paper, and wood products mills account for less than 1 percent of particulate matter, to put that in perspective.

Blindly ratcheting down on already controlled sources has diminishing returns, and collapsing the permit program by making it unachievable blocks progress towards more efficient and cleaner facilities.

The previous administration unfortunately ignored each of these concerns—concerns raised not only by industry, but our partners in labor and many elected officials. If we don't change this trajectory now, American manufacturing competitiveness and jobs in many of your districts are at stake.

We stand ready to work with you, with Administrator Zeldin, and the Trump administration to strengthen and support this effort.

Thank you, again, for the opportunity to be heard and for your tireless leadership to support U.S. manufacturing jobs.I look forward to your questions.

[The prepared statement of Mr. Noe follows:]

Written Testimony of Paul Noe for American Forest & Paper Association and American Wood Council before the House Committee on Energy and Commerce, Subcommittee on Environment, Hearing on "Short-Circuiting Progress: How the Clean Air Act Impacts Building Necessary Infrastructure and Onshoring American Innovation" (June 11, 2025)

Chairs Griffith and Guthrie, Ranking Members Tonko and Pallone, and distinguished members of the Committee, my name is Paul Noe, and I am representing the American Forest & Paper Association and the American Wood Council. Thank you for the opportunity to be heard on our concerns about EPA's National Ambient Air Quality Standards (NAAQS) program. We appreciate the Committee's draft bills to modernize and improve the NAAQS permit program, which is urgently needed.

I. Background

The American Forest & Paper Association (AF&PA) represents manufacturers of paper products made in the USA. Paper products support sustainable living. Paper mills support the American workforce, produce carbon-neutral bioenergy, and support recycling.

The American Wood Council (AWC) represents 86 percent of the structural wood products industry. From dimension lumber to engineered wood products, we champion the development of data, technology, and standards to ensure the best use of wood products and recognition of their unique sustainability and carbon-reduction benefits.

Together, our forest products industry directly employs more than 925,000 people and is among the top 10 manufacturing sector employers in 44 states, accounting for 4.7% of total U.S. manufacturing GDP. The industry supports 1.63 million additional jobs across its suppliers and in local communities, many of which are in rural America.

AF&PA's sustainability initiative — *Better Practices, Better Planet 2030* — comprises one of the most extensive quantifiable sets of sustainability goals for a U.S. manufacturing industry and is the latest example of our members' proactive commitment to the long-term success of our industry, our communities and our environment. We have long been responsible stewards of our planet's resources. AF&PA is pleased to report that our members have made substantial progress reducing their emissions. This includes cutting their emissions of sulfur dioxide by 85% and nitrogen oxide by about 45% since 2000.[1] Both are precursors to criteria pollutants (PM and ozone) regulated under the NAAQS program.

Forest products support sustainable living. Paper and wood products mills support the American workforce. When industry workers spend their earnings on goods and services in their local communities, it stimulates additional economic activity and employment. And the paper and wood products industry works every day to be a good neighbor in communities large and small.

Additionally, the U.S. wood products industry is uniquely situated to help meet the needs of our nation's housing. Most single-family homes are built with wood, and a growing number of developers are turning to innovative wood products like mass timber for workforce and affordable housing projects. The products made by U.S. wood manufacturing facilities support the significant need for housing in our country. When houses are not being built, rural communities suffer, manufacturing slows and local economies waver.

Our goal is sustainable regulation which stands the test of time. Sustainable regulations must satisfy legal requirements and support environmental and economic needs as well as social expectations. This is consistent with the dual purposes of the Clean Air Act to protect and enhance air quality so as to promote public health and welfare, as well as the productive capacity of our nation.[2]

[1] https://www.afandpa.org/priorities/energy-environment
[2] *See* Clean Air Act, Section 101(b)(1).

II. The Compelling Need to Reform the NAAQS Rulemaking Process

Unfortunately, the NAAQS program is not working – starting with its failure to align workable implementation plans with any lowering of a NAAQS. As discussed in Section IV, there are two parts to the clean air programs that focus on criteria air pollutants subject to NAAQS. The process of setting the standard, and the permitting program, which we have identified for decades as a barrier to innovation and accomplishing relatively little in the way of public health benefits. There are many other components of the Clean Air Act that set requirements to directly reduce emissions without throwing up complex procedural provisions like the Prevention of Significant Deterioration (PSD) and New Source Review (NSR) permit programs.

A Snapshot on Permit Gridlock from the 2024 PM NAAQS

It was generally understood that the 2024 PM NAAQS rule would result in many more ***non-attainment*** areas in the U.S., where economic development would be impeded. But the permit gridlock problem did not end there. There is an additional permit gridlock problem that was largely unrecognized and is even more concerning for the pulp, paper and wood products industries. Specifically, setting the standard so close to background levels means that – ***even in cleaner attainment areas*** where our mills typically are located – there would not be sufficient "permit headroom" (the difference between the standard and the background PM level) to obtain a permit. This **widespread *permit gridlock*** not only threatens many modernization projects in the forest products industry and many other industries; it ultimately threatens U.S. competitiveness and high-paying jobs, largely in rural communities across the country that especially need those jobs. And the rule does not address the far larger sources of particulate matter.

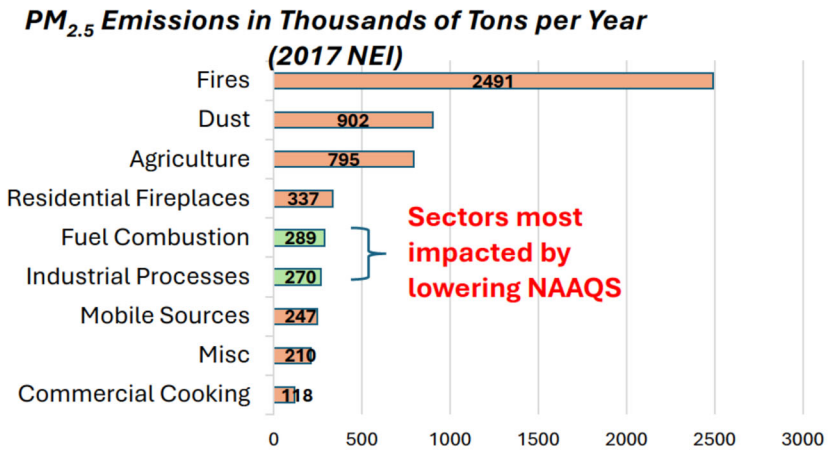
To visualize this permit gridlock problem, see our colored map on p. 18, where the red areas are the non-attainment areas that cannot meet the standard of 9 ug/m3, but the much larger pink areas are those that are in attainment but which practically now lack sufficient "permit headroom" to get an air permit for modernization projects. To validate this permit gridlock concern, an audit was conducted for 36 actual projects in various industries, including our own, that had been approved at the former 12 ug/m3 standard. ***Stunningly, 78% of those projects would have flunked at the current standard of 9 ug/m3*** (see circle chart on p. 19, and the dots on the colored map at p. 18).

We must modernize the statute to continue the essential effort to protect public health while recognizing the huge progress the country has made in improving air quality over the decades. This can be accomplished through common-sense adjustments to the law – and the discussion draft bills being considered by this Committee include many improvements to the NAAQS program.

Provide a Workable Implementation Plan When Lowering the NAAQS Standard

Section 2(e) of the Clean Air and Building Infrastructure Improvement Act bill ("Timely Issuance of Implementing Regulation and Guidance") appropriately links any change in the NAAQS with issuance of a workable plan for how it will be implemented by states, and as importantly, for obligations of regulated sources. As the standards have been lowered, and emission reductions have occurred, the "low hanging fruit" of easily controlled stationary sources are largely gone because most new and existing sources are already well-controlled. Non-traditional sources of pollution such as wildfires (the largest source of PM), dust, and even international transport have become larger percentages of the remaining emissions profile– and are harder to address and develop appropriate policy responses. PM2.5 emissions from industrial sources account for just 16% of the total inventory given reductions that have occurred over the last several decades. Wildfires, road dust and even residential fireplaces are each larger contributors than either industrial sources or energy combustion (see table below).

As a result, EPA needs to develop not just a traditional implementation plan to guide the designation process for states, but also a plan that includes updated tools and policies for the broader permitting program to ensure that both public health is protected and economic viability is sustained to support U.S. manufacturing and the innovation and high-paying jobs it provides.



Consider Attainability When Reviewing the NAAQS

Section 2(b) of the CLEAR Act bill states "The Administrator may, as a secondary consideration in establishing and revising the national ambient air quality standard for such air pollutant, consider likely attainability of the standard", which recognizes the importance of attainability when setting a NAAQS, especially in how it is implemented. For example, if modernization projects that would reduce emissions per ton of production are thwarted, and the public health objectives of the law are harmed, and carbon reduction targets set elsewhere compromised, then EPA should be able to adjust its policies and permitting tools to allow these types of win-win projects to proceed. These projects could be replacing older pulp mill process equipment nearing the end of their life, such as lime kilns or power boilers, with new modern equipment that is much more efficient. A project may be a new lumber mill expanding the production of carbon-storing , wood construction materials that helps support affordable housing. And as markets change, converting a newsprint mill to make tissue paper or containerboard. Again, using more realistic assumptions as discussed below maintains health protection while embracing economic opportunities, innovation, and job growth.

Longer Timeframe for Reviewing the NAAQS

Section 2 of the CLEAR Act bill ("Facilitating State Implementation of National Ambient Air Quality Standards) includes a provision in Section 2(a) that adjusts the frequency of

mandated NAAQS reviews from five to ten years. This would provide important regulatory certainty throughout the permitting process that helps with business planning and investment essential for both the competitiveness and environmental progress of U.S. manufacturing.

It is important to bear in mind that the NAAQS program is extremely complex and extensive -- there are six NAAQS standards that cover particulate matter, ozone, nitrogen oxides, sulfur dioxide, carbon monoxide and lead. And several standards have multiple forms to protect both short- and long-term exposures, as well as consideration of public welfare and environmental impacts. Under the current five-year cycle, at least one NAAQS is up for review each year on average. This makes it very hard for manufacturers, who must plan to be in compliance, to anticipate the regulatory landscape for operating our facilities across the country.

In addition, this not only makes EPA's job very hard; it makes it very challenging for States who must implement the program. It is not typical that major changes in the underlying science occur rapidly, and EPA commonly is very challenged to meet the current five-year review cycle. All of that means a lot of effort and resources wasted -- on process, litigation, and regulatory uncertainty -- rather than making progress on air quality.

Timeframes give states and sources, including non-traditional sources, the time it will take to achieve further air quality improvements given the increasing costs and difficulty in finding the necessary reductions to get areas into attainment and further reduce background concentrations of the critical air pollutants. Some states have supported the ten-year timeframe in the past. (*See, e.g.*, testimony of Sean Alteri, Director of the Kentucky Division of Air Quality, before this Committee on March 22, 2016). EPA and interest groups agreed to a ten-year schedule for making sulfur dioxide designations when EPA reviewed that NAAQS in 2010.

And, of course, if significant new health evidence were to emerge before the 10-year review deadline, ***EPA could always start its review cycle sooner. The way the draft legislation appears in our reading indicates that nothing in the proposed legislation would prevent any earlier reviews deemed necessary***. Again, if you look at the history of the PM NAAQS, EPA regulations have struggled to keep pace with the 5-year cycle and

can extend closer to 10 years. Finally, this provision may mitigate the filing of lawsuits against EPA when it fails to meet a deadline for the review of a NAAQS and allow the Agency to control its regulatory workload in a more coherent manner. The end result would still be improving air quality while growing our economy and enhancing our quality of life.

Treating Fires as Exceptional Events

Section 3 of the CLEAR Act Discussion Draft would provide clarity and legal certainty to EPA's Exceptional Events program. This would help prevent and reduce the growing risks of wildfires, which are by far the largest source of PM – roughly 450% larger than the PM most impacted by the NAAQS. EPA has acknowledged the trend in PM emissions from wildfires and the need for prescribed burns, an important part of healthy forest management. When it released its PM NAAQS rule on February 7, 2024, EPA stated in an accompanying Fact Sheet on "Wildland Fire, Air Quality, and Public Health Consideration":

> "Wildfires have been growing in size and severity, with millions of people at risk from wildfire and wildfire smoke. The wildfire crisis is a public health crisis, including significant impacts on air quality. As wildfires increase in size and severity, the related public health impacts, including from smoke exposure, will continue to grow. At the same time, increasing the application of prescribed fire in a strategic and coordinated manner is needed to mitigate the risk and adverse effects of high severity wildfire and future smoke exposure."

While Clean Air Act Section 319 addresses exceptional events, there have been concerns about whether the statute clearly protects actions to mitigate wildfire risk, i.e., prescribed burns (*See* letter to EPA from Standford Researchers commenting on the proposed PM NAAQS (March 28, 2023), and letter from the California Congressional Delegation to EPA Administrator Regan (June 13, 2023)). For example, Section 319 defines exceptional events as "not reasonably controllable or preventable." Section 2(i)(2)(E) of the Committee's draft bill would make clear that exceptional events include prescribed burns by adding a separate category of coverage ("Actions to Mitigate Wildfires"), undertaken in accordance with State approved practices.

III. Suggestions for Additional NAAQS Reforms

AF&PA, AWC and other industries have been working hard and presenting our ideas for modernizing EPA's permitting program for over a decade. For example, about a decade ago, in 2014, we assembled an extensive analysis highlighting problems with the PSD and NSR programs and, more importantly, outlined specific actions EPA could take to address the problems. Let us summarize just a few examples for permitting improvements that we have presented to the Agency then, again on December 21, 2023 in the comments of the NAAQS Regulatory Review and Rulemaking (NR3) Coalition[3] on EPA's proposed rule on "Guideline on Air Quality Models; Enhancements to the AERMOD Dispersion Modeling System"[4] and as recently as our December 5, 2024 letter to incoming President Trump and comments submitted to the OMB Request For Information[6] on May 12, 2025. These documents highlight some of the key areas where the permitting program has diverged from reflecting real world conditions by ignoring true air quality impacts. We recommend that the bill language be amended to solve these key problems and ensure these solutions become part of any future NAAQS implementation plan.

A. Using Modern, Statistical Tools

First, for almost a decade, EPA has recognized that modern, statistical tools known as probabilistic risk assessment (or PRA)[5] are widely available to robustly account for variability and uncertainty in modeling and decision-making. This paradigm is used for other EPA programs, but not PSD permitting. Currently, projects must assume multiple worst-case scenarios that unrealistically estimate impacts beyond what would happen in the environment. For example, maximum emissions rates from multiple emission units operating simultaneously are assumed to occur continuously and added together. In addition, the public's likelihood and duration of exposure is not assessed, but rather, points near facility fence lines, where people do not reside or spend significant time, are

[3] https://www.regulations.gov/comment/EPA-HQ-OAR-2022-0872-0034

[4] See 88 Fed. Reg. 72,826 (Oct. 23, 2023)

[5] Risk Assessment Forum White Paper: Probabilistic Risk Assessment Methods and Case Studies, EPA/100/R-14/004 July 2014; https://www.epa.gov/osa/risk-assessment-forum-white-paper-probabilistic-risk-assessment-methods-and-case-studies

[6] https://www.regulations.gov/document/OMB-2025-0003-0001

simulated as receptors. These "receptors" for PSD modeling may be in a swamp or river, or on railroads or highways where exposures are very short, if they ever occur at all, and in the absence of other substantial risks to human health and welfare. We suggest this impact demonstration point to not be tied to the current interpretation of "ambient air" near facility fence lines but consider where people live and work rather than arbitrary points on a map that are not relevant to the purpose of protecting public health.

B. Improving Background Estimation and Monitors

Second, certain prevalent ambient air monitors using Federal Equivalent Methods (FEMs) measuring background concentrations, the starting point for assessing available "headroom," are known to over-estimate levels by as much as 2 $\mu g/m^3$ (Timothy Hunt's September 19, 2023 written testimony has a sample bar chart with emissions relative to design value)). EPA has acknowledged this FEM bias, and last year made some corrections by updating monitoring data[6] which helps states to make adjustments prior to non-attainment designations. However, there remains biases in this data due to the influence of temperature and humidity that should be accounted for. Until this correction is implemented, facilities need to determine background when doing PSD modeling for the new NAAQS using a case-by-case analysis subject to additional, longer review. In addition, more monitors could be deployed in more areas to better measure background levels, especially in the rural areas where forest product mills are located.

C. Adjustments to Background Due to High Concentration Events

Third, separate from the need to expeditiously exclude wildfires and prescribed burns as exceptional events during nonattainment designations, states and permit applicants also should be able to exclude the added emissions from these events from background monitors used in PSD assessments. Some states are already doing this on a case-by-case basis, and EPA certainly could promote it much more, particularly with state permitting authorities. An explicit recognition in the bill would leave no doubt for states and permittees that this is an allowed and encouraged practice.

In section C ("Regional Analysis"), the bill also gives more responsibility to EPA to conduct modeling and analysis to support the case for identifying exceptional events that should be excluded. We support this language too, but the bill should make clear that these "exceptional events" or high concentration situations should also be excluded from background levels for PSD purposes. Even a few days (5 to 10) of high PM levels

[6] https://www.epa.gov/aqs/aqs-memos-monitoring-and-policy

(>100 $\mu g/m^3$) as we saw last year along the East Coast and in the Midwest or West and again this year, can raise the annual average for a monitor by 1 or 3 $\mu g/m^3$ and inappropriately shrink permit headroom. Allowing the use of better monitoring data that determine the all-important background starting point for PSD permitting, could help reduce permitting gridlock.

D. More Realistic Emissions Estimates

Finally, there is strong evidence that current methods are over-predicting PM emissions from wet stacks and condensables from sources with sulfur dioxide and ammonia. For example, the National Council for Air and Stream Improvement (NCASI) has a Cooperative Research And Development Agreement (CRADA) with EPA to explore measurement bias in EPA's Test Method 202. The research, which has been presented to EPA and subsequently independently confirmed by their own studies, has found that up to 80% of measured condensable PM can be attributed to measurement bias due to the formation of ammonium sulfate when running Method 202 on sources with sulfur dioxide and ammonia, common in combustion sources.[7] Last year, EPA published new guidance making a partial correction to the method but it was insufficient and failed to account for this new scientific information. When small amounts of modeled PM can determine if a project will "pass" or "fail," EPA needs to move forward with an additional correction. Similarly, available technical information can be leveraged to estimate fine PM from wet stacks, rather than assuming all PM is fine PM, which can lead to gross overestimations of emissions and impacts.

Much of the PM2.5 emissions data for fugitive sources is suspect, either because there is little data, the test methods are challenging to implement, or available estimation techniques and/or emission factors are of limited applicability as they were developed for aggregate piles and are not directly applicable to many types of forest products industry sources. Air permits do not require testing of most area and fugitive sources (roads, woodyard operations, material handling, paper machines, or plywood presses for example). In addition, we are not aware of any work that has been done to validate the EPA dispersion model's performance modeling of fugitive emissions sources, especially in the near field. Where emissions are not released through a stack, they are not easily quantifiable. and assumptions must be made with respect to emission rates and release characteristics. Our experience indicates that often the modeled impact for fugitive

[7] See NCASI Tech Bulletin 1079.

sources is disproportionate to the expected emissions (their emissions are small but their impact on model results can be large, especially where PM2.5 emissions are assumed equal to PM10 emissions). Modeling PM2.5 emissions from offsite fugitive sources is often challenging because these sources are often grouped or otherwise not well described in the permit.

Until such time that EPA can complete AERMOD validation studies and emissions data are improved, EPA should issue guidance that indicates modeling analyses may exclude fugitive emission sources where PM2.5 emissions can reasonably be expected to be small based on available emission estimates and facilities have implemented best practices around road traffic and material handling and storage. Some states have this type of guidance already.

These and other improvements and implementation fixes should already have been in place before the recent NAAQS revision, and need to happen quickly now regardless of whether the 2024 NAAQS is maintained or adjusted. .

IV. The Impending Permit Gridlock Crisis

A. Background

It is important to note that there are two inextricably linked programs that are particularly relevant when a NAAQS is changed. The first is setting the standard "requisite to protect the public health" with an adequate margin of safety considering the quality of the studies and scientific uncertainties. In a reconsideration of a standard (which includes the new PM NAAQS), as distinct from a normal statutorily-mandated five-year review, EPA can weigh implementation challenges and costs on whether it conducts such a review ahead of schedule. The second program implicated when a NAAQS is lowered is permitting of new projects under EPA's air permit program, both for new "green field" facilities and for modifications to existing facilities (separate from the process of states and EPA designating areas for attainment or non-attainment). The PSD program is extraordinarily complex, requires installation of best available control technology, and especially relevant here, requires sources to conduct extensive assessments according to EPA policies and guidelines to determine if the project itself and the site's emissions combined with background concentrations exceed the NAAQS.

B. The Need for Reform

Without the type of improvements in the Committee' draft bill -- some of which we believe EPA can currently do under their existing Clean Air Act authority -- overly conservative modeling analysis can lead to unverifiable and nonexistent concentration estimates that cause costly changes or cancellations of beneficial projects, even though real-world exposure of the general public at these locations is minimal, improbable, or practically impossible. Public health is still protected with these reforms and improvements while allowing beneficial projects and economic growth to continue.

The new PM2.5 NAAQS continues to place the preponderance of the burden on a small portion (16%) of overall emissions by focusing on traditional stationary sources, which have been regulated by the NAAQS program for decades. The program will not achieve its goals to protect public health unless efforts are made to look at all sources and come up with innovative and cost-effective ways to achieve the standards. For example, wildfires are more than 40% of the total PM emissions nationwide, and we all have experienced their impact on air quality in the West, and last year especially, in the East. The California Air Resource Board has quantified the amount of PM coming from wildfires, and the amounts are staggering – in California alone, CARB estimated 380,000 short tons of PM2.5 on average (1,181 thousand short tons of PM2.5 from the 2020 fires alone)[8][1]. To put that into context, these California wildfires are equivalent to 10 times (or 1000% of) the forest product industry's total 2020 PM2.5 emissions[9]. ***And looking nationwide, wildfires resulted in 1,700,000 tons of PM2.5 in 2020, and compared to total forest product industry's emissions (40,672 tons), that is a ratio of 42 to 1 (or 4,200%) higher***. If emission reduction strategies can reduce just a few wildfires or reduce the number of acres burned on Federal lands, it would result in greater air quality improvements than focusing on sources that have already reduced emissions. The forest products industry already manages its private forestlands in a way that mitigates wildfire risks and avoids emissions of PM2.5 that might otherwise occur. Thus, simply issuing any new NAAQS without a workable, comprehensive implementation plan/strategy creates a false sense of progress when far larger sources remain unaddressed.

Furthermore, the potential economic impacts are very real and potentially staggering. The lost opportunity costs from cancelled projects are hard to measure because those

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[8]

[9] https://www.epa.gov/air-emissions-inventories/2020-national-emissions-inventory-nei-data

projects do not see the light of day and end up on the cutting room floor when a company tries to model compliance with the new standard and fails. The hard truth is that the full impact is unknowable: We never see the jobs never created, the manufacturing facilities never built, the American products never made, or the innovative ideas drowned in a sea of red tape. In addition, for those projects that might theoretically proceed, we estimate that the capital costs of the 2024 PM NAAQS would be on the order of $3 billion to $4 billion to the industry for installing measures to help lower modeling estimates that may in fact have small public health benefits[10]. With a standard at 9.0 ug/m^3, the permit challenges are widespread, as we estimated in 2023 that 88% of pulp and paper mills will be in areas with less than 3 ug/m^3 of headroom; in other words, in areas with background concentration of 6 ug/m3 or more. For the wood products industry, 97% of wood products mills fall in areas with less than 3 μg/m^3 of headroom. The ultimate reality is that energy efficiency and modernization projects that could reduce actual emissions, including greenhouse gases, are thwarted by how PSD is implemented, and this will be amplified given the much lower standard.

C. Headroom is More Limited Today Than in the Past

Since the PM2.5 NAAQS was signed, many observers, including EPA, have countered industry's claim that the lower standard will have severe impacts are exaggerated. They note that industry has made claims of economic hardship in the past, yet the economy continues to grow. These comments miss a critical point of why the PM2.5 NAAQS rule, coupled with a permit program that is not working, will cause permit gridlock. Let's look at how the PM NAAQS evolved over time.

First, looking back to when the original 15.0 μg/m^3 PM2.5 NAAQS was established in 1997, headroom constraints were not an issue because EPA implemented the PM10 Surrogacy Policy in recognition of insufficient techniques for source testing and permit modeling, so applicants were not required to model relative to the PM2.5 NAAQS to get permits. And back then, and most of the time since then until recently, no one had to add secondary PM2.5 from precursor NOx and SO_2 emissions (which adds to a project's total) or model minor sources or modifications of direct PM2.5 emissions when NOx and/or SO2 emissions were major or increased significantly. Finally, at the urging of stakeholders, EPA improved the scientific basis of certain elements of the regulatory air

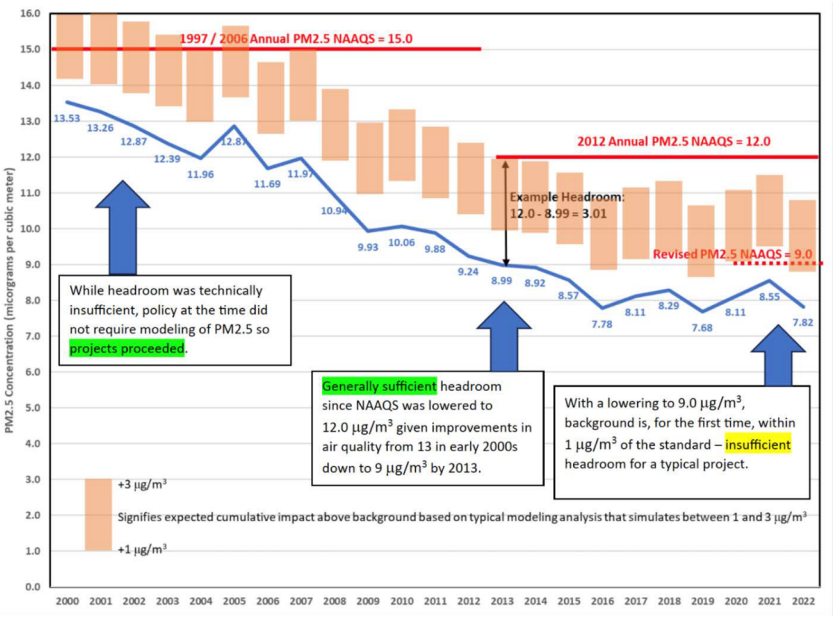
[10] See Attachment 2 to comments of the NAAQS regulatory Review & Rulemaking Coalition on EPA's Reconsideration of the National Ambient Air Quality Standard for Particulate Matter

dispersion model to be more realistic (e.g., the LOWWIND/ADJ_U* changes and the horizontal/obstructed point source plume rise algorithms). In a sense, that expanded the headroom since projects modeled with lower impacts.

Second, in 2012-2013, when the PM standard was last lowered from 15.0 $\mu g/m^3$ to 12.0 ug/m^3, the mean U.S. background concentrations (based on EPA trends data) was above 9 ug/m^3, so the headroom shrank from greater than 5 $\mu g/m^3$ to about 3 $\mu g/m^3$. The lowering presented permitting challenges depending on location and size and type of project. Although the representative background concentration for any particular project is estimated based on local conditions, the average background concentration helps track air quality trends and whether typical projects will have enough headroom (i.e., difference between NAAQS and background) to get permitted. The typical modeled impact of a facility with a well-controlled project that triggers PSD review and a NAAQS analysis comes out between 1 and 3 $\mu g/m^3$, which is verified by a review of three dozen recent PSD projects that needed an average of 2.6 ug/m^3 of headroom. Since the PM2.5 NAAQS was last lowered, the headroom has improved only slightly (roughly 1 $\mu g/m^3$) as air quality improvements have leveled off (see figure 1 below on page 15); or even risen slightly, which coincides with the time more biased FEMs were deployed. While the 12.0 $\mu g/m^3$ standard posed challenges for permitting projects, it pales in comparison to what U.S. manufacturers face now.

On February 7, 2024, EPA lowered the PM NAAQS from 12.0 $\mu g/m^3$ to 9.0 $\mu g/m^3$, when average U.S. ambient background remains close to 8 $\mu g/m^3$. Thus, the average headroom is just 1 $\mu g/m^3$, which is far less than the 3 $\mu g/m^3$ needed for a typical facility with a PSD project. ***Headroom of 1 $\mu g/m^3$ is far less than ever before, and threatens many beneficial modernization projects of U.S. manufacturers***.

Figure 1. Depiction of U.S. nationwide annual average mean PM2.5 concentration as measured at 361 trends sites relative to effective annual NAAQS. EPA, Particulate Matter (PM2.5) Trends (https://www.epa.gov/air-trends/particulate-matter-pm25-trends).



D. Permit Gridlock From the New PM2.5 NAAQS Even in Attainment Areas

Since there is a general tendency to focus on non-attainment areas when a new NAAQS is set, it is important to focus instead on the cleaner areas that meet the NAAQS but still face significant permitting challenges. To understand the potential impacts of a tighter PM NAAQS, in 2023 we hired Alpine Geophysics, experts in air quality modeling and very familiar with EPA's emissions databases, to analyze data from EPA's and state regulatory agencies' ambient monitoring networks to develop the maps on behalf of AF&PA, AWC and others. The maps used maximum $PM_{2.5}$ Design Values (DVs) from 2020-2022[11] (the most recent data at the time) for each monitored county in the United States. Alpine calculated background PM2.5 concentrations in non-monitored counties using

[11] https://www.afandpa.org/news/2023/why-epa-should-not-finalize-particulate-matter-naaqs-standard

geospatial statistical interpolation ("kriging") that "fills-in" PM2.5 estimates for locations between monitors.[12] Kriging is a spatial interpolation method that is intended to take a series of points and create a continuous surface (i.e., interpolate the space between the points so that the user can obtain a value at any location). The method originated in the geological sciences as a way to interpolate soil/mining samples for mineral exploration. It is now broadly used in the spatial sciences across disciplines, such as interpolating groundwater contamination based on sample wells. EPA has acknowledged the value of kriging to reliably estimate air pollution concentrations in unmonitored locations for use in modeling PM2.5 attainment demonstrations.[13] Some states also allow kriging to estimate background design values for projects when monitors are not nearby.[14] [15]

In our maps, the five closest monitored values are used to estimate non-monitored county values using the inverse-distance weighted averaging method. Five monitors were used as a reasonable proxy for surrounding air quality. To validate these assumptions, we found 28 recent PSD projects that were permitted in 18 states across a dozen sectors where the facility's' modeled concentrations exceeded 9 ug/m^3 and found that the actual background levels used for those detailed modeling analyses generally align with the values projected by Alpine. Two thirds of the projects were within 1 μg/m^3 of the mapped background concentration, with 17 mapped values higher than the background used for the project, 10 lower than the background used for the project and one the same. For the purposes of this general analysis, counties were used as the relevant geographical parameter since finer scales were not needed.

Let's focus first on the pink areas on the map, which are the areas that will be in attainment but still have very limited headroom to allow new or expansion projects to proceed. Due to EPA's discretionary practice), sources in attainment areas are immediately subject to use of the lower NAAQS in PSD permitting which occurred in May 2024. While EPA has the legal authority to align the effective date for use of the lower NAAQS in permitting with the much longer timeframes for designating non-attainment areas and for states to submit infrastructure SIPs, EPA chose not to set a more

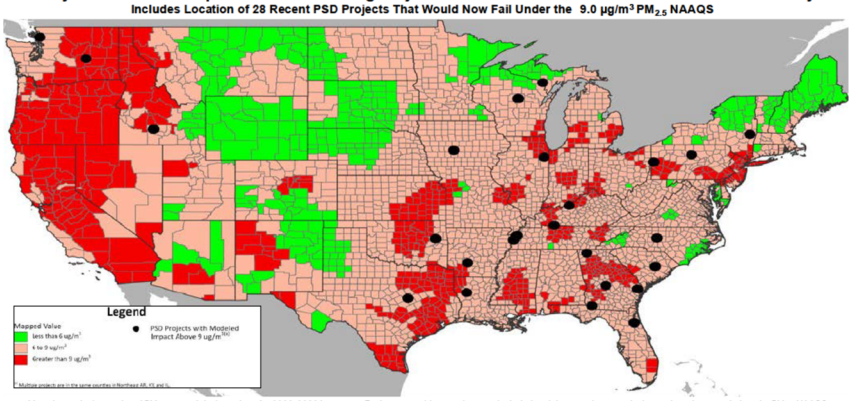
[12] Kriging is a method of statistical analysis that uses a limited set of sampled data points to estimate the value of a variable over a continuous spatial field.
[13] https://ntrl.ntis.gov/NTRL/dashboard/searchResults/titleDetail/PB2005103146.xhtml)
[14] https://www.oregon.gov/deq/aq/cao/Documents/CAORP-AirQualityModeling.pdf
[15] https://idahodeq.maps.arcgis.com/apps/MapSeries/index.html?appid=0c8a006e11fe4ec5939804b873098dfe

reasonable schedule of 3 years hence. And adjusting the effective date is not "grandfathering" so is consistent with current case law. A 3-year effective date would have provided time for EPA to reform its outdated and unrealistic permit program to avoid permit gridlock under the stringent new PM2.5 standard .

All too many new or expanded manufacturing projects that trigger PSD will be blocked as it becomes economically infeasible or technically unachievable to build in the pink areas of the map using 2020-22 design values (more recent map provided by the U.S. Chamber for this hearing use the same method as described above and show very similar results from the analysis done two years ago). The average national background level for PM2.5 is around 8 $\mu g/m^3$. Accordingly, with the standard at 9.0 $\mu g/m^3$, even areas with background as low as 6 $\mu g/m^3$ will not have enough "headroom" to accommodate the ambient concentration conservatively simulated for the project and facility (typically, up to 3 $\mu g/m^3$). The number of projected non-attainment counties and those with insufficient headroom (less than 3 ug/m^3) using the 2020 to 2022 data are shown in the following table.

NAAQS Level	**Nonattainment Counties (Red)**	**Counties with < 3 $\mu g/m^3$ (Pink)**	**Counties with >= 3 $\mu g/m^3$ (Green)**
12	31 (1%)	553 (18%)	2,559 (81%)
11	82 (3%)	1,238 (39%)	1,823 (58%)
10	218 (7%)	2,001 (64%)	924 (29%)
9	584 (19%)	**2,204 (70%)**	355 (11%)
All	3,143	3,143	3,143

Many Future New or Expanded Manufacturing Projects Unachievable in Red and Pink Areas Immediately
Includes Location of 28 Recent PSD Projects That Would Now Fail Under the 9.0 µg/m³ $PM_{2.5}$ NAAQS



Map shows the interpolated $PM_{2.5}$ annual design values for 2020-2022 by county Each county with a monitor was included and the counties were designated as above or below the $PM_{2.5}$ NAAQS of 9 ug/m³ If a design value was not available for a specific county, Alpine Geophysics used a kriging interpolation method to estimat e the $PM_{2.5}$ concentration in a county Counties with values less than 6 ug/m³ are highlighted in green because a typical project needs 3 ug/m ³ of headroom between the background and the NAAQS to allow for a successful modeling demonstration

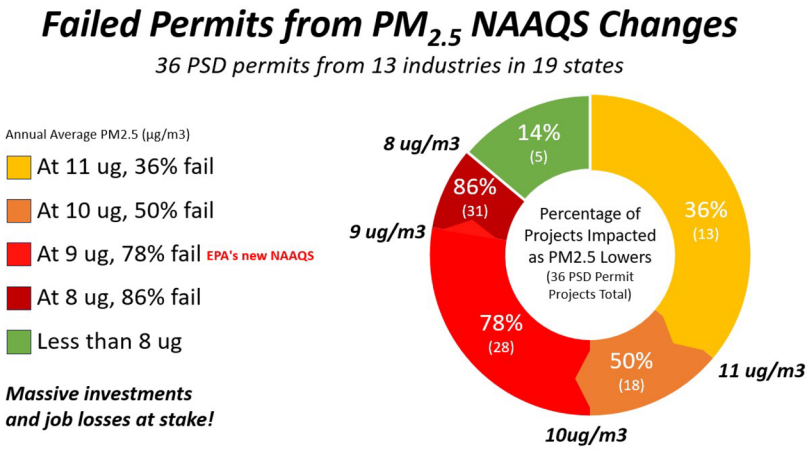
Lowering the NAAQS could stifle mill modernization projects -- projects that would otherwise reduce emissions while keeping the U.S. forest products industry globally competitive and supporting high-paying jobs, often in small, rural communities that particularly need economic opportunity.

E. Why Does a Typical PSD Project Need 3 µg/m³ of Headroom?

To determine the headroom typically required by forest products facilities, AF&PA/AWC reviewed several recent permit applications for both greenfield facilities and modifications to existing facilities. For example, a permit application for a state of the art, greenfield pulp and paper mill was submitted in the southern U.S in 2018. The modeling submitted with the air permit application indicates that the facility's PM2.5 emissions consumed approximately 3 µg/m^3 of headroom. This mill ultimately was not constructed, but it was to be located on a large property in flat terrain, equipped with state-of-the-art PM emissions controls, and have exhaust stacks sized to optimize dispersion. Other recent air permit applications for eight pulp and paper mills that triggered PSD review required between 0.9 to 5.7 µg/m^3 of headroom, with an average of 3.5 µg/m^3 (six of the eight paper mill projects recently permitted are above 3.0 µg/m^3).

Recent air permit applications for wood products mills that triggered PSD review and modeling for PM2.5 required up to 3 µg/m^3 of headroom to accommodate the mill's PM2.5 emissions.

More importantly, we analyzed three dozen recent PSD projects across a dozen manufacturing industries in nineteen states that were approved under the past standard of 12.0 ug/m3. ***Shockingly, we found that 78% of those manufacturing modernization projects would have failed at the new PM NAAQS standard of 9.0 µg/m^3*** (see circle chart below). In addition, we found that the average annual modeled design concentration (MDC) to be 2.6 µg/m^3. Half of the projects' MDCs reviewed fell between 1.5 and 3.6 ug/m^3. MDC is computed by AERMOD (i.e., the average 5-year annual mean concentration) to simulate cumulative impacts from the applicant facility and nearby sources. It includes secondary PM2.5 screening concentrations from PM precursor emissions of NOx and SO_2 estimated using EPA's Modelled Emission Rates for Precursors (MERPs) and related guidance. This supports the premise that an average PSD project would need about 3 µg/m^3 of headroom to get permitted using existing permitting techniques.



Given the consistent results of modeling analyses used for permitting new projects, it is evident that the lower PM2.5 NAAQS would stifle growth because well-controlled

projects would not be able to demonstrate cumulative PM2.5 impacts using current permitting policies and modeling techniques. Despite EPA's claims that it was able to "ensure a smooth transition to the new permitting requirements and to enable NSR permitting to continue without significant disruption"[16] when the PM2.5 NAAQS was last lowered to 12.0 $\mu g/m^3$ in 2012, there remain deficiencies with key analytical tools (i.e., source testing methods) and opportunities to improve prescriptions for regulatory modeling that are amplified by the recent NAAQS revision. Because there are no changes to these permitting policies concurrent with the effective date just 60 days from the imminent final rule publication, there is every expectation that similar projects cannot be permitted.

V. How the PM NAAQS Experience Demonstrates the Need for Reform

A. The Urgent Need for Sustainable Regulation

Our goal is sustainable regulation that will stand the test of time. Sustainable regulation must satisfy legal requirements and meet environmental and economic needs as well as social expectations. This is consistent with the dual purposes of the Clean Air Act to protect and enhance air quality so as to promote public health and welfare and the productive capacity of our nation.[17] The paper industry has invested in important improvements to air quality and has reduced its SO_2 emissions by more than 80% and nitrogen oxides (NOx) emissions by about 50% since 2000[18]; both are precursors to fine particulate matter. Unfortunately, we do not think that the PM2.5 NAAQS meets the goal for sustainable regulation since EPA failed to include a workable permitting path to achieve better air quality and job creation.

Historically, AF&PA and AWC have had a very good working relationship with EPA. We appreciate when the Agency recognizes that, to achieve emissions reductions, EPA does the very important work to write the rules, but the regulated community does the important work to invest and achieve reduced the emissions. Sometimes, however, rules do not meet the legal or scientific standards necessary for a sustainable rule. Thus, in

[16] EPA Fact Sheet: "Implementing the Final Rule to Strengthen the National Air Quality Health Standard for Particulate Matter – Clean Air Act Permitting, Air Quality Designations, and State Planning Requirements," February 7, 2024. (https://www.epa.gov/system/files/documents/2024-02/pm-naaqs-implementation-fact-sheet.pdf)
[17] *See* Clean Air Act, Section 101(b)(1).
[18] https://www.afandpa.org/priorities/energy-environment

the case of the 2024 PM NAAQS tightening, we are pleased that EPA Administrator Zeldin has made it a priority to revisit that hasty rulemaking to ensure it comports with the Clean Air Act and the best science. He has also noted the importance of a functioning permitting program and making improvements which we wholeheartedly support.

> *"The EPA's commitment to permit reform cannot be overstated. By cutting through redtape and resolving the backlog of state and tribal implementation plans, we are creating an environment where businesses can thrive and infrastructure can be built."* [19]

We all benefit when EPA crafts achievable rules that are based on the best available evidence and can be successfully implemented. For example, during the Obama Administration, EPA proposed an unachievable Boiler MACT rule, but EPA engaged stakeholders and carefully considered the data we developed and shared. The final rule was stringent and cost our industry alone over a billion dollars, but we defended EPA's rule in court. Ultimately, our industry could comply and go on to compete in our highly competitive global marketplace. And among other things, the Boiler MACT rule led to major reductions in PM, NOx and SO_2 emissions, as well as hazardous air pollutants.

B. **EPA's Air Permit Program is Not Working**

Unfortunately, EPA's PSD program is an outdated and inefficient regulatory approach that currently just doesn't work very well. For existing sources in areas meeting air quality standards, so-called attainment areas, EPA's policy[20] -- reflected yet again in the March 2024 final PM2.5 NAAQS rule -- is that the NAAQS was effective for PSD permitting last May. EPA was quite clear on this point, stating in the PM2.5 NAAQS preamble: "At the effective date, all applicants for permits to construct a new major source or major modification of an existing stationary source will need to conduct an air quality analysis that considers the revised PM2.5 NAAQS." This means the new lower standard must be considered immediately when undertaking a major facility modification -- even before EPA has formally designated which areas are above or below the new or revised standard.

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[19] Wall Street Journal, Opinion, March 12, 2025 by Lee Zeldin:" EPA Ends the Green New Deal"

[20] Page, Stephen (EPA OAQPS): "Applicability of the Federal Prevention of Significant Deterioration Permit Requirements to New and Revised National Ambient Air Quality Standards," April 1, 2010. https://www.epa.gov/sites/default/files/2015-07/documents/psdnaaqs.pdf.

It wasn't enough that EPA lowered the standard close to average ambient background levels; the Agency without any notice also lowered the Significant Impact Level (SIL).[21] The SIL trigger for cumulative modeling was 0.3 $\mu g/m^3$, (or 0.2 $\mu g/m^3$ depending on the state), and EPA has lowered the SIL to 0.15 $\mu g/m^3$, so modeling for new projects would be more or less automatic given the very small value. The PM2.5 SILs are very specifically NOT associated with the value of the NAAQS, unlike the other SILs. They were calculated by analyzing all of the monitor data in the U.S. to determine what change in ambient concentrations would be greater than the noise, or variability of measuring or monitoring natural background. Since changing the NAAQS doesn't change that evaluation, there are no statistical grounds for EPA's change to the SIL.

One perverse outcome of the SIL change is that a major source will not be able to do even a small PSD project (or perhaps the project would be significantly delayed) that only has a 0.15 $\mu g/m^3$ impact if it is in a county that will become non-attainment under the new standard. They are subject to PSD because the attainment designations have not been made yet, so they are in a county designated attainment. However, since background is already greater than the revised standard, there is no headroom for the smallest of projects. Once the county is designated non-attainment, the project would be subject to the Non-attainment New Source Review program (NNSR), and only then might a permit be obtained so the project could proceed.

Further reducing the SIL makes permitting any project of any size that much more difficult. And to make matters worse, projects that trigger PSD review for SO_2 or NO_X are also required to model PM2.5 even if the project does not have a significant net emissions increase of PM2.5. With a further reduced SIL, the odds increase of even a small amount of fugitive PM2.5 near the fence line triggering cumulative PM2.5 modeling for sources, even when emission inventories are lacking or permits only include PM10 limits for such small sources of PM2.5 emissions. Finally, legal challenges often arise when the amount of headroom between the ambient background and the NAAQS is less than the SIL, leading to delays and unnecessary court costs.

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[21] "*Additionally, in light of this NAAQS revision, the EPA is updating its guidance that provides recommended significant impact levels (SILs) for PM2.5 and expects that an updated SIL for the revised primary annual PM2.5 NAAQS will be available on or before the effective date of the final NAAQS.*" *See* page 598 of 715 of the signed rule at https://www.epa.gov/system/files/documents/2024-02/pm-naaqs-final-frn-pre-publication.pdf

Some states also require NAAQS modeling for minor NSR projects that increase emissions or for permit renewals. If a facility wants to permit a minor project with a PM2.5 emissions increase that is above modeling exemption levels but below the PSD significant emissions rate, it will be challenged to do so if the background value is greater than 9 μg/m3 but the area is designated as attainment. The only way the project will proceed is if the project emissions increases can model below the SIL, which will be even more difficult if EPA lowers the SIL.

VI. Conclusion

American forest products companies are trying to modernize, grow, and produce products from renewable and recyclable products that our customers demand, but are impeded even in attainment areas with cleaner air. Meanwhile, non-attainment areas with dirtier air will not see significant restrictions for several more years -- and as much as a decade later. It doesn't make sense to discourage upgrading plants already subject to a myriad of other regulatory requirements, or to block beneficial projects already using best controls, simply due to unrealistic air quality modeling and assumptions. Our country has made great strides in improving air quality, largely under other programs, and not PSD.

Our shared goal should be sustainable regulation – regulation that addresses environmental, health and economic needs. This requires bipartisan work. We must keep and create sustainable manufacturing jobs in America – they are critical now and for our country's future success. There is no better place for a robust manufacturing sector than the United States, which has highly productive workers, creative entrepreneurs and innovators, abundant resources, a strong free-market democracy, and regulatory agencies capable of leading the world on sustainable regulation.

Thank you for the opportunity to share our views.

Mr. GRIFFITH. I thank the gentleman. I thank all of you for your testimony. I now move into the question-and-answer portion of the hearing, and I will begin the questioning and recognize myself for 5 minutes.

Mr. Noe, we are talking about NAAQS today, but I can't help myself: Attainment also impacts new course review permitting. It concerns me that industries are trying to reduce—industries trying to reduce emissions at their plant can potentially be punished in some cases under the Clean Air Act, which is why I have been working on H.R. 161, the New Source Review Permitting Improvement Act. Doesn't the current new source review permitting process make manufacturers think twice about building new projects, or even improving current facilities?

Mr. NOE. Mr. Chairman, 100 percent. And thank you so much for your tireless work there. I am going to paraphrase a friend of mine and former EPA general counsel, Don Elliott, who said the kindest things you can say about NSR is it is ineffective, slow, and it doesn't work. And those really are about the kindest things you can say about it because it makes no sense that a program that is supposed to improve air quality blocks efforts to become more efficient and thereby lower emissions per ton of production. It is that simple.

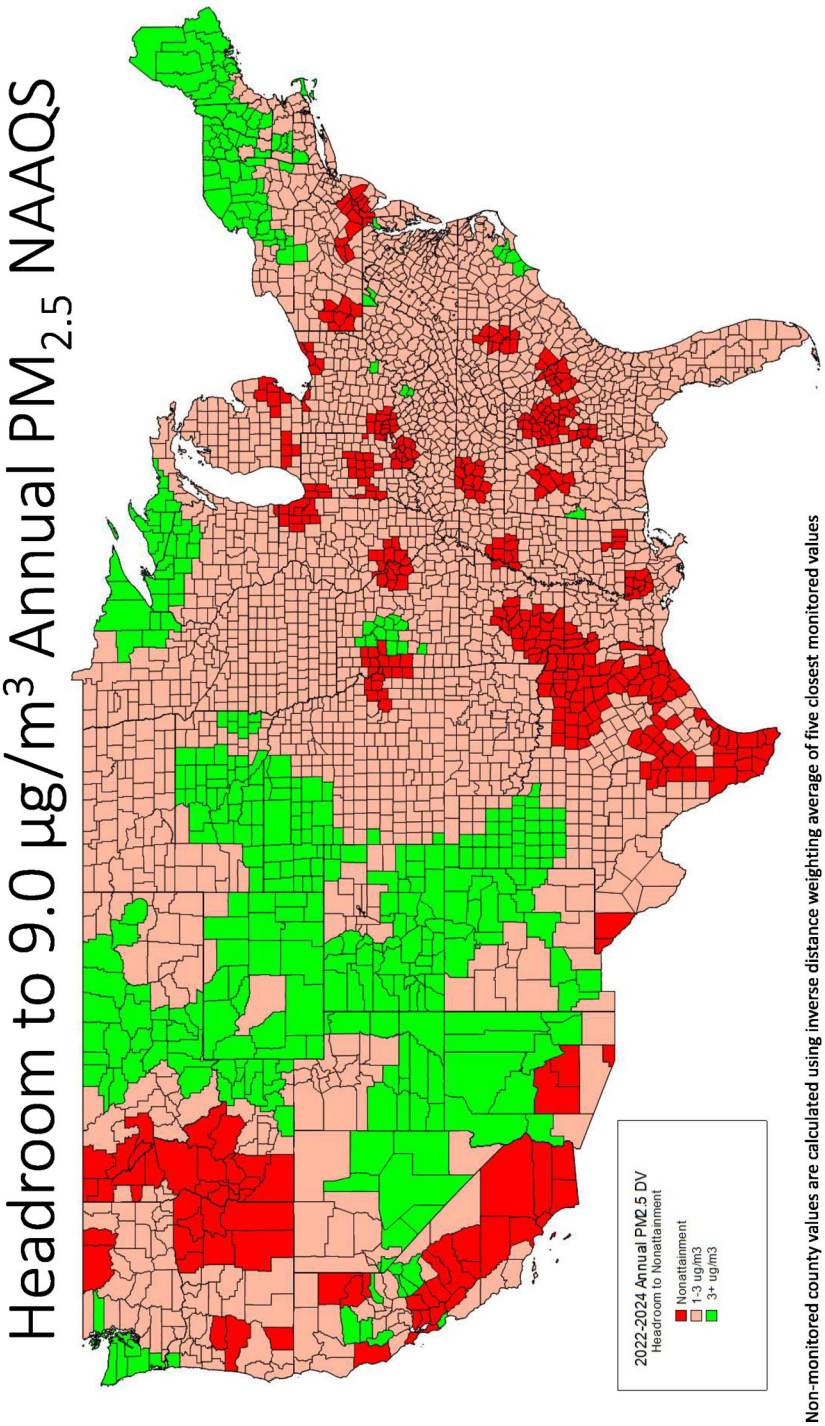
Mr. GRIFFITH. Yes. is it economically efficient or environmentally friendly to require pollution control projects to go through the full NSR permitting process, and doesn't the current NSR regime actually discourage major sources from installing emission control equipment for fear of losing their current air permit?

Mr. NOE. One hundred percent. And, Mr. Chairman, I just want to add, when you were kind enough to have a hearing back in February 2018 and I had the opportunity to testify, we had a whole bunch of examples from our industry alone about how NSR has had very damaging unintended effects. The intent was good: Let's make our air cleaner. We all support that. I think you have heard that already from not only all of you on this panel, but we have got to be smart about how we do this. There is so much at stake if we are not smart in how we do it.

Mr. GRIFFITH. I appreciate that. And I had my examples too, but I won't go through them today.

Mr. Whiteman, could you briefly explain the colored map, which has—we have got our fake Vanna here. Could you explain the colored map in your written testimony and that is enlarged behind me?

[Map displayed.]


Headroom to 9.0 µg/m³ Annual PM2.5 NAAQS
2022-2024 Annual PM2.5 DV
Headroom to Nonattainment
Nonattainment
1-3 ug/m3
3+ ug/m3
Non-monitored county values are calculated using inverse distance weighting average of five closest monitored values

Mr. WHITEMAN. Will do. Thank you for the question. Yes, this map is a map of the counties in the U.S., and we modeled the air quality nonattainment, and areas that would be in attainment.

So if you look at the map, the green areas would be those that are in attainment. The red areas are those that are out of attainment, 428 counties that we project. EPA projected just one-fourth of that.

And then the light red areas are those where there is not much headroom—there is not a lot of headroom to build new facilities, or you bump into the standards.

This is the first time that we have seen the Clean Air Act, the NAAQS program, reduce emissions so low that the impacts are getting around background levels. So that is why we see such an extensive potential permitting gridlock across the country, and that is why we raised so many concerns about the NAAQS standard.

We all want to reshore manufacturing, we all want to provide the good-paying jobs, and unfortunately this looks like it is going to block a lot of those projects for coming back.

Mr. GRIFFITH. What are the real-world effects of a nonattainment designation for a county trying hard to land a big factory, or a family manufacturer looking to expand their plant?

Mr. WHITEMAN. I am sorry, sir, I missed——

Mr. GRIFFITH. That is all right. What are the real-world effects of a nonattainment designation for a county trying to land a big factory, or even a family manufacturer looking to expand their existing facility?

Mr. WHITEMAN. It puts them through a lot of permitting and can be quite difficult. In fact, I was talking to somebody in the foundry industry yesterday from Wisconsin. They had a new green field facility that they wanted to build. They looked at 400 sites, after they—they could meet their labor requirements. When they went on and considered the environmental requirements from the NAAQS, from ozone and PM, it narrowed it down to eight. And then when they looked at supply chain, energy access, and other things, they decided they just couldn't do the project because the NAAQS program and what is coming up is just going to be too stringent to them.

Mr. GRIFFITH. Couldn't do the project in the United States.

Mr. WHITEMAN. They shelved—no. They shelved it.

Mr. GRIFFITH. And so when we are talking about those nonattainment areas, those are the ones that are currently red, correct? Dark red?

Mr. WHITEMAN. These are the ones that are projected to be out of attainment in the future.

Mr. GRIFFITH. All right. And then a lot of the pinkish red ones are close, so if you were trying to land a really big factory, that might tip you over the line as well.

Mr. WHITEMAN. That is right. We have an example in one of the reports that we wrote, even a wind facility in Colorado, CS Wind—the air permit they had to put together to follow EPA's requirements would increase the emission in their area by 1.9 micrograms. They may not have been able to build their facility because even projects like that could be blocked.

Mr. GRIFFITH. All right. My time is up. I yield back, and now recognize the ranking member from the State of New York for his 5 minutes of questioning.

Mr. TONKO. Thank you, Mr. Chair. As I expressed earlier, it is critically important that the National Ambient Air Quality Standards are based on the latest science to ensure they are health protective. However, I am concerned that several provisions of these proposals will undermine those efforts.

First, the CLEAR Act would change the current 5-year review cycle to a 10-year cycle. So, Mr. Walke, what would be the consequences of making that sort of change?

Mr. WALKE. Thank you, Mr. Tonko. The consequences, unfortunately, would be to ensure that updates to health standards occur closer to 12 to 15 years.

Now, why do I say that? Because under today's law where the statutory deadline is 5 years, as Dr. Boylan said, the reality is it is closer to 8 to 10 years, and the Agency has to be sued in order to try to issue them faster. If the statutory deadline were 5 years, they would miss that statutory deadline, too.

Now, why do I say that? Well, because Congress adopted a program in 1990 that set a 10-year statutory deadline for a lot of standards, and EPA missed that deadline probably 60 to 70 percent of the time. Sometimes they missed it by 10 or even 15 years.

So it is entirely predictable what would happen. Americans would be denied safer, clean air based upon what the medical science says for as long as 12 to 15 years, or more.

Mr. TONKO. Thank you. And is it safe to say that our scientific understanding of the health impacts of air pollution is continuously improving?

Mr. WALKE. That is absolutely the case. In the most recent updates to the health standards for ozone that unfortunately did not occur but were the subject of scientific analysis in 2023, shows that we have learned much more and the standards should be strengthened.

The strengthening the PM 2.5 standard in 2024—which, by the way, is the most deadly pollutant regulated by the Clean Air Act and recognized globally as either the second- or third-largest source of premature mortality globally—we have learned much more and we need to do more to protect Americans.

Mr. TONKO. Right. And let me add to your assessment. There can be a lot of science produced in a short period of time, and as an example, the 2020 ozone standard review included more than 1,700 new studies that were published since EPA's 2015 review of that standard.

So even within the current 5-year cycle there could be hundreds if not thousands of relevant scientific studies that further our understanding of what levels of air pollution may be considered safe.

So Mr. Walke, if we are committed to having our environmental protections based on the latest best available science, would shifting to a 10-year review cycle undermine that goal?

Mr. WALKE. Absolutely it would undermine that goal, and so would eliminating the Office of Research and Development, a lot of other things that are being done by this administration, unfortu-

nately. We are eliminating scientific capacities, and lengthening the period to 12 to 15 years would just be even more irresponsible.

Mr. TONKO. And, Mr. Walke, I would also further ask about the CLEAR Act's proposed changes to the Clean Air Scientific Advisory Committee. Currently the CASAC is statutorily required to have seven members, with at least one from a State agency.

Mr. Walke, what is the role of the CASAC today, and would you say it is to inform EPA in consideration of the latest science when reviewing standards, or is it more focused on the implementation and feasibility of the standards?

Mr. WALKE. It is focused on the protectiveness of the health standards and whether they provide an adequate margin of safety for vulnerable populations like children. And so it requires medical expertise. It does not require implementation expertise. And I differ with my fellow witness, Dr. Boylan, on that respect.

Geographic diversity doesn't speak to medical expertise. So kind of pulling people from region 4 States to be on the panel doesn't speak to whether the standards will be better and more protective of Americans.

Mr. TONKO. Thank you. While I certainly support States playing an important role in scientific reviews of standards. I also believe States are just one of several important contributors.

Mr. Walke, are you concerned that this proposed change to the CASAC membership might tip balance of the—tip the balance of the committee?

Mr. WALKE. I think it is intended to, Mr. Tonko. We had testimony before this committee today that criticized past panels for being imbalanced, and this was the approach to supposedly address that. Administrator Pruitt did it during the Trump administration and blocked people who had EPA grants for serving on the committee, and that was found to be unlawful by a court. So I think there have been attacks on the integrity of CASAC for as long as I have been practicing law.

Mr. TONKO. Is there any evidence that the current structure of the CASAC is causing it to fail to adequately fulfill its responsibilities?

Mr. WALKE. To the contrary. I mean, Dr. Boylan was reappointed by a Democratic administration and provided his views, and they were fully captured for the public record, and I think that was to the credit of both Dr. Boylan and to Mr. Biden and his EPA.

Mr. TONKO. Thank you, and, Mr. Chair, I yield back.

Mr. CRENSHAW [presiding]. The gentleman yields back. The Chair recognizes Mr. Latta.

Mr. LATTA. Well, thank you, Mr. Chairman, and thanks to our witnesses for being here.

This is a pretty important discussion that we are having today on these bills that we—the discussion drafts. And, you know, if you look at this map, again, looking where the State of Ohio was, it pretty much puts the entire State of Ohio in jeopardy.

And what I would like to start, Mr. Whiteman, if I can just ask you some real quick questions. One of the things you said in your testimony, that EPA acts based on faulty scientific analysis. How often does thought happen, and how can this affect this map right here?

Mr. WHITEMAN. Let me first qualify, I am not a scientist, but there is a lot of science that goes into this, into the NAAQS, and there are concerns—you know, let me just speak from the business community perspective on cost, because ultimately if we are not considering costs and we are just considering one side of the equation and not the other, it leaves with unbalanced and overly burdensome regulatory provisions that we are finding ourselves now in this situation of having potential permitting gridlock.

Mr. LATTA. Let's go back just a couple years back because, you know, when we were talking about maybe a county being out of compliance, and the county that would be adjacent to it—and all of a sudden the county adjacent to it who might not have any issues, but because of it being next to that county, depending when that test is being run, then all of a sudden then that could be putting the county adjacent that didn't have any issues out of compliance. But would you say when you are looking at this map today, it is putting everything out of compliance, is that correct?

Mr. WHITEMAN. Yes, you know, the red areas, we completely expect them to be in violation of the standards. And those next to it, we expect permitting gridlock to be there because you need some headroom to be able to site these facilities. And because they are so low, the standards, so close to background levels, there is just not a lot there.

Mr. LATTA. Let me ask a few more questions real quick. You know, when these tests are out there and the monitoring goes on, you know, when they take into effect certain things—like, I have got one in particular: You have an interstate highway that runs through a county. Would, you know, would that be a factor out there that would be a concern?

Mr. WHITEMAN. Yes, certainly the funding that Congress passed in the infrastructure bill, building new roads and bridges, you know, State DOTs have to look at potential air emission increases and factor that and look at the NAAQS standards, and so that may block some of those roads and bridges that would increase efficiency and supply chain efficiency.

Mr. LATTA. Well, and, again, this is like several years back in Ohio on Interstate 75 from the Michigan border down to the City of Findlay, it was determined that we had to—the road was at about 115 percent capacity, and what did they have to do? They needed to put a third lane in. So what you are seeing right then is it could put that kind of a project in jeopardy to have something like that done then.

Mr. WHITEMAN. They would likely have to deal with the NAAQS program and finding offsets and other things, which may not be available.

Mr. LATTA. What would the impact be on agricultural areas? Do you have any idea on that?

Mr. WHITEMAN. Certainly they are one of the nonpoint sources that are becoming—you know, as industrial emissions have gone down, or around 16 percent, other nonpoint sources like, again, road dust and fires are becoming a bigger portion of it, so it is likely that, you know, farming and other things will be in the crosshairs for this type of NAAQS, which is bringing pollution levels down so low.

Mr. LATTA. And just to follow up on that real quick, just a comment on my part because, again, you have to think about when harvest is done. So if you are shelling corn, or if it is going to—you are harvesting beans, you are harvesting wheat, that is the time of the year that you are going to have a little more dust in the air. But thank you.

Mr. Noe, if I could ask you, could you tell the committee about the cumulative regulatory challenge facing American industrial, what it means to this country?

Mr. NOE. Thank you, Congressman. The challenge is enormous, and there is so much at stake because, if our regulatory system isn't working well, and the permit system is gridlocked, that grinds progress to a halt. We need to play to our strengths. We are the most innovative country on the planet. We have great entrepreneurs. We have a great, productive workforce. And our workers just want the right to compete. That is all they are asking for.

And so we can't have a picture like that where the permit program is basically collapsing because what those colors show you, it is not just there are lots more of these nonattainment areas in red. That pink is a special problem for my industry. And those are attainment areas, OK. So don't get me wrong. We are in rural America, by and large, those are cleaner areas that tend to be in attainment, but by putting the standards so close to background level—average in this country is 8, they put it at 9, we—that blocks major projects in our industry. They typically need an increment of 3.

So the simple math is, you start at background, let's say it is 8, you add 3 to that, where are you? Eleven. That is way above the standard at 9. You can't do it. You have now blocked a project that is both going to create more jobs in this country, help onshore manufacturing, put wealth in communities that really need more economic development and job opportunity. You are blocking all of that, and you are also preventing more efficient technology that is also cleaner technology.

So that is what I mean when I say we have got to be smarter than that. We need a permit system that works and allows all of the benefits of our economy where we can have both jobs and environmental progress to happen together.

Mr. LATTA. Thank you very much. Mr. Chairman, thanks for the indulgence. My time has expired. I yield back.

Mr. CRENSHAW. The gentleman yields back. The Chair yields 5 minutes to Ms. Schakowsky.

Ms. SCHAKOWSKY. Thank you, Mr. Chairman. Mr. Walke, I want to just tell you that you and I are on the same panel right now and on the same view. You know, when I was in the State legislature in 1995, I found the report and I stood on the—in the State legislature and said, "Please, let's pay attention to this issue, time is running out."

Well, how many times have we heard that, that time is running out? We know that the international panel on climate change said that very clearly. We have heard them all the time.

But even more important to me is the children in my district, especially in low-income districts, have more asthma than others in the country, and we don't want to see that happen.

We have to understand that time really is running out. And while we want to make sure that we have a good economy, are we going to trade that in? And that definition about all the businesses that are made—I am not against them, but I say we have to do something. And I wanted you to talk about the things that were—that have been introduced.

What is going to happen if those bills go into fruition, and are we going to do better?

Mr. WALKE. Thank you, Ms. Schakowsky. No, we are going to do worse, and I think across the board that is clear in my testimony. A bipartisan Congress in 1970 and again in 1977 and again in 1990 ensured that health standards for Americans protected us all with an adequate margin of safety. And the courts and EPA have found that means children, it means the elderly, it means people suffering from asthma and emphysema, to make sure that we have health standards that protect all Americans, not just some.

And this bill would eliminate that. It would allow economic impacts or attainability or, you know, cost feasibility to eliminate the protectiveness of standards for children, for the elderly, and then for the most vulnerable among us because it eliminates the health foundation for the standards and replaces it with whatever costs decide is good enough.

Ms. SCHAKOWSKY. Yes, thank you. So I wanted to ask you, what is the most immediate thing that you think that we want to do to start to catch up with this time line that is growing stronger?

Mr. WALKE. So the current process for setting the health standards takes too long. But it takes too long because EPA engages in a bunch of steps that the statute doesn't require. So I think that we could have a science- and health-based process that actually does update health standards according to the best medical science closer to 5 years than 10. Certainly closer than 15 that this bill would produce. And we would be better served by that process.

We have recommendations to strengthen the current unsafe ozone standard now. And this administration, if it wanted to, could act on that. Instead, they have announced that they don't see any cause or reason to update the standard until 2030. That is 15 years after it was last updated, Ms. Schakowsky, in the year 2015. And we have been told that level is unsafe, and we are going to be stuck with that unsafe standard until at least 2030 and beyond.

Ms. SCHAKOWSKY. Are our—yours and mine, and I think a lot of people in this country, are we going to be really saying to manufacturers that you can't do a job?

Mr. WALKE. Of course not. Like you said, 1995 is an interesting year that you mentioned because that is when the Chamber of Commerce and some others filed lawsuits to require that health standards be set based on cost. That resulted in the Supreme Court decision in 2001 that unanimously said no, that is just wrong.

K, so this fight has been going on for a long time, and as Mr. Tonko said, we have been told ever sense, the sky is falling, but it never has. And these complaints are ones that are designed to weaken the law. There is a lot of complexity in this testimony, and there are surely things that could be improved with implementation of the program. But eliminating Americans' legal right to safe air based on medical science is not the way to do it.

Ms. SCHAKOWSKY. I agree. And my time is up, but I wanted to thank the—allowing me to talk a little over. Thank you. I yield back.

Mr. CRENSHAW [presiding]. Thank you. The gentlelady yields. The Chair now recognizes the chairman of the full committee, Mr. Guthrie.

Mr. GUTHRIE. Thank you, Mr. Chairman, for the time, and I look forward to the discussion based on what we just heard. I see a good friend of mine, Johnny Walke is in the audience. Johnny Walke is from Tennessee, and he runs a business. He is trying to put people to work and run a manufacturing business and be successful. And he has no other intent than to run a clean, sound business and make sure that he puts people to work.

And it is a high—what do you call it?—you are in a high-cost, low-margin business, and that is a fun one to be in, right, a high-cost, low-margin, and just trying to stay ahead. And regulations matter. But we do need a clean environment.

So Mr. Whiteman, the Biden administration did a particulate mater rule, and they were reducing annual standard to 9 parts per microgram of cubic meter, which is getting close to some areas of the country, it may be in that lower-than-background levels. Could you describe what having a standard lower than background levels, what the impact could be on manufacturing, or ability to develop, ability to construct, ability to operate?

Mr. WHITEMAN. It essentially puts those areas into gridlock. I mean, the way the permitting works is once you are out of attainment, you have to implement the most stringent emissions control technologies out there under the lowest achievable emissions reduction program. And on top of that, you are going to have to seek offsets because, once you establish the background so low and you are in this area of trying to implement layer controls, you are going to need some help somewhere else.

The problem is, you set it so low everybody else is going to be in the same boat. So everyone else is going to be pointing to each other like the Spider-Man, and then I am like, can I get your offset credits from you? So ultimately it is going to lead to a lot of projects like the one I mentioned in Wisconsin that is going to get blocked.

Mr. GUTHRIE. Well, it was mentioned earlier that people say the sky is falling. I hope we can fix this product before the sky falls. That is the idea, not have it fall on us.

So Mr. Noe, the pulp and paper industry used a lot of energy data centers which are being built to support and develop artificial intelligence also needed an enormous amount of energy. What insights can your industry share with those in the AI sector about how these air quality standards will impact their ability to grow in the United States?

Mr. NOE. Thank you for that question, Mr. Chairman. And I think that shows the urgency. We have got to be able to build things. We have got to be able to expand things. We have got to be able to modernize things in this country. And what that map is showing you is permanent gridlock all around the country. And it is not just these bigger red areas of nonattainment that Mr. Whiteman was mentioning. All of that pink is areas that are in attain-

ment. So you would think things would be fine, but they are not, because there is permit gridlock. And if you want to do a major project in those areas, you are going to be blocked.

So, you know, there is a lot at stake here. It is not just U.S. manufacturing competitiveness. Our place in the world, our ability not only to compete, but national security issues are at stake, because the demand that is coming online for energy in this country, including electricity, are massive. And that is what keeps CEOs up at night, I can tell you.

Mr. GUTHRIE. Well, thank you. And that is a good point. Because, you know, from the mid-1990s until just recently, we have had a flat-level demand for power. Part of it is because—and thankfully so—we have become far more efficient at using the power that we use, which we absolutely should be.

The second part of it is, we unfortunately had flat manufacturing growth, which is now beginning to increase, but not just bringing jobs back but also th excessive demand, the extensive demand that is coming from new areas which is data centers. I always quote, and I said that Bill Gates had a Microsoft data center—can, not everyone, but can—one of them can use as much power as the city of Seattle. So that what we have scale up for. If we don't do it, then we are going to lose this battle to China. And I would rather have the American values govern AI around the world than Chinese values any day. There is no comparison to that.

So let me go to Mr. Boylan. The Clean Air Act requires EPA to review and revise air quality standards on 5-year intervals. But the Biden administration conducted a review of the particulate matter outside of the normal review cycle. That means States like yours may have significant burdens in implementing these changing standards. The draft legislation will move it to 10 years.

As the head of Georgia's program, can you discuss the impact that would be for you?

Dr. BOYLAN. Yes, so the impact of changing it from 5 to 10 years, is that what you are asking?

Mr. GUTHRIE. Yes.

Dr. BOYLAN. Yes, so what that would do is it would allow EPA to fully consider all the documents. The way it is now, the rush—and sometimes they try to shortcut reviews and things like that—giving the full 10 years would allow for a full consideration of all the science. These documents can be over a thousand pages long, and there's six different pollutants that are being reviewed.

And so, one, it would allow for EPA to not be rushed. But it would also give more stability to the State to be able implement. Because what happens is sometimes States are right on the verge of coming into attainment and then EPA drops the standard, and then we kind of have to start the whole process again of getting back into nonattainment. So it would give more stability and allow for a better long-term planning for attainment.

Mr. GUTHRIE. Thank you, Dr.—I said Mr.—thank you, Dr. Boylan. I appreciate it, and I will yield back.

Mr. CRENSHAW. The gentleman yields. The Chair now recognizes Mr. Peters.

Mr. PETERS. Thank you, Mr. Chairman. The Clean Air Act is one of our most, the Nation's most important substantive environ-

mental and public health laws. At the center of the law are the National Ambient Air Quality, or NAAQS. They define what levels of common air pollutants are safe to breathe, and they are developed based solely on science and public health considerations. And I have often talked about in the context of permanent reform.

When we talk about statutes like NEPA, we don't have to worry so much about NEPA because we have the Clean Air Act and the Clean Water Act guarding us against the emission of pollutants into the atmosphere, into the environment without permission by way of a permit.

And as we consider ways to support infrastructure and energy development, I think there is room for bipartisan conversation. We should be looking at how to reduce permitting delays, provide clarity for important infrastructure projects. But I don't think that those projects and improvements should come at the expense of science-based processes that sets clean air standards.

So the discussion drafts we are looking at today do raise a couple of questions. One thing I am struck by is the debate between 5 and 10 years. And it doesn't sound like 5 years is ever met.

And, Mr. Walke, what were you saying was the timeline we are seeing for the actual review of this in comparison to the 5-year mandate?

Mr. WALKE. Mr. Peters, it has been closer to 8 to 10 years.

Mr. PETERS. Right. You know—and that happened under Democratic and Republican administrations. I guess I am interested if you want to extend it. We could talk about that. But I also wonder what enforcement we are going to have. What I find among my colleagues is that they are reluctant to talk back to this administration. And if they were willing to give me some assurance about actually observing a limit, I think that is something that we could talk about.

Mr. Walke, also, would you address this concern I think about the standards getting so low that they are close to background, and that makes things impractical to comply with?

Mr. WALKE. Sure. I would be happy to do so. That actually was addressed in the most recent court decision from the DC Circuit Court of Appeals about the ozone standard, where that very concern was raised. And what the court said rightly and what the law has said for, you know, 55 years is those are implementation concerns. Congress has three tools that they have included in the law: exceptional events, international transport, and rural transport. You know, maybe the regulations for those programs could be improved, but it is an implementation concern.

Mr. PETERS. That is implementations. I mean, how will you respond to the practical problem that that presents when, you know, you impose regulations on actors when the regulations themselves—see you have to get so close to background, it is impractical. How do you deal with that as a practical matter?

Mr. WALKE. Well, you know, we have heard a lot of talk about wildfires and prescribed fires and things that are real concerns in this country. And I was a little puzzled because I looked up the 2017 exceptional events rule last night. It defines exceptional events to include prescribed fires, and it mentions prescribed fires

182 times. So I am a little puzzled why we are talking about the need to change the law when the law already guarantees that.

But, you know, it requires good, hard work by people of good faith to say, look, if you violated the standard of 9 because the combination of background in wildfires pushes you over 9, you are not in nonattainment. You are not. And if the rules and the processes need to be expedited and made more efficient and effective, then we would stand ready to support that.

Mr. PETERS. OK. I guess I'd just like to pick up on the issue of particulates and wildfires. It is a huge problem. And I would just drive one's attention to the bill I did with Chair Westerman, the Fix Our Forests Act, which is the only attempt, I believe—certainly the only bipartisan attempt—to deal with pollution from wildfires by giving the Forest Service the ability it needs to actually go in and perform the forest management that would keep us from only having catastrophic fires and get us back to a normal fire cycle, which we suppressed particularly in the West for many decades.

I would also ask particularly the National Resources Defense Council to participate in that process. They have basically not helped us in a way that I think would really meaningfully reduce air quality concerns and reduce the concern about particulates from wildfires, which is a bigger climate pollution source than the entire power sector of California right now. It is the biggest problem we have.

We need the help of the environmental community. We have the Nature Conservancy that has helped us, the Environmental Defense Fund, the Audubon Society. But some people are so wedded to what the law is today that they have so far not helped us change the law to really help meet concerns about air quality. I know that is not what NRDC is about, and I ask their help. And with that I yield back.

Mr. CRENSHAW. The gentleman yields. The Chair recognizes Mr. Palmer for 5 minutes.

Mr. PALMER. Thank you, Mr. Chairman. This is a topic that I am particularly interested in. I have worked for two international engineering companies. I worked for Combustion Engineering in the Environmental Systems Division. I worked for Rust International. Everything from refuse energy to air space. And talking about particulate matter in general, we have the technology to produce that, but I think we are at a point now where we are asking industry to meet standards that we don't have the technology to meet, particularly when it comes to, as my friend from California mentioned, dealing with wildfires, agricultural dust, just things that occur in nature, a substantial part of the particulate matter that is in the atmosphere over California originated in China or other places.

How do you respond to that? Obviously, we want to maintain as high an air quality as we possibly can, but at the same time we have got to take into account what we are capable of and what is economically sustainable. Any of you?

Mr. NOE. Congressman, what I would say is, a hundred percent no one is saying you shouldn't use best technology. That is not the issue. The issue is we have got a permit program that is basically collapsed right now. You can't get a permit to do a highly beneficial project that anyone could tell you is not only going to create jobs

and economic growth and inject that community with some prosperity but it is also going to be a more efficient—this is typical—so it is going to lower missions per ton of production.

Those are the kind of projects we should be having all around our country, and that map's showing you we can't because you have got permanent gridlock all cross the country, including in attainment areas.

Mr. PALMER. It is also a problem, though, I believe we are literally on our national security situation with regard to the processing and refining of rare earth elements. There is not a single major refinement for rare earth elements in the Western Hemisphere. If I said there wasn't one in the United States, that would be bad enough. There is not one in the Western Hemisphere. And there is only nine in the world. Eight are in China. The other one is in Malaysia.

And there is a reason for that. We have regulated these industries out of existence to the point now that we are confronted with a national security emergency. Your economy depends on them, but your military depends on them.

Mr. NOE. Absolutely.

Mr. PALMER. So I think we have got to find that balance. The other interesting thing about this is, is when you look at asthma rates—and, admittedly, I wouldn't expect China to provide the most accurate data, or India for that matter—but when you look at efforts to improve emission quality, the United States has a prevalence of 8.7 percent, China has one of 2.2 percent. And anyone who has ever been to China will tell you that the air quality there is substantially worse than here.

So there is just a lot of information out there that I think requires a little different narrative. I think part of the problem is, from the narrative from my colleagues on the other side of the aisle is that the EPA regulations only impact large businesses. And that is not true. So I think when you look at the overall impact, and whether it is homebuilders, whether it is small manufacturers, we are literally regulating our economy. And we have been regulating it into oblivion to get us to the point where we are no longer competitive.

I was asked to be on a panel with members of the European Parliament, and we were talking about this, and I said, you know, China subsidizes companies, they cut up—they don't follow the rules that we follow, whether it is wages, in some cases it is slave labor. And how do we respond? We tax our companies. We regulate them to a point that they are not even competitive within our own markets.

And I think part of what all of us have got to come to a realization of is that, you know, we have got to have sensible regulation. We are not in competition with Europe, we are not in competition with Canada. It is the West in competition with China. And I think it is time that we sat down and had a very serious discussion about the regulations that we need, the tax policy that we need. That is what we are trying to do with this bill that they are so adamantly opposed to, is we are trying to get to a position where we can bring back these industries that we are going to need for economic security and national security.

Thank you, Mr. Chairman, I yield back.

Mr. CRENSHAW. The gentleman yields. The Chair now recognizes Mr. Ruiz.

Mr. RUIZ. Thank you, Mr. Chairman. At the heart of today's hearing is the National Ambient Air Quality Standards, our Nation's baseline for breathable, safe air. The standards are designed to limit how much of certain harmful pollutants can be in the air. And yet, rather than strengthening these standards, my Republican colleagues are once again choosing a familiar path, chipping away at policies that protect the environment and the health of the American people.

So let's be clear: Weakening these standards mean more pollution, more illness, and more deaths. And these NAAQS protect our health, environment, and also vulnerable communities.

Fine particulate matter is microscopic pollution so small that they can enter our blood right straight through the lungs. They are tied to asthma, heart disease, lung damage, and early death. And in communities like mine, the consequences are dire.

In California's 25th District, we have been classified as an EPA nonattainment area for years, meaning our air quality consistently fails to meet the national health base standards set by the Federal Government. Riverside County has been flunked by the American Lung Association, receiving an F for our annual particle pollution.

Mr. Walke, is it correct that the new NAAQS standards have consistently provided significant health benefits for our communities, especially our most underserved?

Mr. WALKE. Absolutely, Mr. Ruiz. And they will continue do so if we let them. You know, the State of California has about 10 percent of the manufacturing in this country. It is the fourth-largest economy in the world. It also happens to have the greatest air pollution challenges in the United States.

And yet the California Air Resources Board strongly opposes these bills because they know that protecting health—and children's health, especially—is compatible with economic growth. And they know that deadly fine particle pollution kills far too many Americans that we can prevent by upholding the law.

Mr. RUIZ. Well, that is why I am so concerned about these legislative proposals that will delay and weaken these standards. Last Congress, we examined changes to the PM 2.5 standard, which is projected to save thousands of lives.

Mr. Walke, can you share why it was critical for EPA to follow the science when the Agency revised the PM 2.5 NAAQS standard?

Mr. WALKE. It was critical because PM 2.5 is responsible for more premature deaths than any other air pollution in this country and around the globe. EPA found that strengthening the standards would avoid 4,500 premature deaths every year as a result of this.

And, Congressman, I am a little puzzled by some of this conversation. These bills do not eliminate Clean Air Act permitting. So it sounds really like what is going on here to me is they just don't want the PM 2.5 standard to be strengthened, then don't want it to be in place at all so that permits would have to be obtained to meet those stronger limits.

Mr. RUIZ. And so if EPA had considered industry costs during the standard-setting process, how might that have impacted the

standard? And what would be the downstream effects for communities rural and impoverished like mine?

Mr. WALKE. I don't think EPA would have strengthened the standard. In fact, that is what the Trump administration did as it was walking out the door on December 23, 2000. They refused to strengthen the standard, and I think they were just secretly considering costs. And the Biden administration properly reconsidered those standards as the law has always allowed for four decades. And that is why we now have safer standards protecting more American lives.

Mr. RUIZ. Thank you. As an emergency physician, you know, I have seen the impact of this pollution up close: Kids wheezing through asthma attacks, seniors collapsing from respiratory distress. And these are not data points, they are people, and they are depending on us to act. But instead of standing with their constituents, Republicans are standing with corporate polluters.

Last Congress, committee Republicans voted for the bills being discussed today. These are disastrous bills, and now they are back once again moving these bills and trying to delay and derail these public health standards.

Let's be honest: They are not defending public health, they are not defending Medicaid or working families, they are defending polluters and profit margins. And the cost is measured in ER visits, missed school days, missed work, and lives cut too short. So people will die. As we have seen, people who live in high-polluted areas live 10 years less than people who live in nonhigh-polluted areas. The evidence is there: High pollution kills people earlier than what was intended. And we must uphold and enforce the National Ambient Air Quality Standards, not weaken them. I yield back.

Mr. GRIFFITH [presiding]. I now recognize the chairman of the Health Subcommittee, the gentleman from Georgia, Mr. Carter.

Mr. CARTER OF GEORGIA. Thank you, Mr. Chairman. And I thank all of you for being here. This is extremely important. You know, balancing America's air quality with economic development begins with implementing commonsense legislation. I think we would all agree on that. EPA reviews the National Ambient Air Quality Standards on a 5-year interval.

After establishing the National Ambient Air Quality Standard, States assume the primary responsibility for implementing and enforcing them, these rules. This is an extremely time-consuming process, one that takes years and years. I have got a bill, it is called the CLEAR Act, that would give States the time needed to implement standards without rushing the process. And I think that is very important. This bill also allows States the opportunity to correct deficiencies found by EPA in State implementation plans for NAAQS before EPA can issue a Federal implementation plan. The CLEAR Act offers commonsense solutions, commonsense solutions to make attaining clean air standards realistic while giving States the time necessary to comply.

Dr. Boylan, I want to ask you. You are obviously very familiar with implementing clear air quality standards and policy. Can you tell me more about the implementation process for these kind of rules that we are talking about here?

Dr. BOYLAN. Yes, so for the implementation for the attainment and the nonattainment areas. For attainment areas, there is a lot of hurdles for getting new permits implemented. In fact, the last time the PM standard was dropped from 15 micrograms to 12 micrograms, we had four nonattainment areas, and we had zero new, large projects go into those areas until the areas were designated back to attainment many years later. In addition, areas that were attainment, there was so little headroom that the number of new projects even in the attainment areas declined substantially in those areas. So that is kind of what we are looking at with the new standard of 9 micrograms here in Georgia.

Mr. CARTER OF GEORGIA. OK. Well, let me ask you this: Lowering the NAAQS standards, how does it impact you on a local and a State level?

Dr. BOYLAN. Yes, so when the NAAQS is lowered, there is a process to go through for designations. It is very resource-intensive. We have to make recommendations to EPA on areas that are attainment or not attainment. It also involves the evaluation of exceptional events, particularly in Georgia for prescribed fires. We had a team of 14 people recently working on—just on exceptional events to be able to get them submitted to EPA.

So once we go through the designation process, then a new lower standard does make it much more difficult to issue permits, and then the resources become much tougher, or working with the companies to see if there's ways to find compromises and things like that. But in the end, sometimes projects just need to be denied because there is not enough headroom to issue the permit.

Mr. CARTER OF GEORGIA. OK. Well, you know, we have had a lot of discussion in this subcommittee about the PM 2.5 standard and whether it is too close to background levels or not. You just mentioned wildfires. Is that something that can lead to noncompliance that you think?

Dr. BOYLAN. Yeah, so wildfires—you know, we had the Canadian wildfires that impacted the Northeast and Midwest, but it also impacted the Southeast. So wildfires definitely could impact compliance as well as prescribed fires, which your bill would specifically call out prescribed fires as events that could be removed when making the comparison to the NAAQS.

Mr. CARTER OF GEORGIA. Isn't that what we call common sense?

Dr. BOYLAN. Yes, sir.

Mr. CARTER OF GEORGIA. OK. Thank you. Let me ask you this, Georgia, for 11 years in a row, the number-one State in which to do business. One of the primary reasons for that is our availability and affordability of energy.

Now, the current PM 2.5 and other NAAQS standards, does it pose a threat to the development of energy projects in Georgia?

Dr. BOYLAN. Yes, it does. In fact, I spent 4 years as the Georgia EPA liaison to our Georgia Department of Economic Development. And when I met with new companies looking to locate in Georgia, the first question they ask is, is this a nonattainment area? And if the answer is yes, they are not looking at it. And then they are looking at how much headroom there is for new projects.

But, yes, this is a serious concern with the lower PM standard, that the ability to permit new projects will be very challenging.

Mr. CARTER OF GEORGIA. Thank you for that. And I thank all of you for being here. Mr. Chairman, I will yield back.

Mr. GRIFFITH. The gentleman yields back. I now recognize the ranking member of the full committee, the gentleman from New Jersey, for 5 minutes of questioning.

Mr. PALLONE. Thank you, Mr. Chairman. Today, we are back again considering harmful regulation to undermine the heart of the Clean Air Act. And these discussion drafts are more of the same, creating loopholes and providing giveaways to industry at the expense of the people's health, and proponents are rehashing old misleading arguments to justify these proposals.

Every time EPA proposes a new policy, we hear arguments for why it can't be done. These arguments rely on exaggerated claims about implementation costs, job losses, and minimal health benefits. But we have heard all of these doomsday claims before. Over and over again, these claims have turned out to be simply wrong.

So, Mr. Walke, can I ask, what does the history of the Clean Air Act tell us about the relationship between environmental health and safety regulations and the strong economy?

Mr. WALKE. Thank you, Mr. Pallone. It is one of the greatest success stories of any U.S. law, in my opinion. We have had, you know, 400 percent-plus growth in GDP over the period that the Clean Air Act has reduced emissions by, you know, 78 to 90 percent. And so all of these doomsday scenarios—I have been hearing them for 32 years as a Clean Air Act attorney.

Mr. PALLONE. Thirty-seven for me.

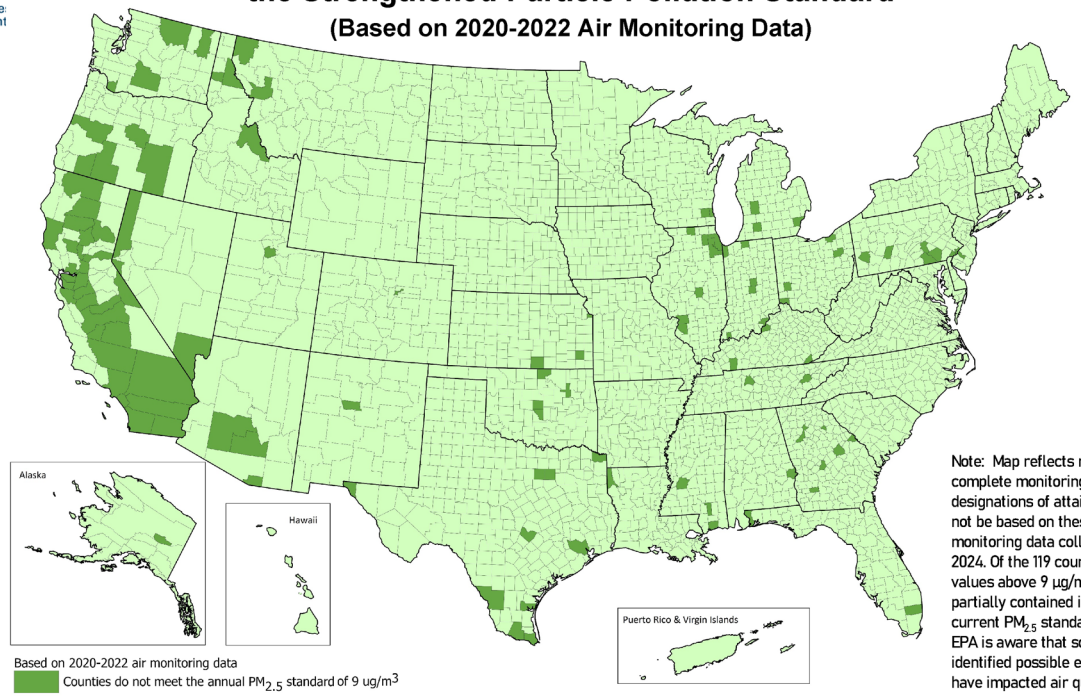
Mr. WALKE. The same ol' same ol'. Well, congratulations, sir.

Mr. PALLONE. Thank you. Well one of the exaggerated Republican claims being circulated about the EPA's PM 2.5 standards is that it is simply impossible and the majority of counties around the Nation will be in nonattainment. Of course, this is at odds with EPA's own analysis. We have this map here——

[Map displayed.]

Most Counties with Monitors Already Meet the Strengthened Particle Pollution Standard

(Based on 2020-2022 Air Monitoring Data)



Based on 2020-2022 air monitoring data

Counties do not meet the annual $PM_{2.5}$ standard of 9 ug/m^3

This information is provided for illustrative purposes only and is not intended to predict the outcome of any forthcoming designations process.

Note: Map reflects monitored counties with complete monitoring data. Future final designations of attainment/nonattainment will not be based on these data, but likely on monitoring data collected between 2022 and 2024. Of the 119 counties with 2020-2022 design values above 9 µg/m^3, 59 counties are totally or partially contained in nonattainment areas for current $PM_{2.5}$ standards. In years 2021 and 2022, EPA is aware that some states have already identified possible exceptional events that may have impacted air quality in the US and may be relevant to designations decisions.

Mr. PALLONE [continuing]. And if you look at it, it clearly shows that the overwhelming majority of the United States is in light green. And these are the counties that already meet EPA's more protective standard.

Yet the National Association of Manufacturers released a report about the economic effects associated with a stronger PM 2.5 standard. And that report which has been used to justify undermining clean air protections in today's draft bills unsurprisingly paints a much darker picture.

So, Mr. Walke, again, based on your Clean Air Act expertise, what do you think of the manufacturers' report? Is it realistic to expect a potential economic impact that they are suggesting?

Mr. WALKE. Congressman, thank you. That red/pink map we have seen, unfortunately, today is just—it is fiction. It was created by consultants for NAM in a report. As the logo on your map shows, it was produced by EPA. They found that 3.8 percent of counties nationwide would be in nonattainment, and half of those were in California and already failing to meet the older standard.

So this is a California-centric problem. They have got some challenges. But the rest of the country looks nothing like the red and pink bloodbath that we saw in that other map.

Let me say one thing about headroom too. Headroom is a concept that says a new plant should be able to come in and become built and permitted very often at the expense of existing businesses and facilities that are already in that area. If you allow a new plant to come in that does not have modern air pollution controls, that shifts the burden to the existing plants and facilities that are being asked to do more.

That is not the way the law works. This bill doesn't actually eliminate the permitting program, so I think something else is going on. I think they are actually targeting the PM 2.5 standard, and like the Trump administration really aiming to make it go away.

Mr. PALMER. Well, thank you. I agree with you. Again, you know, since the beginning of the Clean Air Act, polluters have been crying wolf every time EPA has issued a new rule to protect public health. And they claim time and again that a new clean air rule will lead to economic ruin. But those claims never come true. And we know we can have a strong economy while cutting pollution and cleaning the air. Everything points to that.

So these exaggerated claims are being used to justify this legislation, which I think is dangerous and will leave communities exposed to the harmful impacts of air pollution. And these Republican draft bills once again put corporate polluters over people and will make Americans sicker.

Everyone has the right to clean and healthy air to breathe. And I think these drafts undermine that right. And that is why I will continue to oppose them for more than the 37 years. And thank you again.

I yield back, Mr. Chairman.

Mr. GRIFFITH. The gentleman yields back. I now recognize the gentleman from Texas for 5 minutes.

Mr. WEBER. Thank you, Mr. Chairman. I want to come to y'all with simply a yes or no answer.

Mr. Whiteman, you are hearing about from the other side that we want to put polluters over people. Does that sound absurd? Yes or no? We want a clean energy environment, don't we? Does that sound absurd?

Mr. WHITEMAN. Eighty-four percent of the emissions come from nonpoint sources like wildfires.

Mr. WEBER. So that is a yes.

Dr. Boylan, do you think that is absurd that people think that we want to put polluters over——

Dr. BOYLAN. Yes.

Mr. WEBER. Mr. Noe, I am going to come to you next.

Mr. NOE. Yes, sir.

Mr. WEBER. I am going to stay with you, Mr. Noe. We seem to be looking at two different maps.

Mr. NOE. Yes.

Mr. WEBER. Why is that, do you think?

Mr. NOE. Well, it is very misleading to look at the map that was just shown because those are EPA projections, and I won't get into the details, but the point is that is showing the projections of who is in attainment. That misses the point.

What this map shows you is the whole country lights up on who is going to have permit gridlock, and that is the problem. Our industry, as I said, by and large, is in cleaner attainment areas. We are in rural America. But the problem is the way the math works under the program, you got to take what is background level. Average in this country is 8.

[Chart shown.]

Mr. NOE. You have a major project, you need an increment of 3 more micrograms. That gets you to 11. The standard is 9. That is gridlock. That means you can't create jobs, you can't inject the local community with prosperity, and you also can't upgrade, which means you can't lower emissions per ton of production. That is why it is so frustrating. It is a lose/lose for jobs and the environment.

Mr. WEBER. And all the while, all our enemies are outstripping us big time, not just——

Mr. NOE. Absolutely. We have got to compete. Our workers are asking you, just let us compete.

Mr. WEBER. Pretty simple.

All right. Dr. Boylan, I am going to come to you, if I may. On March 12, 2025, the EPA announced the reconsideration of Biden's administrations of particulate matter PM 2.5 standard, which lowered the standard from 12 micrograms per cubic meter to 9.

This committee going back to the previous Congress has expressed concerns that the 9 level simply is not attainable in many regions without bringing manufacturing and production and infrastructure development to a halt. Did I mention our enemies are outstripping us right now?

So in your opinion, is the 12 standard a more appropriate balance between protecting public health and while preserving our Nation's ability to grow and innovate in spite of our enemies?

Dr. BOYLAN. Yes, I do.

Mr. WEBER. Well, you are easy. Can you share how the United States has successfully balanced high-air quality standards with

the needs of industry and what the EPA needs to keep in mind as it considers revising the PM 2.5 standard.

Dr. BOYLAN. Yes, so, you know, none of these bills are looking to remove the permitting process. The analysis that is done, the best available control technology, the lowest achievable emission rate—all those are in there. It is just ensuring that the standard is set at a value that is achievable. When you said it——

Mr. WEBER. A reasonable standard. Keeping in mind these kids that we love and the parents and the grandparents that we love. Keep going.

Dr. BOYLAN. That is correct. When you set standards at or below background values, they are impossible to meet, and it basically causes permitting gridlock.

Mr. WEBER. And it handicaps, as Mr. Noe said, industry. All the while our enemies are loving every minute of this.

Dr. Boylan, I am going to stick with you for a minute. Given the States that are responsible and implementing State implementation—which I was in the State legislature environmental reg committee when I was back in Texas in 2009, 2012.

In implementing State implication plans to ensure compliance with EPA's air quality standards, how important for it is for those States to have a meaningful role—which they love their kids, people in most legislatures want people to thrive, they don't want kids to get sick.

How important is it for them to have something to say meaningful role in the standard-setting process to ensure they can actually implement these standards? How important is that?

Dr. BOYLAN. That is very important. And specifically, you know, getting more State regulators on the case act is important because many of the academic researchers, they understand the science, but they don't understand how it translates into the NAAQS, which involves not just a number, it is the level, it is an averaging period, it is a form. You know, and there is—many of the academic researchers don't understand the importance of the risk and exposure assessment. In fact, the last ozone study, they didn't even want to see a risk and exposure assessment. They looked at some epi-studies and said the number should be 55, which just really didn't make sense.

Mr. WEBER. It is like you are trying to pull a rabbit out of the hat. It just a stymied growth. Anyway, Mr. Chairman, thank you. I yield back.

Mr. GRIFFITH. The gentleman yields back. I now recognize the gentlelady from California for her 5 minutes of questioning.

Ms. BARRAGÁN. Thank you. Mr. Walke, we just heard an exchange about fiction, absurdity, and pulling rabbits out of a hat. Is there anything that you want to correct from that conversation for the American people that are watching today?

Mr. WALKE. Sure. I would like to, you know, address this constant charge of permitting gridlock. That term has been used a lot today. What you won't find for it is the evidence in testimony presented today or in the prior two hearings that would remotely justify eliminating Americans' right to safe air over some problems that have been identified.

This system is not perfect. They have given us some examples of things that should be improved. And the exchange that just happened, I think we had something really useful happen that I want to bring attention to. And one of the answers to Mr. Weber's question, it became clear that permitting gridlock is just a euphemism for eliminating the right to safe air by claiming that it is not attainable or that we should be considering feasible costs.

Mr. WEBER. That is funny.

Mr. GRIFFITH. It is Ms. Barragán's time.

Ms. BARRAGÁN. Go ahead, sir. And I expect to have that extra time.

Mr. GRIFFITH. Yes, ma'am.

Mr. WALKE. And so I, you know, I do want to emphasize that the focus on implementation and permitting in particular where Dr. Boylan correctly said that this does not change the permit process, OK, in the implementation section of the bill. Rather it is the attack on the health foundation of setting standards that guarantees Americans' right to safe air. That is really the target of this bill.

We will continue to have permitting, and we should for new facilities coming into an air shed using modern air pollution control technology. They would like the PM 2.5 standard to disappear.

Ms. BARRAGÁN. Great. Thank you, Mr. Walke. And I think the Member that was interrupting you is indicating of they don't like to be challenged. And the answers that are given, they don't like the fiction to be corrected. So thank you for doing that.

The Trump EPA and House Republicans claim that weaker clean air regulations will spur economic growth. But according to a recent Associated Press investigation, these rollbacks could lead to up to 30,000 premature deaths annually and wipe out $275 billion in public health benefits each year.

Mr. Chairman, I would like to enter into the record the Associated Press article entitled "Trump EPA Rollbacks Would Weaken Rules Project to Save Billions of Dollars and Thousands of Lives." The article highlights Jessica Blazier whose 11-year-old son Julian has multiple health conditions that make him more sensitive to air quality, which can make breathing, quote, "feel like a knife sometimes," end quote. Jessica said these rollbacks, quote, "are almost adding insult to injury," end vote.

Mr. GRIFFITH. And it is on the staff list. So we will make sure we get it put in the record.

Ms. BARRAGÁN. Mr. Walke, I have a district that has heavy air pollution surrounded by freeways and ports. Kids play in parks with inhalers around their necks because of air pollution. Can you talk about how weaker air standards will affect school attendance and student performance?

Mr. WALKE. Yes, Ms. Barragán, there's been numerous studies that show that attention in school is dramatically worsened in districts like your own, unfortunately, due to air pollution. We know that mercury and lead, both neurotoxins, begin damaging the developing fetus all the way up through children that breastfeed due to the mother's milk being contaminated by those neurotoxins.

And yet we have had a Congressional Review Act resolution in this Congress that rolled back air toxic safeguards under the Clean Air Act for the first time in the law's history. We have got the Ad-

ministrator announcing that he wants to conduct the greatest rollback in U.S. history of nine hazardous air pollution standards. We are expecting at 2 o'clock this afternoon rollbacks of the mercury and air toxic standards for power plants that burn coal.

And all of these rollbacks will have devastating impacts on the health of children, sending them to ERs, causing them to miss school, causing them to suffer learning deficiencies. And even, you know, saddling them from an early, early life with diminished IQ as a result of damage that was done to them before they were even born.

Ms. BARRAGÁN. Well, thank you for pointing that out. Because we apparently love our children too and our grandchildren too, except we don't want to go to the hospital and suffer those. And other people, I guess, feel differently, and they are OK with having kids suffer and not get the air quality that they deserve and the clean air they deserve.

I yield back.

Mr. GRIFFITH. The gentlelady yields back. I now recognize the gentleman from Pennsylvania for 5 minutes of questioning.

Mr. JOYCE. Thank you, Chairman, and thank you, Ranking Member Tonko, for holding today's important hearing. Thanks to the panel for testifying here today.

Important context for this hearing is understanding that America's air quality is among the best in the world, and that the U.S. emissions have steadily decreased over the past several decades, even as economic input and output has changed. We observed this trend because of the fact that reasonable clean air standards lead to economic growth. And if this economic growth spurs innovation in investment and technology, that ultimately reduces emissions without sacrificing output.

We need to balance public health and clean air goals with the reality that attainable standards will not only hurt the American economy but also disincentive development of the more efficient technologies necessary to continue to lower U.S. emissions.

Mr. Whiteman, I would like a clarification of some previous discussion that we have had. Could you explain the data differences between the two NAAQSes that were recently discussed?

Mr. WHITEMAN. Will do. Thank you for the question, Mr. Joyce. So I just wanted to talk a little bit about the differences between the two maps that we have seen here today. The map that was put together that we presented and talked about, actually it looks at more recent data—data that actually incorporates the fires from 2023, which is missing from the EPA map which we just saw previously. And that is one of the big reasons why we see such a massive increase in nonattainment areas. Everybody remembers here in Washington, DC, when we had 2 weeks of red haze in the sky because of the emissions coming down from Canada.

The other thing is EPA only looks at the monitored areas to determine nonattainment areas, and they didn't look at adjacent areas. So therefore, we did. And when you have adjacent areas to nonattainment areas, you can expect them, too, to have issues.

And, finally, I will just mention that EPA has a habit of underestimating nonattainment areas. In the 2015 NAAQS, they estimated 14 counties out of California to be out of attainment with

the NAAQS. The last time I looked at EPA's Green Book, there are over 143 counties that are out of attainment with the ozone NAAQS.

So the issues can be significant. It is a real issue. You have to look at the recent data. And, unfortunately, the prior estimates have been underestimated, and we think our maps are much more accurate.

Mr. JOYCE. Thank you for that clarification.

Dr. Boylan, in your testimony you discuss how the lack of headroom in some areas due to the stringent 2024 annual PM 2.5 standards hurts economic development even in attainment areas that comply with the current NAAQS. Can you discuss how these overly burdensome standards can prevent the permitting and development of innovative projects such as data centers that we desperately need?

Dr. BOYLAN. Yes, so it goes back to the headroom issue with the map—if you looked at the map in Georgia, it had a lot of red areas and then a lot of pink areas, making it very difficult, the pink areas being the attainment areas. With so little headroom and the amount of energy that is going to be required for these data centers, it is going to be very challenging to be able to permit all the new power generation that is going to be needed to power this industry.

Mr. JOYCE. By creating an inhospitable environment for these projects, data centers, you mentioned, we will lose out on investment in American innovation to countries like China, which lacks truly any meaningful environmental regulations.

Dr. Boylan, would you agree that ceding our investment opportunities to foreign adversaries who do not have clean air requirements not only harms the U.S. economy but is incompatible with the ultimate goal of protecting the environment?

Dr. BOYLAN. Yes, I would agree with that.

Mr. JOYCE. Mr. Whiteman, do overly aggressive and burdensome environmental regulations threaten our global competitiveness?

Mr. WHITEMAN. They are really challenging. They are micromanaging businesses and aren't providing the opportunities for to us innovate, which we do best.

Mr. JOYCE. In the same vein, in order to encourage investment and project sponsors, they need to have the predictability when they choose to invest their resources that will not be burdened with unforeseen costs.

Unfortunately, PSD projects that submitted previously but not finalized before the effective date of tighter standards are not grandfathered in will be forced to invest resources to update their permitting.

Dr. Boylan, how will giving more flexibility to projects that are already engaged in the permitting process benefit both the State and the industry stakeholders?

Dr. BOYLAN. Yes, so you are correct that there is no grandfathering in. The grandfathering would allow projects that are already in the permitting process to continue through that process and finish them out. So it is a lot of resources for States and industry, and rather than having to go back to the drawing board and starting from scratch again.

Mr. JOYCE. So short answer: Grandfathering in will speed up the process?

Dr. BOYLAN. Yes, that is correct.

Mr. JOYCE. Thank you, Mr. Chairman. My time has expired. I yield back.

Mr. GRIFFITH. I now recognize the gentleman from Florida for his 5 minutes of questioning.

Mr. SOTO. Thank you, Chairman. You know, in Florida, we are a peninsula. We are blessed with a naturally clean air quality as the breeze just blows through, and no mountains to stop it. A lot of this—as you can tell from the maps that have been put up, geography has a big effect on it. And we are—every one of our counties, including in central Florida, are below the National Air Ambient Quality Standards.

Although, we are still working on clean air in central Florida with the closing of the OUC coal plant, natural gas, solar, nuclear are the predominant power sources in central and south Florida. We also see IRA projects, including the largest solar plant in North America coming to our area.

Although we did just recently—Orange County had an air pollutant ozone at elevated levels on May 23 primarily due to forest fires, which obviously we are discussing here today, and a big population with some vehicle pollution.

And Florida has the second most EVs of any State in the Union. That may shock some folks. And then you look at with transportation being the biggest air polluter, 20 percent of new vehicles that are bought hybrid and electric. So we see the trends and where they are going.

Another interest we have is hurricanes, which are getting more extreme and are making insurance rates go up. They are making it intolerable for many Floridians, and it is making it progressively worse.

So why would we want to stop now the progress that we are making on it? That is not common sense. That makes no sense. When we are looking at data centers, AI, fabricators from microchips, you know, I feel like a lot of this conversation is like we are having it 10 years ago. Most of these places, they are going nuclear now.

Microsoft, 20-year agreement with Three Mile Island. Amazon, a major agreement with Pennsylvania Susquehanna Nuclear Power Plant. Google, they are going with small modular reactors, and they are adding in wind and solar. And solar power is being used by Apple in Nevada. None of those have significant air pollution.

We just passed the last term the Nuclear Advancement Act, which improved timetables, fee caps, streamlines approval for well-established reactor models.

Mr. Boylan, we saw in Georgia you all just opened the new Vogtle Power Plant, and some of it has been reported in response for the increasing demand for power generation in Georgia from AI and data centers. What can you tell us about what the challenges you face with Vogtle and what we can do to continue to improve the ability to get more nuclear energy online?

Dr. BOYLAN. Yes, so plant Vogtle, while it was the first nuclear reactors built in 30 years, they were severely delayed in timelines

and well over in budget by billions and billions of dollars. I do think, you know, increase in nuclear energy is a good thing. However, not all of the data centers are being powered by nuclear and clean energy in Georgia. We have a number of new projects in house being evaluated currently for fossil. Because fossil is much quicker to get up and running than nuclear projects that could take 10 to 20 years to get online.

Mr. SOTO. So what could we do to help? What were some of the obstacles you faced with the new unit at the Vogtle plant?

Dr. BOYLAN. Well, so as far as like you mentioned, plant Vogtle is a nuclear plant. It doesn't have lot of air emissions. We don't have to actually issue permits for plant Vogtle. It is regulated through the Nuclear Regulatory Commission. What we do issue are very minor permits for our backup generators and things like that. And so that was not a major permitting project for Georgia.

Mr. SOTO. But those are things that we have to improve upon if we are going to continue to provide this power. We saw NOAA through the Climate Program Office state that wildfires are 25 percent of all days with unhealthy ozone levels.

Mr. Walke, what is the danger if we remove wildfire smoke and wildfire pollution from air quality standards?

Mr. WALKE. So Senator Inhofe amended the Clean Air Act 20 years ago to ensure that wildfire smoke did not count towards violations of air quality standards. And since then we have issued regulations that add prescribed fires, I think smartly and responsibly, to that same practice, so that States and industries are not penalized for violations of monitors that occurred due to prescribed fires. So there is no need to amend the law. The law already guarantees that. And it is a real challenge, but it is the right treatment under the law, I think.

Mr. SOTO. So the key is we are promoting management of forests because this is now 25 percent of what is affecting our clean air standards across the Nation, isn't that true?

Mr. WALKE. Yes, sir, and it comes down from Canada, as we remember from last summer, two summers ago, in Washington, DC, when we were blanketed in smog. It is a real problem for all of us. And we believe it is driven and accelerated by climate change, but we can all agree that it causes dangerous air pollution.

Mr. SOTO. Thank you. I yield back.

Mr. GRIFFITH. The gentleman yields back. I now recognize the gentlelady of North Dakota for 5 minutes of questioning.

Mrs. FEDORCHAK. Excellent. Thank you, Mr. Chairman. Thank you all for sharing your expertise with us today. I appreciate this really informative discussion.

So North Dakota, where I am from, is one of only four States that has never violated a Federal ambient air standard. And we do that while being one of the largest energy producers in the country. Yet North Dakota opposed, our State opposed, the NAAQS rule change.

Mrs. FEDORCHAK. In fact, we joined more than half the States that sued according—against this new standard. At the heart of this matter is the health assumptions and the modeling. We all agree that we want clean air for our kids, for our grandkids. It is

offensive to suggest that some don't agree with that. And I take great offense at those suggestions. We all share that.

But we also can all agree that you can get a model to say just about anything you want. And so what is at the core of this disagreement is the health assumptions. That is what my State focused on. Some of the opposition from our Department of Environmental Quality was opposition to some of the technical flaws in health modeling. Specifically, they failed to use actual models, actual air quality versus modeled air quality data.

There was assumptions that there is no safe threshold. So regardless if it was something from smoke or whatever that the factories or the emitters could never affect was considered still not safe. And then the application of urban health impacts to rural States, like mine, that just doesn't work.

So I am curious, to some of the experts here, what are the—specifically Mr.—I forget your name—from the Chamber, could you talk about further about some of the health assumptions and the health data modeling assumptions that were erroneous or could have been improved in this current rule proposal?

Mr. WHITEMAN. I think our biggest—one of our biggest concerns with the proposal was EPA short-circuiting the standard full NAAQS review process. And instead of doing the full review and going back and looking at all the science, they short-circuited that and moved forward. So that is one of our big concerns. They didn't do the full review, which is really required. And, you know, I think they could have done a better job in looking at the science if they had done that.

Mrs. FEDORCHAK. OK. Thank you.

Mr. Walke, you talked with my colleague from California, Mr. Peters, about an implementation concern regarding, you know—he asked some very good questions about how are companies supposed to deal with existing emissions that they can't affect. And you said that that is an implementation concern.

But I don't really feel like you got to the heart of the matter in providing, like, an answer to how is an emitter, a factory or a generator, an electric power generator, supposed to achieve emissions standards when the emissions in the air are dominated by sources that they can't affect? How are they supposed to deal with that?

Mr. WALKE. Well, the way they are supposed to deal with it and the way the law has worked for over 50 years is that first States and industries are not responsible for controlling emissions that are uncontrollable. No one is asking them to do things that can't be done. And so the law has mechanisms to ensure that things like wildfire smoke doesn't count towards how they receive their permits or whether air quality standards are met. And that is what I was addressing in my, you know, comments.

But the question of permitting gridlock, as I think we have seen here today, is really not about implementation, it is about an attack on the standards and whether they are too safe in one version or too low in another version.

And that is why I think that the focus should be on what the bill really does, the CLEAR Act, especially. As Dr. Boylan said, facilities still have to get the required permits and meet the modern air pollution control technology and attainment and nonattainment

under the Republican bills. And I am grateful for that. I think that is the responsible thing to do.

But why doesn't that lead to permit gridlock just as much as requiring it for a safer standard? So the attack is really on the safer standards, because we are still requiring permits.

Mrs. FEDORCHAK. The attack seems to be on—I agree with you, on the standard, and the fact that more than half of the States oppose this says an awful lot about that standard and whether it is accurate or not.

Thank you. I yield back.

Mr. GRIFFITH. The gentlelady yields back. I now recognize Mr. Landsman for 5 minutes of questioning.

Mr. LANDSMAN. Thank you, Mr. Chairman, and thank you to all of our witnesses for being here and engaging.

The proposal that we are discussing today could fundamentally change the way air quality standards are pursued, implemented in this country, and that has enormous implications for our children, our families, our communities.

As part of the proposals that worry, as we are hearing, is that the way in which we use science, it could be changed in prioritizing—or in setting these standards.

So this is, unfortunately, not the only way in which science that informs these health-protective standards has been diminished.

So Administrator Zeldin announced that they would shutter the Office of Research and Development, which affects my district in Southwest Ohio significantly, affects the entire country—just from an employment standpoint, it affects us—and would fire nearly 1,200 dedicated public servants that conduct the office's work. It is the scientific backbone, if you will, of the EPA.

Not only will this plan have a negative impact on the research conducted by the Agency, but the actions have real impact on, again, my district, our constituents.

Mr. Walke, how does EPA's work within ORD inform EPA's work to address air pollution?

Mr. WALKE. Thank you, Congressman. The Office of Research and Development scientists' work touches on every aspect of air pollution control at EPA in ways that you couldn't even describe in a full day's hearing, with the intricacy of the analysis and the world-class research. And it was just even to me breathtakingly reckless that they would shutter that office. Far more extreme than anything they did in the first term.

Just 2 days ago, they announced quietly that they are canceling a world-class air quality research lab in North Carolina. It didn't get much attention. But this is a systematic attack on the science and the scientists that inform health safeguards and protections for the American people.

Mr. LANDSMAN. I had heard somewhere recently that government sometimes is in the business of providing investments and supporting folks and trying to improve their lives, but it is also about mitigating risks, the societal risks that if government doesn't stand in the way, or try to mitigate those risks, terrible things will happen.

And I am curious. Based on your extensive experience, what are the implications of shuttering ORD. I mean, what are the risks

that we will start to deal with because we are no longer using ORD?

Mr. WALKE. So ORD, among other things, provides invaluable research into the hazards and harms of classes and chemicals like PCBs and dioxins and other chemicals that make their way into products that go into consumer products and can get into the food supply and the water supply, and so they are, you know, the scientific canary in the coal mine that alerts us to those future risks while at the same time providing the, you know, the legwork for the scientific studies and analysis that goes into trying to protect us against deadly levels of PM 2.5 pollution, alerting us to new chemical risks that we haven't even known about.

It is hard to keep up with industry and industrious chemists in this country, and ORD is in part our bulwark against that, trying to provide the Government with a fair assessment of dangerous chemicals before they get into the marketplace and end up in our food and shampoo and water and places that we can't do anything about.

Mr. LANDSMAN. And who benefits? I mean, you know, obviously this is a committee that has—there is bipartisan support for permitting reforming and getting things done built faster. You also want to make sure that we are using science and research to inform how we protect people.

Undermining that, obviously, has a negative impact on kids, families, all of us. Who benefits and who—why do this?

Mr. WALKE. Congressman, honestly, I don't think anyone benefits. Unless you adopt kind of a short-term, quarterly mentality that profits and, you know, stock values are important because really it is companies producing the chemicals and pushing them out into the marketplace that now we are facing shorter, abbreviated, inadequate reviews. It doesn't help their families or their workers to have that happen.

Mr. LANDSMAN. Or long term, their businesses.

Mr. WALKE. Yes.

Mr. LANDSMAN. Thank you, and I yield back.

Mr. GRIFFITH. The gentleman yields back. I now recognize the gentlelady from Iowa for her 5 minutes of questioning.

Mrs. MILLER-MEEKS. Thank you, Chairman Griffith and Ranking Member Tonko, for holding this important hearing today, and I also want to thank our witnesses for appearing before this subcommittee.

Over the past two decades, the U.S. has proven that environmental progress and economic growth aren't mutually exclusive. We have dramatically improved air quality while expanding energy output.

In Iowa, our farmers and manufacturers rely on stable, smart policy to keep innovating and growing and also to compete economically around the globe.

As we look to the future, any new regulations must support, not stifle, the backbone industries of our heartland.

Mr. Boylan, the discussion draft before the subcommittee today reforms several counterintuitive and outdated portions of the NAAQS program—N-A-A-Q-S, excuse me. For example, it extends the timelines to conduct the NAAQS process from 5 to 10 years.

How many times has the EPA completed a NAAQS review within the statutory-mandated 5 years.

Dr. BOYLAN. As far as I know, the 2020—or the 2020 review was last reviewed in 2015, which would have been one time. But technically it was actually 5 years and 3 months, so even technically that one didn't make the 5 years.

Mrs. MILLER-MEEKS. So—and as someone who has served on CASAC, can you explain to the committee why it is such an important role, and your thoughts on increasing State representation?

Dr. BOYLAN. Yes. So typically the CASAC is more academic researchers who understand the underlying science, but they don't really understand how the underlying science is translated into the NAAQS. From that standpoint, the NAAQS includes an averaging period of form—a statistical form and a level and an indicator pollutant, and that is understood through a risk and exposure assessment, and many of the academic researchers don't understand the value of the risk and exposure assessment, which basically translates the basic science into an equivalent NAAQS.

And a lot of State regulators deal with design values every single day and really understand that. That is why we should have more State regulators on there.

Mrs. MILLER-MEEKS. As a physician who has been both in academic medicine as well as in the field, as you say, in the community, I certainly understand and would echo that sentiment.

Can you tell me how the exceptional event process has unfolded in Georgia?

Dr. BOYLAN. Yes. So in Georgia, as the map was showing, we have a lot of red areas, many of those areas for PM 2.5. Some of those were caused by Canadian wildfires, but a majority of them were caused by prescribed burns where we burn 1.5 million acres per year to prevent the wildfires, and it has been a very successful program.

But I will say that the amount of exceptional events we have had to do—we actually recently turned in 129 exceptional events to EPA for approval, the majority of which were prescribed fire, some were Canadian wildfire, and it was a huge resource. We had 14 people on my staff working on this, on this project, over the last year and a half, and now we are actually turning to do exceptional events for the 2024 data. It is almost a never-ending process.

Mrs. MILLER-MEEKS. And would the process of extending timelines and/or the PM 2.5, would that hamper you from being able to do prescribed burns to prevent drastic wildfires?

Dr. BOYLAN. I am sorry. Could you repeat the question? I am sorry.

Mrs. MILLER-MEEKS. EPA's guidelines on PM 2.5.

Dr. BOYLAN. So the standards—yes, so if EPA—EPA has not yet approved any of our exceptional events, and so I don't know if I can answer—you know, if they can approve the exceptional events, that would be great. Right now the exceptional events are not part of the Clean Air Act. In fact, the description of exceptional events is almost contrary to prescribed burning, and that is the reason why I feel it strongly that specifically prescribed burning should be added into the Act.

Mrs. MILLER-MEEKS. You answered my question, so thank you for that.

Mr. Noe, in your testimony you described the permitting gridlock crisis that occurs when a NAAQS is changed. How does the immediate application and the revised PM 2.5 NAAQS to PSD permitting in attainment areas contribute to permitting gridlock despite those areas still meeting the new standard?

Mr. NOE. Thank you, Congresswoman. I think the map shows it best, because so much of the country lights up either in red nonattainment, or even these attainment areas where you have got permit gridlock now pink.

But I will tell you, I put a chart in my written statement on page 15 that is complicated, but it makes a really important point. This really is the first time in the history of the Clean Air Act where the permit gridlock problem is unique, because this is the first time in the history of the Clean Air Act where the standard is so low it is literally one click above background levels, the average level in the U.S., and in some areas it is, you know, it is below background, but because we are in that situation, that is why that map lights up.

And so much of your State is lit up in that, and these other Members'. And, you know, that is a shame, not just for jobs, again, and the economy, that is a shame for progress because the typical project is going to bring efficiency, which is lower emissions per ton of production. We all should want the modernization of our manufacturing sector.

Mrs. MILLER-MEEKS. Thank you. My time has expired. I yield back.

Mr. GRIFFITH. The gentlelady yields back. I now recognize the gentleman from Louisiana for his 5 minutes of questioning.

Mr. CARTER OF LOUISIANA. Thank you, Mr. Chairman, and thank our witnesses for being here today.

You know, I have heard repeatedly said from my colleagues on the other side of the aisle that we have the best air quality in the world. According to IQ Air Global Ranking shows that major U.S. cities frequently fall outside the world's top cleanest, demonstrating that that statement is not correct.

Meanwhile, some countries in territories like Bahamas, Bermuda, and New Zealand consistently outperform the U.S. in terms of cleaner air on average.

We know that 1980–2006 emissions and carbon monoxide, sulfide dioxide, lead and particulates in the U.S. have fallen lower under the Clean Act and EPA measures, yet we still are losing lives. Despite progress, chronic exposure to fine particulate matters in the U.S. still causes an estimated 100,000 to 200,000 premature deaths annually, which means we can do better.

It is not a us-against-them, it is not a one or the other. We can do better. The notion that we have the cleanest air: compared to what? People are still dying. People are still getting chronic diseases as a result of pollutants in the air. So we have nothing to celebrate. There is nothing to pat ourselves on the back about.

You know, I represent a community in Louisiana that, unfortunately, has the dubious distinction—and I hate even saying it because of the pain associated with it—nicknamed Cancer Alley. It is

an industrialized stretch along the Mississippi River which suffers from high cancer rates among residents believed to be linked to industrial pollution. I have heard stories of people who lost their families. I have seen the pain and suffering of people who have talked about their loved ones who have died because of their close proximity.

You know, we can't accept a false choice between public health and economic growth. We can have both. Congress can and must work with both communities and industries to set fair, science-based solutions to pollution standards to protect people without shutting down jobs. Many companies are already stepping up. Many have a long way to go because cleaner technologies and responsible practices aren't just good for health, they are good for business.

Communities must be safe. Clean air, cean water. If we expect industry to survive, you have to have healthy employees.

We know that, once a National Ambient Air Quality Standard is in place, States and industries get to work on how best to meet it. Along the way, we develop more effective and less expensive pollution control technologies. Not only is our air cleaner due to the Clean Air Act, but we know—now also export tens of billions of dollars of pollution-control equipment worldwide. We have seen this happen over and over again.

But the discussion of the draft being considered today would undermine EPA's ability to set forth health-protective air quality standards and drive the development of pollution-control technology, rejecting an approach that has been successful for over five decades.

Mr. Walke, why is it so important for EPA to have the ability to set strong, enforceable air quality standards?

Mr. WALKE. Thank you, Congressman. Because over 156 million Americans live in parts of the country where the air is not safe, and that is based on health standards that themselves are not protected. So the problem is bigger than the 156 million. It is actually much bigger because we are allowing unsafe air pollution levels to persist today and calling them healthy based on outdated science.

President Trump doesn't believe in climate change, but he talks about air pollution and water pollution. They issued a Make America Healthy Again report recently——

Mr. CARTER OF LOUISIANA. Dr. Walke, I don't want to cut you off. I appreciate it. I really want to get to Dr. Boylan in my final seconds.

Dr. Boylan, the corporative federalism model allows EPA to set clean air goals and allows States to decide how to best achieve them.

Before joining Congress, I served Louisianian State Senate, so I am very familiar with difficult budgetary decisions States are forced to make. That is why I am dismayed by the proposed cuts to State funding in EPA's budget request.

Dr. Boylan, would a cut to EPA's resources and State grants hurt your State's ability to comply with clean air regulations?

Dr. BOYLAN. Yes. A cut in our budget grants that we get from EPA would definitely hurt us, yes.

Mr. CARTER OF LOUISIANA. Thank you. I agree. The Federal Government needs to be a strong partner with our States. If we are going to protect the environment and public health, that includes robust and reliable Federal resources. Unfortunately, my Republicans are ignoring the dangers of toxic pollution and putting polluters over people. We can, we must do better. This is not a partisan issue. This is about lives.

I yield back.

Mr. GRIFFITH. The gentleman yields back. I now recognize the vice chairman of the subcommittee, Mr. Crenshaw, for 5 minutes.

Mr. CRENSHAW. Thank you to both the Chair and ranking member for holding this important hearing today. It has been a great conversation, especially regarding, I think, what are very commonsense and, frankly, quite mild changes to the National Ambient Air Quality Standards under the Clean Air Act.

Look, there is radical environmentalism and there is rational environmentalism, and I am certainly an environmentalist, but I am a rational one, and I would hope we all are. It is important to protect our air and water, of course, but as policymakers we deal with tradeoffs. That is what policymaking is. There is no perfect solutions to anything. There are only tradeoffs.

And you can't hold two contradicting ideas in your head, one being that, you know, what, we need more energy, or at least 50 to a 100 percent more energy over the next 50 years. That is pretty commonly understood. We want to reshore manufacturing, especially on critical items like critical minerals processing or medical manufacturing. I am actually on the same committee, that exact hearing is going on downstairs.

You can't say that but also say, look, we have to create limits to any of that manufacturing, basically making it impossible to build anything new. You can't hold both of those ideas in your head at the same time.

And, also, let's stop with the catastrophizing. And I want to let the American people know that, luckily, this crisis mode that everybody says we are in is just not true. The facts are air quality in the U.S. has been improving, not deteriorating. According to the EPA's own data, the concentration of the six critical pollutants are down almost 80 percent in recent decades. Meanwhile, the population has gone up, economic activity has skyrocketed, and energy demand has also massively increased.

So this crisis isn't true. That doesn't mean that the first regulation wasn't a good thing. But let's have a little thought experiment. One regulation being good doesn't meant 10 more are necessary. There has to be a logical limit, and I think the legislation that we have been proposing is just assessing those tradeoffs more properly.

You know, more than 80 percent of PM 2.5 emissions, they come from sources other than the manufacturing that we are talking about. We are talking about our cities being so polluted. When I lived here in DC right next to a highway, yes, I got a lot more dust than my home in Houston. A lot more. Because it is from the highway. Are there manufacturing plants around me that I am not aware of? I don't think so.

You know, so these are coming from sources other than manufacturing in the power sector. They are coming from wildfires and road dust. And we are getting to this point as assessed where you have the largest reduction—Mr. Boylan, maybe you can help me with this one. We had the—in 2024, NAAQS rule decreased limit for PM 2.5 by 25 percent. How does that drastic reduction compare to the past?

Dr. BOYLAN. For PM 2.5? The previous reduction was from 15 down to 12, and then from 12 down to 9, which is a huge reduction.

Mr. CRENSHAW. Twenty-five percent is a big reduction.

Dr. BOYLAN. It is.

Mr. CRENSHAW. And where did it start? We have been trying to actually research that during this hearing. I have gotten numbers like 65, 75. It started pretty high, didn't it?

Dr. BOYLAN. Just to be clear, there is the annual standard, which started at 15——

Mr. CRENSHAW. Annual standard.

Dr. BOYLAN. And there is the 24-hour standard, which started at 65 and has now been brought down to 35. So the annual standard went from 65 to 35. The—I am sorry. The daily standard went from 65 to 35, and the annual standard went from 15 down to 12, and now down to 9.

Mr. CRENSHAW. OK. And it obviously begs the question, what is the logical limit? And Mr. Walke, maybe you can help me. Thought experiment: What is your end goal here? I mean, should it go below 9? At what point is—have we gone too far on the logical limit of regulation?

Mr. WALKE. I guess that is just a misunderstanding, Congressman. That is not the way that the law or I view it. The goals are twofold. One, safe air for all Americans. Two——

Mr. CRENSHAW. Which we have accomplished. In your testimony——

Mr. WALKE. That is not true, Congressman.

Mr. CRENSHAW. We have accomplished it.

Mr. WALKE. That is not true.

Mr. CRENSHAW. How much better can you get?

Mr. WALKE. The second goal is safe air based upon medical science, which is why I can't and won't give you a limit because science tells us what the limit is, not a witness at a table.

Mr. CRENSHAW. OK. Say what the science tells us the limit is.

Mr. WALKE. Congressman, I am not a scientist. I don't have the science before me. That is why we need to have scientists doing their job.

Mr. CRENSHAW. When we talk about air, and you keep referring to the public health—and of course that has to be a consideration—but you know what else is a consideration when considering public health is economic activity and prosperity. And, in fact, that is probably the primary determinant of public health by far. And that is—and not taking that into account is a disservice to the American taxpayer.

I am already out of time, but I have a lot more questions. Thank you, Mr. Chairman. I yield back.

Mr. GRIFFITH. The gentleman yields back. I now recognize the junior member from New Jersey for 5 minutes of questioning.

Mr. MENENDEZ. Thank you, Chairman. No one should worry about the air that they breathe. No one should worry that the air they breathe is unsafe. That is why Congress established the National Ambient Air Quality Standards to keep excess cancer-causing pollutants like lead and carbon monoxide out of the air. And since 1990, the NAAQS have reduced the concentration of criteria pollutants in New Jersey's air by 80 percent and improved the health of our communities. That is a great thing.

But here is the problem. Just weeks after voting to take healthcare aware from 16 million people, Republicans are bringing up draft bills that would weaken vital Clean Air Act protections and increase Americans' risk of developing serious health conditions. And these drafts don't just endanger the health of our communities. They are bad for the economy and bad for our workers.

We are hearing a lot of talk today about permits issued for the highest-emitting projects, facilities like factories and refineries. The Clean Air Act requires large new or expanding industrial facilities to get air pollution permits before starting construction.

Mr. Walke, those facilities must commit to installing pollution controls and demonstrate that emissions won't produce unhealthy levels of air pollution in the area, is that correct?

Mr. WALKE. That is correct under current law. It is not correct under the bills.

Mr. MENENDEZ. Right. And that is the problem that we are going to address in our 4 minutes together.

And if a polluting industrial facility would cause the area in which it operates to violate an air pollution standard, then it must do more to reduce or offset its emissions, is that correct?

Mr. WALKE. That is correct. And under current law, that is before the plant is even built. So it has plenty of opportunity to get the right controls to get the right result.

Mr. MENENDEZ. To ensure clean air in the——

Mr. WALKE. Yes, sir.

Mr. MENENDEZ. Area it is to serve, depending on those particular circumstances.

Mr. WALKE. Correct.

Mr. MENENDEZ. Agreed. Thank you. These permits provide an effective, science-based way to protect our communities from dangerous health risks associated with dirty air while supporting businesses and economic growth. But the draft bill, as you alluded to, creates a loophole in the law. If the EPA fails to meet new procedural requirements, a proposal will allow a facility to get a permit by measuring its emissions against an outdated, less protective air quality standard. Previous witnesses have referred to this as, quote, "amnesty."

Mr. Walke, what is the practical effect of allowing a new facility to be permitted under an outdated standard?

Mr. WALKE. The effect is it pushes the pollution burden from the plant that will not meet the health standards onto two groups.

The first group is the community and the public that lives around that plant. The second group is other businesses that now will be required to reduce pollution more because we allowed a new plant to be built that is not doing its job.

Mr. MENENDEZ. Can you expand on part two, on how would existing facilities be impacted by such a change?

Mr. WALKE. Yes, sir. I mean, the Clean Air Act and attainment and nonattainment areas is a zero sum game. Someone has got to come up with the reductions in order to meet the health standards. So if you are not requiring it of the new plant because you are giving them a pass or amnesty or whatever you want to call it, you are putting the burden on existing plants and constituents and companies in that area to make up for the added pollution that you have failed to address properly.

Mr. MENENDEZ. Correct. I appreciate you explaining how this discussion draft would not only harm public health, right—the first group, the community that these facilities would serve in—but it would also hurt industry, the existing facilities. Correct.

This provision shifts the burden of air quality improvements from new to existing industrial facilities, as you alluded to, which would make it more expensive and doesn't make business sense.

And it is not just this one section that is bad for business. Environmental protections specifically, especially NAAQS, support a key driver of economic growth in our Nation's labor force. I consistently hear from Jersey businesses and manufacturers who want to protect and prepare our workforce, not make them sicker.

I am concerned about what gutting bedrock air quality standards means for workers breathing unsafe air. Mr. Walke, these bills could allow industrial sites to emit more polluted air, is that correct?

Mr. WALKE. That is correct. And ground zero for the air pollution is the workers.

Mr. MENENDEZ. That is right. And Mr. Carter acknowledged that in a part of Louisiana that he represents in terms of these high industrial areas where workers are subjected to lower air quality, especially if we consider these draft proposals. And that would make situations better or worse for workers?

Mr. WALKE. Worse.

Mr. MENENDEZ. That is a problem. So yes or no, do you agree that those effects on workers could worsen if air pollution increases beyond safe limits as a result of these discussion drafts?

Mr. WALKE. Yes.

Mr. MENENDEZ. And we are here today because Republicans claim that gutting bedrock clean air protections is good for business, but would you agree that harming worker health and productivity would be bad for business too?

Mr. WALKE. I fully agree.

Mr. MENENDEZ. So the pro-business Republicans are actually doing a thing that would harm existing businesses and make it more expensive for them while simultaneously creating unsafe air conditions for both the workers inside those facilities and the communities surrounding them, is that correct?

Mr. WALKE. I will stick with your words.

Mr. MENENDEZ. I appreciate it. I yield back.

Mr. GRIFFITH. The gentleman yields back. Seeing no other Mmbers of the committee, I will now move to those who wish to waive on. It is policy in our committee, and I appreciate the wit-

nesses—I appreciate the witnesses being here, but we always allow folks to waive on our committee.

And Mrs. Dingell wants to waive on, and we are more than happy to have her. Mrs. Dingell, you are recognized—I should say the gentlelady from Illinois is——

Mrs. DINGELL. No. Michigan.

Mr. GRIFFITH. Michigan. Michigan. Michigan. I am sorry.

Mrs. DINGELL. Motor City.

Mr. GRIFFITH. I tried to put you in Chicago. I apologize. It has been a long day. Please forgive me. The gentlelady from Michigan is recognized for 5 minutes.

Mrs. DINGELL. Mr. Chairman knows how much I love him, so—look, all Americans deserve to breathe clean air. Clean air is a basic right, and it is the foundation of the Clean Air Act.

And by the way, I lived through watching the Clean Air Act get passed, and it took a long time, and I watched a lot of the fights on all sides.

But here is a reality: Over 100 million Americans live in areas with unhealthy air. Air pollution contributes to over 100,000 premature deaths annually, and it hits children, seniors, underserved communities, workers, as it has been discussed, the hardest.

In Michigan, we know the cost of environmental failure from contaminated sites. In my district, which is one of the—was one of the heaviest to the Flint Water Crisis. And I think we also can all agree that we want efficient permitting. But that can't come at the expense of health protections like the National Ambient Air Quality Standards, which save thousands of lives each year.

So with respect to my colleagues, you are pushing two draft bills that would delay lifesaving clean air standards, but polluters override public health experts and exempt the most polluted communities from being cleaned up. This is a giveaway to polluters at the expense of everyday Americans.

And to make matters worse, hundreds of EPA employees have been let go since the start of this year, weakening our ability to protect air, water, and public health.

So pointblank, clean air save lives, and protecting it should be a top priority for all of us.

And before I get to my questions, I also, having listened to—yes, economic security, economic success matters, but I listened to the autos. I worked for General Motors for 30 years, and I can remember how the company said, "We can't do anything, it is too expensive." Thirty years ago, a car sitting in a driveway not going anywhere was dirtier than a car going down a highway today. That is a fact.

So since I have been in Congress I have fought hard to ensure strong science-based standards, but that they are also balanced with economic growth. We can do both. They are not a conflict.

Mr. Walke, can you explain why the National Ambient Air Quality Standards process is essential to protecting public health, particularly for vulnerable groups like children and the elderly and low-income communities?

Mr. WALKE. Yes, Mrs. Dingell. It is pretty basic. First, the law says you have to make sure health standards are safe to protect humans from dangerous air pollution. OK. But then Congress in its

wisdom went on to say and especially provide a margin of safety for vulnerable groups like children and the elderly and people who suffer asthmatics. For 55 years that has worked to make the Clean Air Act one of the biggest success stories in the world.

And so I just still am puzzled why we are attacking success when we are protecting our children and elderly and all Americans based on science and not based on cost or economics.

Mrs. DINGELL. So let me ask you this, Mr.Walke. To justify this bill, we have heard concerns that new standards would result in significant cost to States and industry. Do you agree with this assessment? What would be the cost if we delayed implementation or weakened standards?

Mr. WALKE. I do agree that they impose significant costs, and they impose or deliver vastly, vastly higher benefits. The Office of Management and Budget routinely identifies the Clean Air Act as the single most successful cost-effective law across all of Federal Government, producing benefits of 60-to-1 or 90-to-1 higher than their costs.

So by definition, if you weaken those health protections you are increasing costs on the American people in the form of hospitalizations and premature death and lots of other things that the law is designed to avoid.

Mrs. DINGELL. Thank you. And that is what we have also got to figure out, how you keep that—take that into account.

Can you—one more question. Can you explain how these policy proposals would undermine the science-based framework that currently guides clean air protection?

Mr. WALKE. Well, it eliminates the science-based framework and replaces it with one that even the majority has described as based on cost feasibility. An earlier Member described this as quite modest, I think, but it would be cataclysmic, and it would be a radical, radical overhaul of the law, overturning Supreme Court decisions and multiple other decisions. There is nothing modest about that.

Mrs. DINGELL. Thank you. Mr. Chairman, I just want to say we have cut air pollution by 78 percent since 1970 while growing our economy. We can and must keep leading.

And with that, I thank you and yield back.

Mr. GRIFFITH. The gentlelady from Michigan yields back. I would like to thank our witnesses for being here today. Members may have additional written questions for you.

I will remind Members you have 10 business days to submit additional questions for the record. And I would ask the witnesses to do their best to submit responses within 10 business days of receipt of the additional questions from the members of this subcommittee.

I ask unanimous consent to insert into the record the documents included on the staff hearing document list.

Without objection, so ordered.

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

Mr. GRIFFITH. The subcommittee is hereby adjourned. Thank you all.

[Whereupon, at 12:50 p.m., the subcommittee was adjourned.]

[Material submitted for inclusion in the record follows:]

DISCUSSION DRAFT

119TH CONGRESS
1ST SESSION

H. R. _____

To amend the Clean Air Act to facilitate State implementation of national ambient air quality standards, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

M__. _____ introduced the following bill; which was referred to the Committee on _____

A BILL

To amend the Clean Air Act to facilitate State implementation of national ambient air quality standards, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This Act may be cited as the "Clean Air and Economic Advancement Reform Act" or the "CLEAR Act".

SEC. 2. FACILITATING STATE IMPLEMENTATION OF NATIONAL AMBIENT AIR QUALITY STANDARDS.

(a) TIMELINE FOR REVIEW OF NATIONAL AMBIENT AIR QUALITY STANDARDS.—Paragraphs (1) and (2)(B) of section 109(d) of the Clean Air Act (42 U.S.C. 7409(d)) are amended by striking "five-year intervals" each place it appears and inserting "10-year intervals".

(b) CONSIDERATION OF ATTAINABILITY.—Section 109(b)(1) of the Clean Air Act (42 U.S.C. 7409(b)(1)) is amended by inserting after the first sentence the following: "If the Administrator, in consultation with the independent scientific review committee appointed under subsection (d), finds that a range of levels of air quality for an air pollutant are requisite to protect public health with an adequate margin of safety, as described in the preceding sentence, the Administrator may, as a secondary consideration in establishing and revising the national primary ambient air quality standard for such air pollutant, consider likely attainability of the standard.".

(c) OPPORTUNITY FOR STATES TO CORRECT DEFICIENCY PRIOR TO PROMULGATION OF FEDERAL IMPLEMENTATION PLAN.—Section 110(c)(1) of the Clean Air Act (42 U.S.C. 7410(c)(1)) is amended—

(1) by striking "at any time"; and

(2) by adding at the end the following: "Before promulgating the Federal implementation plan, the

Administrator shall give the State at least one year after such finding or disapproval to submit a plan or plan revision to correct the deficiency. If the State submits a plan or plan revision to correct the deficiency, the Administrator may, notwithstanding the 2-year deadline under this paragraph to promulgate a Federal implementation plan, take up to 3 years after such finding or disapproval to promulgate a Federal implementation plan.".

(d) CONTINGENCY MEASURES FOR EXTREME OZONE NONATTAINMENT AREAS.—Section 172(c)(9) of the Clean Air Act (42 U.S.C. 7502(c)(9)) is amended by adding at the end the following: "Notwithstanding the preceding sentences and any other provision of this Act, such measures shall not be required for any nonattainment area for ozone classified as an Extreme Area.".

(e) PLAN SUBMISSIONS AND REQUIREMENTS FOR OZONE NONATTAINMENT AREAS.—Section 182 of the Clean Air Act (42 U.S.C. 7511a) is amended—

(1) in subsection (b)(1)(A)(ii)(III), by inserting "and economic feasibility" after "technological achievability";

(2) in subsection (c)(2)(B)(ii), by inserting "and economic feasibility" after "technological achievability";

(3) in subsection (e), in the matter preceding paragraph (1)—

(A) by striking "The provisions of clause (ii) of subsection (c)(2)(B) (relating to reductions of less than 3 percent), the provisions of paragaphs" and inserting "The provisions of paragraphs"; and

(B) by striking ", and the provisions of clause (ii) of subsection (b)(1)(A) (relating to reductions of less than 15 percent)"; and

(4) in paragraph (5) of subsection (e), by striking ", if the State demonstrates to the satisfaction of the Administrator that—" and all that follows through the end of the paragraph and inserting a period.

(f) PLAN REVISIONS FOR MILESTONES FOR PARTICULATE MATTER NONATTAINMENT AREAS.—Section 189(c)(1) of the Clean Air Act (42 U.S.C. 7513a(c)(1)) is amended by inserting ", which take into account technological achievability and economic feasibility," before "and which demonstrate reasonable further progress".

SEC. 3. EMISSIONS BEYOND CONTROL.

(a) EXCEPTIONAL EVENTS.—Section 319(b) of the Clean Air Act (42 U.S.C. 7619(b)) is amended—

(1) in the subsection heading, by inserting "OR ACTIONS TO MITIGATE WILDFIRE RISK" after "EVENTS";

(2) in paragraph (1)—

(A) in the paragraph heading, by striking "DEFINITION OF EXCEPTIONAL EVENT" and inserting "DEFINITIONS";

(B) in subparagraph (A), by redesignating clauses (i) through (iv), as subclauses (I) through (IV), respectively;

(C) by striking "(A)" and all that follows through "an event that—" and inserting the following:

"(A) EXCEPTIONAL EVENT.—

"(i) IN GENERAL.—The term 'exceptional event' means an event that—";

(D) by amending subclause (III) of subparagraph (A)(i), as redesignated, to read as follows:

"(III) is an event that is—

"(aa) a natural event;

"(bb) caused by a human activity that is intended to mirror the occurrence or reoccurrence of a natural event; or

"(cc) caused by a human activity that is unlikely to recur; and";

(E) by striking subparagraph (B) and inserting the following:

"(ii) EXCLUSIONS.—In this subsection, the term 'exceptional event' does not include—

"(I) ordinarily occurring stagnation of air masses;

"(II) meteorological inversions; or

"(III) air pollution relating to source noncompliance."; and

(F) by adding at the end the following:

"(B) ACTION TO MITIGATE WILDFIRE RISK.—The term 'action to mitigate wildfire risk' means a prescribed fire or similar measure, undertaken in accordance with State approved practices, to reduce the risk and severity of wildfires.";

(3) in paragraph (2)—

(A) in subparagraph (A)—

(i) by striking "March 1, 2006" and inserting "18 months after the date of enactment of the CLEAR Act";

(ii) by inserting "revisions to" before "regulations"; and

(iii) by adding "or actions to mitigate wildfire risk" before the period at the end;

(B) in subparagraph (B)—

(i) by inserting "or action to mitigate wildfire risk" after "an exceptional event"; and

(ii) by striking "paragraph (3)" and inserting "this section";

(C) by adding at the end the following:

"(C) REGIONAL ANALYSIS.—When more than one State notifies the Administrator of its intent to submit a petition for an exceptional event or an action to mitigate wildfire risk for the same air quality event, the Administrator shall conduct regional modeling and analysis, upon request by one or more States, to satisfy the analysis required for an exceptional event or an action to mitigate wildfire risk petition for such air quality event.

"(D) TRANSPARENCY.—Not later than 12 months after the date of enactment of the CLEAR Act, the Administrator shall establish and update monthly a public website describing the status of all submitted petitions for exceptional events and actions to mitigate wildfire risk.";

(4) in paragraph (3)(A)—

(A) by redesignating clauses (ii) through (v) as clauses (iii) through (vi), respectively; and

(B) by inserting after clause (i) the following:

"(ii) the principle that actions to mitigate wildfire risk can play an important role in reducing the magnitude and frequency of wildfires;";

(5) in paragraph (3)(B)—

(A) in clause (i), by inserting "or action to mitigate wildfire risk" before "must be";

(B) by amending clause (ii) to read as follows:

"(ii) a clear causal relationship must exist, or be reasonably expected to exist, between the measured exceedances of a na-

tional ambient air quality standard and the exceptional event or action to mitigate wildfire risk to demonstrate that the exceptional event or action to mitigate wildfire risk caused a specific air pollution concentration at a particular air quality monitoring location;"; and

(C) by amending clause (iv) to read as follows:

"(iv) there are criteria and procedures for the Governor of a State to petition the Administrator to exclude air quality monitoring data that is directly due to exceptional events or actions to mitigate wildfire risk from use in determinations by the Administrator with respect to—

"(I) area or source exceedances or violations of the national ambient air quality standards;

"(II) the designation, redesignation, classification, or reclassification of an area;

"(III) the demonstration by a State of attainment of a national ambient air quality standard;

"(IV) attainment determinations;

"(V) attainment date extensions;

"(VI) finding a State implementation plan to be inadequate; or

"(VII) preconstruction demonstrations under section 165(a)(3).";

and

(6) by striking paragraph (4).

(b) APPLICABILITY OF SANCTIONS AND FEES IF EMISSIONS BEYOND CONTROL.—The Clean Air Act (42 U.S.C. 7401 et seq.) is amended by inserting after section 179B the following new section:

"SEC. 179C. APPLICABILITY OF SANCTIONS AND FEES IF EMISSIONS BEYOND CONTROL.

"(a) IN GENERAL.—Notwithstanding any other provision of this Act, with respect to any nonattainment area that is classified under section 181 as a Severe Area or an Extreme Area for ozone or under section 188 as a Serious Area for particulate matter, no sanction or fee under section 179 or 185 shall apply with respect to a State (or an area or source therein) on the basis of a deficiency described in section 179(a), or the failure to attain a national ambient air quality standard for ozone or particulate matter by the applicable attainment date, if the State demonstrates that the State would have avoided such defi-

ciency, or such standard would have been attained, but for one or more of the following:

"(1) Emissions emanating from outside the nonattainment area.

"(2) Emissions from an exceptional event (as defined in section 319(b)(1)).

"(3) Emissions from mobile sources to the extent the State demonstrates that—

"(A) such emissions are beyond the control of the State to reduce or eliminate; and

"(B) the State is fully implementing such measures as are within the authority of the State to control emissions from the mobile sources.

"(b) NO EFFECT ON UNDERLYING STANDARDS.—The inapplicability of sanctions or fees with respect to a State (or an area or source therein) pursuant to subsection (a) does not affect the obligation of a State, area, source, or other entity under other provisions of this Act to establish and implement measures to attain a national ambient air quality standard for ozone or particulate matter.

"(c) PERIODIC RENEWAL OF DEMONSTRATION.—For subsection (a) to continue to apply with respect to a State (or an area or source therein), the State involved

shall renew the demonstration required by subsection (a) at least once every 5 years.".

SEC. 4. CLEAN AIR SCIENTIFIC ADVISORY COMMITTEE.

(a) COMPOSITION OF INDEPENDENT SCIENTIFIC REVIEW COMMITTEE.—Section 109(d)(2)(A) of the Clean Air Act (42 U.S.C. 7409(d)(2)(A)) is amended—

(1) by striking "one person representing State air pollution control agencies" and inserting "three persons representing State air pollution control agencies"; and

(2) by adding at the end the following: "The persons representing State air pollution control agencies shall be from geographically diverse areas with at least one person representing a State located in Region 1, 2, 3, or 5 of the Environmental Protection Agency, one person representing a State located in Region 4, 6, or 7 of the Environmental Protection Agency, and one person representing a State located in Region 8, 9, or 10 of the Environmental Protection Agency.".

(b) CONSIDERATION OF ADVERSE PUBLIC HEALTH, WELFARE, SOCIAL, ECONOMIC, OR ENERGY EFFECTS.—Section 109(d)(2) of the Clean Air Act (42 U.S.C. 7409(d)(2)) is amended by adding at the end the following:

"(D) Prior to establishing or revising a national ambient air quality standard, the Administrator shall request, and such committee, after receiving public comments, shall assess and provide advice under subparagraph (C)(iv) regarding any adverse public health, welfare, social, economic, or energy effects which may result from various strategies for attainment and maintenance of such national ambient air quality standard.".

DISCUSSION DRAFT

119TH CONGRESS
1ST SESSION

H. R. _____

To require the Administrator of the Environmental Protection Agency to publish, concurrently with any final rule establishing or revising a national ambient air quality standard, regulations and guidance for implementing the standard, including information relating to submission and consideration of a preconstruction permit application under the new or revised standard, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

M__. _____ introduced the following bill; which was referred to the Committee on _____

A BILL

To require the Administrator of the Environmental Protection Agency to publish, concurrently with any final rule establishing or revising a national ambient air quality standard, regulations and guidance for implementing the standard, including information relating to submission and consideration of a preconstruction permit application under the new or revised standard, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This Act may be cited as the "Clean Air and Building Infrastructure Improvement Act".

SEC. 2. PRECONSTRUCTION PERMITS.

Section 109 of the Clean Air Act (42 U.S.C. 7409) is amended by adding at the end the following:

"(e) TIMELY ISSUANCE OF IMPLEMENTING REGULATIONS AND GUIDANCE.—

"(1) IN GENERAL.—In publishing any final rule establishing or revising a national ambient air quality standard, the Administrator shall, to assist States, permitting authorities, and permit applicants, concurrently publish final regulations and guidance for implementing the standard, including information relating to submission and consideration of a preconstruction permit application under the new or revised standard.

"(2) APPLICABILITY OF STANDARD TO PRECONSTRUCTION PERMITTING.—If the Administrator fails to publish final regulations and guidance under paragraph (1) that include information relating to submission and consideration of a preconstruction permit application under a new or revised national ambient air quality standard concurrently with such standard, then such standard shall not apply to the review and disposition of a

preconstruction permit application until the Administrator has published such final regulations and guidance.

"(3) RULES OF CONSTRUCTION.—

"(A) Nothing in this subsection shall be construed to preclude the Administrator from issuing regulations and guidance to assist States, permitting authorities, and permit applicants in implementing a national ambient air quality standard subsequent to publishing regulations and guidance for such standard under paragraph (1).

"(B) Nothing in this subsection shall be construed to eliminate the obligation of a preconstruction permit applicant to install best available control technology and lowest achievable emission rate technology, as applicable.

"(C) Nothing in this subsection shall be construed to limit the authority of a State, local, or Tribal permitting authority to impose more stringent emissions requirements pursuant to State, local, or Tribal law than national ambient air quality standards.

"(4) DEFINITIONS.—In this subsection:

"(A) The term 'best available control technology' has the meaning given to that term in section 169(3).

"(B) The term 'lowest achievable emission rate' has the meaning given to that term in section 171(3).

"(C) The term 'preconstruction permit'—

"(i) means a permit that is required under this title for the construction or modification of a stationary source; and

"(ii) includes any such permit issued by the Environmental Protection Agency or a State, local, or Tribal permitting authority.".

SEC. 3. CERTAIN PRECONSTRUCTION PERMITS.

(a) IN GENERAL.—The 2024 Primary Annual Particulate $Matter_{2.5}$ Standard shall not apply to the review and disposition of a preconstruction permit application if—

(1) the Administrator or the State, local, or Tribal permitting authority, as applicable, determines the application to be complete on or before the date of promulgation of the final designation of the area involved under section 107(d) of the Clean Air Act (42 U.S.C. 7407(d)) with respect to the

2024 Primary Annual Particulate Matter$_{2.5}$ Standard; or

(2) the Administrator or the State, local, or Tribal permitting authority, as applicable, publishes a public notice of a preliminary determination or draft permit for the application before the date that is 60 days after the date of promulgation of the final designation of the area involved under section 107(d) of the Clean Air Act (42 U.S.C. 7407(d)) with respect to the 2024 Primary Annual Particulate Matter$_{2.5}$ Standard.

(b) RULES OF CONSTRUCTION.—Nothing in this section shall be construed to—

(1) eliminate the obligation of a preconstruction permit applicant to install best available control technology and lowest achievable emission rate technology, as applicable; or

(2) limit the authority of a State, local, or Tribal permitting authority to impose more stringent emissions requirements pursuant to State, local, or Tribal law than national ambient air quality standards.

(c) DEFINITIONS.—In this section:

(1) ADMINISTRATOR.—The term "Administrator" means the Administrator of the Environmental Protection Agency.

(2) BEST AVAILABLE CONTROL TECHNOLOGY.—The term "best available control technology" has the meaning given to that term in section 169(3) of the Clean Air Act (42 U.S.C. 7479(3)).

(3) LOWEST ACHIEVABLE EMISSION RATE.—The term "lowest achievable emission rate" has the meaning given to that term in section 171(3) of the Clean Air Act (42 U.S.C. 7501(3)).

(4) NATIONAL AMBIENT AIR QUALITY STANDARD.—The term "national ambient air quality standard" means a national ambient air quality standard promulgated under section 109 of the Clean Air Act (42 U.S.C. 7409).

(5) PRECONSTRUCTION PERMIT.—The term "preconstruction permit"—

(A) means a permit that is required under title I of the Clean Air Act (42 U.S.C. 7401 et seq.) for the construction or modification of a stationary source; and

(B) includes any such permit issued by the Environmental Protection Agency or a State, local, or Tribal permitting authority.

(6) 2024 PRIMARY ANNUAL PARTICULATE MATTER$_{2.5}$ STANDARD.—The term "2024 Primary Annual Particulate Matter$_{2.5}$ Standard" means the final rule titled "Reconsideration of the National Ambient Air Quality Standards for Particulate Matter" published in the Federal Register on March 6, 2024 (89 Fed. Reg. 16202).

U.S. House Committee on Energy and Commerce
Subcommittee on Environment
"Short-Circuiting Progress: How the Clean Air Act Impacts Building Necessary Infrastructure and Onshoring American Innovation."
Documents for the Record
June 11, 2025

1. A report from the Association of Air Pollution Control Agencies entitled, "State Air Trends," submitted by the Majority.[1]
2. A letter from the Association of Air Pollution Control Agencies, addressed to Administrator Zeldin, submitted by the Majority.
3. A letter from the Association of Air Pollution Control Agencies, addressed to Edwin Roks and Administrator Regan, submitted by the Majority.
4. A report from the Providence Engineering and Environmental Group entitled, "Charting Recent NAAQS Developments and Implications for Air Agencies," submitted by the Majority.
5. An article from the Magazine for Environmental Managers entitled, "Understanding the Impact of a Lower Fine Particulate Matter National Ambient Air Quality Standard," submitted by the Majority.
6. A report from Alpine Geophysics entitled, "2022-2024 Annual PM 2.5 Design Value Maps," submitted by the Majority.
7. A letter from the American Cement Association, addressed to Chairman Guthrie and Ranking Member Pallone, submitted by the Majority.
8. An article from AP News entitled, "Trump EPA Rollbacks Would Weaken Rules Projected to Save Billions of Dollars and Thousands of Lives," submitted by Rep. Barragan.
9. A report from the American Lung Association entitled, "Clearing the Air: How the New Particle Pollution Standards Work," submitted by the Minority.
10. A February 21, 2025 letter from health organizations to EPA Administrator Zeldin, submitted by the Minority.
11. A report from the American Lung Association entitled, "State of the Air 2025," submitted by the Minority.[1]
12. A letter from health organizations in opposition to the Smoggy Skies Act, submitted by the Minority.
13. A report from the Environmental Protection Network entitled, "Breathing Easy: An Assessment of Public Health Benefits from EPA Air Pollution Standards (2021-24)," submitted by the Minority.

[1] The report has been retained in committee files and is included in the Documents for the Record at https://docs.house.gov/meetings/IF/IF18/20250611/118385/HHRG-119-IF18-20250611-SD201.pdf.

14. An article from the New York Times entitled, "How Lee Zeldin Went From Environmental Moderate to Dismantling the EPA," submitted by the Minority.
15. A report from the Center for American Progress entitled, "The Trump Administration's Assault on Environmental Protections Will Give Polluters a Free Pass While Causing Millions of Asthma Attacks," submitted by the Minority.[1]
16. An article from WIRED entitled, "Air Pollution is Still Killing Thousands of People in the US," submitted by Rep. Carter (LA).

[1] The report has been retained in committee files and is included in the Documents for the Record at https://docs.house.gov/meetings/IF/IF18/20250611/118385/HHRG-119-IF18-20250611-SD201.pdf.

THE ASSOCIATION OF AIR POLLUTION CONTROL AGENCIES

January 31, 2025

Mr. Lee Zeldin
U.S. Environmental Protection Agency (EPA)
1200 Pennsylvania Ave NW
Washington, DC 20460

Dear Administrator Zeldin,

On behalf of the Association of Air Pollution Control Agencies (AAPCA),[1] congratulations on your confirmation to serve as Administrator of the U.S. Environmental Protection Agency (EPA). AAPCA's state and local member air pollution control agencies, responsible for protecting the air quality of nearly 150 million Americans, welcome you as the Agency's Administrator. State and local air agencies serve as co-regulators with U.S. EPA under the federal Clean Air Act (CAA), and we look forward to engaging you and your staff as the Administration's priorities are developed and initiated. The Association provides this input on environmental policy impacting state and local air pollution control agencies to convey member expertise and priorities.

Built on the foundation of cooperative federalism, the CAA has proven a successful framework for productive partnerships at the federal, state, and local levels that have led to remarkable improvements in air quality since 1970.[2] State and local environmental agencies, delegated with permitting, planning, enforcement, and regulatory authority, are dedicated to working hand-in-hand with federal counterparts to find best-possible solutions that are informed by diverse geographic, economic, and social factors. With core work still to be done and a range of evolving issues, AAPCA offers the following considerations and recommendations for the Agency.

Commit to Early Engagement and Timely Communication.
AAPCA members support Agency efforts to engage air agencies early and meaningfully in regulatory and planning processes, improve the timeliness of state implementation plan (SIP) approval to reduce the SIP backlog, provide technical support, expand grant flexibility, ensure quality and up-to-date training, and effectively coordinate with state and local agencies on compliance and enforcement activities. On June 18, 2024, AAPCA provided comments regarding U.S. EPA's draft Fiscal Years (FY) 2025 – 2026 National Program Guidances (NPGs) for the Office of Air and Radiation (OAR), which were incorporated into the Agency's final FY 2025 – 2026 NPGs.[3]

AAPCA urges U.S. EPA to commit to early, frequent, and substantive engagement with state and local air agencies as co-regulatory partners and stresses the importance of providing timely notice of planned

[1] 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. Created in 2012, AAPCA represents 53 state and local air pollution control agencies, and senior officials from 21 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: www.cleanairact.org.
[2] AAPCA, *State Air Trends & Successes: The StATS Report*, May 2, 2024.
[3] See AAPCA's June 2024 comments and more information about U.S. EPA's FY 2025 – 2026 NPGs here.

actions. Giving advance notice to state and local air agency leadership on forthcoming U.S EPA actions via embargoed information or briefings for the purpose of Federalism[4] is critical to ensuring effective communication between co-regulators and impacted communities and stakeholders.

Encourage Flexibility and Tailored Expectations to Reduce Regulatory Burden.
State and local agencies and the jurisdictions that they serve are unique and differ geographically, economically, and socially. AAPCA members ask U.S. EPA to encourage flexibility and tailored expectations in the work and grant planning processes, as well as for U.S. EPA's commitment to work collaboratively with air agencies to meet priorities under the CAA. U.S. EPA should meaningfully engage with co-regulatory agencies during the pre-proposal and proposal stages of rulemaking. Such engagement is critical to providing U.S. EPA with an understanding of individual state perspectives and offers the opportunity for U.S. EPA to craft rules that provide flexibility while still meeting the objective of the rulemaking.

As an example, U.S. EPA's recently withdrawn final revisions to the Air Emissions Reporting Requirements (AERR)[5] would benefit from improved engagement with state and local air agencies. Specifically, the solicitation and inclusion of input from state and local air agencies prior to proposal would have allowed the consideration of pertinent, on-the-ground expertise in managing emissions inventory systems. The Agency initially proposed that state and local agencies decide whether to assume the responsibility of reporting hazardous air pollutant (HAP) emissions on behalf of owners/operators, and AAPCA recommended that the final AERR rule must include an approach for state and local agency reporting of HAP data that is feasible and does not supersede existing air agency emissions inventory systems. AAPCA also urged U.S. EPA to grant state and local agencies flexibility in rule development to satisfy the proposed reporting requirements for HAP emissions in the revised AERR. Not doing so would divert already limited state, local, and federal agency resources away from other essential aspects of CAA implementation and must be avoided.[6]

Mitigate Funding Challenges and Resource Constraints.
From their on-the-ground expertise, state and local air agencies understand that melding national environmental regulations with local priorities, economic strategies, and social needs requires significant resources. Funding directed to air agencies – including State and Local Air Quality Management Grants under CAA Sections 103 and 105 – must be adequate to meet historic CAA obligations as well as significant and substantive regulatory actions from U.S. EPA that further exacerbate existing resource constraints. AAPCA's state and local air agency members depend on sufficient, stable resources to perform core CAA activities.

On June 5, 2024, AAPCA provided feedback to the U.S. Senate Committee on Appropriations regarding Fiscal Year (FY) 2025 appropriations for U.S. EPA, including State and Local Air Quality Management

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[4] Executive Order (E.O.) 13132 – Federalism (64 Fed. Reg. 43255)
[5] U.S. EPA's final rule, "Revisions to the Air Emission Reporting Requirements (AERR)" was withdrawn from interagency review at the White House Office of Information & Regulatory Affairs on January 21, 2025.
[6] See AAPCA's November 2023 comments on U.S. EPA's proposed Revisions to the Air Emissions Reporting Requirements (Docket ID No. EPA-HQ-OAR-2004-0489).

Grants under the State and Tribal Assistance Grant (STAG) program.[7] The Association asked for increased funding for State and Local Air Quality Management Grants that adequately accounts for new and historic CAA mandates as critical for state and local air agency budgets as well as ensuring the cooperative federalism balance needed for successful environmental outcomes. Providing maximum flexibility in air agency grants enables programs to determine the best use of funds to address air pollution control needs in their jurisdiction.

Since the beginning of the fine particulate matter ($PM_{2.5}$) monitoring program, appropriations have maintained funding authority under CAA Section 103. AAPCA reaffirms the importance of sustaining the granting authority for $PM_{2.5}$ monitoring under CAA Section 103, which does not require a 40-percent funding match and allows state and local agencies to best allocate resources for air quality planning and programs while continuing $PM_{2.5}$ monitoring. Distributing funds for $PM_{2.5}$ monitoring under CAA Section 105 would adversely impact state and local air agency budgets.

State and local agencies have also indicated difficulties hiring and retaining a qualified, technical, and experienced workforce to meet the growing complexities of air pollution control work. Further contributing to this concern may be the almost 30 percent of state and local air agency employees at or near retirement.[8]

State and local resource constraints have been underscored as air agencies face increased obligations under the CAA and prepare to implement multiple major new rulemakings, including a tightened $PM_{2.5}$ national ambient air quality standard (NAAQS),[9] methane standards for the oil and natural gas sector,[10] and greenhouse gas (GHG) standards for power plants.[11] Communicating early about Administration priorities, and avoiding imposing unfunded federal mandates are steps that will help overburdened air agencies navigate these growing resource constraints. However, years of flat grant funding of CAA programs needs critical attention. Furthermore, Title V Operating Permit Program emissions-based fees are declining amid achieved emissions reductions. State and local air agencies have led the efforts to improve the nation's air quality while administering progressively complicated and demanding operations that have had to accommodate growing inflation in expenses related to personnel, travel, monitoring equipment, and building costs for monitoring sites without concomitant federal funding.

Appoint a Balanced Clean Air Scientific Advisory Committee.

U.S. EPA's Clean Air Scientific Advisory Committee (CASAC) fulfills the role of "independent scientific review committee" responsible for reviewing the primary and secondary NAAQS and recommending any new standards and revisions of existing standards to the U.S. EPA Administrator. The charge to the CASAC is to review the science, review the risk and exposure assessment, and review U.S. EPA's policy recommendations. It is critically important to keep a balanced set of perspectives on the chartered CASAC and panels, especially including adequate representation from state air pollution control

[7] See AAPCA's June 2024 letter to U.S. Senate Committee on Appropriations Leadership for FY 2025 Appropriations for the U.S. EPA State and Local Air Quality Management Grants.
[8] See AAPCA's November 2023 report *Staffing at State and Local Air Pollution Control Agencies*.
[9] 89 Fed. Reg. 16202 (March 6, 2024).
[10] 89 Fed. Reg. 16820 (March 8, 2024).
[11] 89 Fed. Reg. 39798 (May 9, 2024).

agencies.[12] State air pollution control personnel have hands-on experience and practical knowledge in the implementation of the NAAQS that contributes a real-world perspective to the CASAC. U.S. EPA should make a conscientious effort to appoint CASAC members and panel members with a balance of perspectives from a variety of backgrounds, including adding more people representing state air pollution control agencies. Furthermore, each CASAC member's recommendation is critically important to the U.S. EPA Administrator, and the recommendation of the minority should not be dismissed or relegated to an obscure appendix. The precedent set during the 2023 ozone NAAQS review and 2023 secondary oxides of nitrogen (NO_X), oxides of sulfur (SO_X), and particulate matter (PM) NAAQS review of removing dissenting opinions from the letter to the U.S. EPA Administrator and placing them in an obscure appendix was contrary to previous reviews, wholly inappropriate, and should be immediately reversed. The CASAC was most recently[13] overseeing the Agency's review of NAAQS for lead, ozone, and NO_X.

Build Capacity for Implementing Recent Regulatory Actions.

AAPCA's members are currently undertaking CAA planning and implementation for a number of recent regulatory actions and provide the following insight to inform the Administration's initiatives.

$PM_{2.5}$ NAAQS

This year, air agencies will be providing recommendations for area attainment designations and boundaries following the revision of the primary annual $PM_{2.5}$ NAAQS. As part of the designations process, air agencies may submit exceptional events (EE) demonstrations for events that have regulatory significance for the 2024 revised primary annual $PM_{2.5}$ NAAQS initial area designations. This is an important CAA provision for addressing air quality impacts outside of regulatory control. Developing EE demonstrations are time- and resource-intensive activities for air agencies. With intensifying wildfire seasons, agencies will need to develop demonstrations more often. U.S. EPA OAR and Regional Offices should continue to work with state and local agencies to streamline the process for drafting and reviewing approvable exceptional event demonstrations – particularly for EE demonstration submissions for the purpose of initial area designations recommendations.

Additionally, U.S. EPA should consider air agency requests to exclude specific monitors from comparison with the primary annual $PM_{2.5}$ NAAQS based on a demonstration that data from such monitors are not representative of area-wide air quality. For example, $PM_{2.5}$ monitors deployed to meet near-road monitoring requirements provide measurements within localized microenvironments near highly trafficked roadways that are not representative of a broader airshed.

AAPCA recently sent a letter[14] to U.S. EPA expressing concern about persisting high bias in $PM_{2.5}$ data from federal equivalent method (FEM) Teledyne T640/T640X PM Mass Monitors. AAPCA appreciates

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[12] Air & Waste Management Association *EM* Magazine, "The Need for a Balanced CASAC in the NAAQS Review Process," June 2024

[13] On January 28, 2025, U.S. EPA Acting Administrator James Payne notified the Office of the Science Advisory Board that, "A decision has been made to reset the Science Advisory Board (SAB) and Clean Air Scientific Advisory Committee (CASAC) and reestablish its current membership."

[14] See AAPCA's December 2024 letter concerning particulate matter monitoring method comparability of the Teledyne T640/T640X PM Mass Monitor Federal Equivalent Method.

Teledyne Technologies and U.S. EPA's efforts to correct the bias in the Teledyne T640/X FEM.[15] However, the bias adjustment algorithm that was developed by Teledyne, approved by U.S. EPA, and applied to data[16] housed in the Air Quality System (AQS) does not adequately reduce the bias in the Teledyne T640/X $PM_{2.5}$ concentrations, resulting in annual $PM_{2.5}$ concentrations that are significantly higher compared to annual $PM_{2.5}$ concentrations measured with federal reference method (FRM) monitors. This could lead to areas being designated nonattainment based on measured Teledyne T640/X $PM_{2.5}$ concentrations, when the area would have been designated attainment based on measured FRM $PM_{2.5}$ concentrations. Developing and implementing the bias adjustment was a time- and resource-intensive process that resulted in the delayed release of 2023 $PM_{2.5}$ design values.[17] U.S. EPA has the option of taking up to one additional year to make initial area designations if the Administrator has insufficient information.[18] U.S. EPA ought to give due consideration to the designations timeline and provide adequate time for attainment/nonattainment designations to be made with the best available data.

CAA Section 111(d) State Plans

State and local air agencies are subject to tight, two-year deadlines to develop Emissions Guideline State Plans (EGSP) for existing sources in the oil and natural gas sector and existing fossil-fuel fired electric generating units (EGUs), due March 9, 2026, and May 11, 2026, respectively. State and local regulatory processes vary considerably and changes to new or existing rules can take as long as five years. Due to the significant lead times required for state and local regulatory processes, air agencies would benefit from early communication on the Administration's priorities regarding implementation of these rules, including any intention to reconsider the rules or roll back their requirements.

Thank you for your consideration of this input. AAPCA's state and local air agency members look forward to working with U.S. EPA and their EPA Regions under your Administration. If you have any questions, please contact Ms. Morgan Dickie, Executive Director, at mdickie@csg.org or (859) 244-8042.

Sincerely,

Morgan Dickie
AAPCA Executive Director

[15] See AAPCA March 2024 comments on U.S. EPA's Proposed Update of $PM_{2.5}$ Data From T640/T640X PM Mass Monitors (Docket ID No. EPA-HQ-OAR-2023-0642).
[16] 89 Fed. Reg. 42874 (May 16, 2024).
[17] U.S. EPA released 2023 $PM_{2.5}$ Design Values on August 9, 2024, while design value reports for all other criteria pollutants were made available on June 12, 2024.
[18] U.S. EPA's February 2024 memorandum on "Initial Area Designations for the 2024 Revised Primary Annual Fine Particle National Ambient Air Quality Standard" indicates that "If the Administrator has insufficient information to make initial designations decisions in the 2-year time frame, the EPA may take up to 1 additional year to make initial area designations decisions."

cc: Mr. Chad McIntosh, U.S. EPA
Mr. Travis Voyles, U.S. EPA
Mr. Eric Amidon, U.S. EPA
Ms. Sarah Dunham, U.S. EPA
Ms. Abbie Tardif, U.S. EPA

THE ASSOCIATION OF AIR POLLUTION CONTROL AGENCIES

December 20, 2024

Mr. Edwin Roks
Chief Executive Officer
Teledyne Technologies Incorporated
1049 Camino Dos Rios
Thousand Oaks, CA 91360

Mr. Michael S. Regan
Administrator
U.S. Environmental Protection Agency (EPA)
1200 Pennsylvania Ave NW
Washington, D.C. 20460

Dear Mr. Roks and Mr. Regan:

This letter is to transmit from the Association of Air Pollution Control Agencies (AAPCA)[1] considerations for improving data comparability between federal reference methods (FRM) and federal equivalent methods (FEM)[2] for ambient air monitoring of particulate matter (PM). State and local air agencies are co-regulators under the federal Clean Air Act (CAA) with important on-the-ground expertise, including serving as primary monitoring entities for the National Ambient Air Quality Standards (NAAQS). The U.S. Environmental Protection Agency (EPA) Office of Air Quality Planning & Standards (OAQPS) and Teledyne Technologies Incorporated acknowledge the need to address comparability issues between FRMs and FEMs, and AAPCA provides this expert technical input to that aim.[3]

Teledyne T640/T640X PM Mass Monitors received FEM designation from the U.S. EPA Office of Research & Development (ORD) in July 2016 and are widely used for continuous monitoring of ambient fine particulate matter ($PM_{2.5}$) by state and local air agencies throughout the nation.[4] These instruments have the advantage of instantly providing high temporal resolution $PM_{2.5}$ concentrations at a lower overall cost compared to FRM monitors. State and local agencies rely on U.S. EPA ORD designation of an instrument as "equivalent" to an FRM, which is generally the sole assurance of comparable performance.[5] Meeting data quality objectives is critical for collecting

[1] 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. Created in 2012, AAPCA represents 53 state and local air pollution control agencies, and senior officials from 21 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. More about AAPCA is at: www.cleanairact.org.

[2] Methods for measuring ambient concentrations of specified air pollutants have been designated as "reference methods" or "equivalent methods" in accordance with 40 CFR Part 53. See U.S. EPA, "List of Designated Reference and Equivalent Methods," June 15, 2024.

[3] See also AAPCA's letter to U.S. EPA OAQPS addressing particulate matter monitoring method comparability (November 23, 2022).

[4] See U.S. EPA's Supplemental Information on the EPA's Update of $PM_{2.5}$ Data from T640/T640X PM Mass Monitors (May 13, 2024). State and local agencies were "reporting data for about 400 T640 and T640X $PM_{2.5}$ FEMs in 2023."

[5] See 40 CFR Part 53 Subpart C – Procedures for Determining Comparability Between Candidate Methods and Reference Methods.

defensible ambient air data that will have important implications for implementing the 2024 revised primary annual $PM_{2.5}$ NAAQS,[6] including for attainment/nonattainment designations, state implementation plans (SIPs), exceptional events demonstrations, and permitting.

AAPCA's state and local air agency members are concerned that the Teledyne T640/X FEM instruments have a significantly high bias compared to FRM instruments. AAPCA appreciates Teledyne Technologies and U.S. EPA's efforts to correct the bias in the Teledyne T640/X FEM.[7] However, the bias adjustment algorithm that was developed by Teledyne, approved by U.S. EPA, and applied to AQS data[8] does not adequately reduce the bias in the Teledyne T640/X $PM_{2.5}$ concentrations, resulting in annual $PM_{2.5}$ concentrations that are significantly higher compared to annual $PM_{2.5}$ concentrations measured with FRM monitors. This can lead to areas being designated nonattainment based on measured Teledyne T640/X $PM_{2.5}$ concentrations, when the area would have been designated attainment based on measured FRM $PM_{2.5}$ concentrations. As a result, many state and local air monitoring programs are in the process of invalidating the Teledyne T640/X measurements and moving away from the Teledyne T640/X instruments.

Currently, there are over 200 sites nationwide that have FRM monitors collocated with Teledyne T640/X instruments. The Georgia Environmental Protection Division (EPD) evaluated the performance of the Teledyne T640/X instruments by calculating the normalized mean bias (NMB)[9] at collocated FRM/FEM sites. The NMB statistics were based on 24-hour $PM_{2.5}$ measurements at 217 FRM sites across the United States from 2018 through 2023. The dataset included more than 68,000 FRM/FEM 24-hour $PM_{2.5}$ concentration data pairs. Details of Georgia EPD's evaluation are contained in Attachment A (slides 23 – 34) and Attachment B.

Prior to the implementation of the Teledyne bias adjustment algorithm, the multiyear average bias of the T640/X instruments was as much as 9.0 micrograms per cubic meter, or $\mu g/m^3$, (65.3 percent) higher as compared to FRM data. Also, 189 monitoring locations (87 percent) had a bias greater than ±10 percent while only 28 monitoring locations (13 percent) had a bias less than ±10 percent. The overall NMB was 20.1 percent. The Teledyne bias adjustment algorithm made adjustments based on the hourly ambient temperature and hourly measured FEM concentration. After implementation of the Teledyne bias adjustment algorithm, the multiyear average bias of the T640/X instruments was up to 7.9 $\mu g/m^3$ (57.6 percent) higher as compared to the FRM data. Also, 68 monitoring locations (31 percent) had a bias greater than ±10 percent while 149 monitoring locations (69 percent) had a bias less than ±10 percent. The overall NMB was 6.4 percent. While this is a significant improvement in the bias compared to the uncorrected measurements, it still does not adequately reduce the bias in the Teledyne T640/X $PM_{2.5}$ concentrations to an acceptable level.

The main concern with the current Teledyne algorithm is that it applies a constant adjustment value of 0.925 $\mu g/m^3$ to all values over 5.0 $\mu g/m^3$ (when the hourly temperature is greater than 20°C) and a constant adjustment value of 1.861 $\mu g/m^3$ to all values over 10.0 $\mu g/m^3$ (when the hourly temperature is less than or equal to 20°C). However, the FRM/FEM comparison clearly demonstrates that this approach does not match the data at higher $PM_{2.5}$ concentrations and that the bias adjustment needs to increase as the Teledyne FEM $PM_{2.5}$ concentrations

[6] 89 Fed. Reg. 16202 (March 6, 2024).
[7] See AAPCA comments on U.S. EPA's Docket ID No. EPA-HQ-OAR-2023-0642; Proposed Update of $PM_{2.5}$ Data From T640/T640X PM Mass Monitors (March 15, 2024).
[8] 89 Fed. Reg. 42874 (May 16, 2024).
[9] Normalized Mean Bias (NMB) = [(Average FEM Conc.) - (Average FRM Conc.)]/(Average FRM Conc)

increase.[10] Therefore, the application of a constant adjustment value (e.g., 0.925 or 1.861 µg/m^3) is inappropriate and should be replaced with an adjustment based on a percent reduction in Teledyne FEM $PM_{2.5}$ concentration for all concentrations and temperatures. As an example of an alternative bias adjustment approach, Georgia EPD implemented a simple update to the Teledyne bias adjustment algorithm. The alternative approach multiplies the T640/X raw PM value by 0.813233 for all hourly $PM_{2.5}$ concentrations regardless of concentration and temperature. Application of the Georgia EPD bias adjustment algorithm to the T640/X data resulted in a multiyear average bias of up to 4.7 µg/m^3 (34.4 percent) higher as compared to the FRM data. Also, only 45 monitoring locations (21 percent) had a bias greater than ±10 percent while 172 monitoring locations (79 percent) had a bias less than ±10 percent. The overall NMB was -2.3 percent. Table 1 below summarizes the T640/T640X instrument bias before and after Teledyne adjustment and Georgia EPD adjustment for 217 collocated FRM/FEM sites from 2018 – 2023.

Table 1. Summary of T640/T640X instrument bias before and after Teledyne adjustment and Georgia EPD adjustment for 217 collocated FRM/FEM sites from 2018-2023.

	Before Teledyne Bias Adjustment Algorithm	**After Teledyne Bias Adjustment Algorithm**	**After Georgia EPD Bias Adjustment Algorithm**
Maximum multi-year average bias	9.0 µg/m^3 (65.3%)	7.9 µg/m^3 (57.6%)	4.7 µg/m^3 (34.4%)
# of Sites > ±10% NMB	189 (87%)	68 (31%)	45 (21%)
# of Sites < ±10% NMB	28 (13%)	149 (69%)	172 (79%)
Overall NMB	**20.1%**	**6.4%**	**-2.3%**

Although the Georgia EPD analysis was performed for the entire United States, it should be noted that some areas of the country performed better than others, while others performed worse. Below are additional examples of analyses and actions undertaken by AAPCA member agencies:

- Georgia EPD evaluated collocated FRM/FEM instruments across 11 collocated sites in Georgia from January 1, 2021, to July 31, 2023. The Teledyne bias adjustment algorithm resulted in an overall normalized mean bias of 9.59 percent (with 6 of 11 sites having greater than ±10 percent bias). Applying a single bias adjustment multiplier of 0.813233 for all $PM_{2.5}$ concentrations regardless of concentration and temperature reduces the overall normalized mean bias in Georgia to -0.24 percent (all Georgia sites have less than ±10 percent bias and 9 of 11 sites have less than ±5 percent bias). Details can be found in Attachment C. As a result of the poor Teledyne T640/X performance in Georgia, Georgia EPD recently purchased 16 new FRM instruments to deploy at locations only running T640/X FEM instruments. For many of these sites, the FRM instruments will collect daily filter samples at an additional cost of approximately $300,000/year for filters, analysis, and additional full-time employees. Georgia EPD has requested NAAQS exclusion for a number of Teledyne T640/X $PM_{2.5}$ monitors based on the poor comparison to collocated FRMs using the U.S. EPA FEM Comparability Assessment Tool.[11]
- Oklahoma Department of Environmental Quality (ODEQ) uses both T640 and T640X samplers, and has found that, following U.S. EPA's implementation of Teledyne's correction factor, a 10 – 22 percent high bias still exists at all three sites collocated with FRM samplers. This level of bias throughout the state results in regions within Oklahoma now inaccurately showing annual design values at or near the newly revised annual primary NAAQS for $PM_{2.5}$. The risk of being designated nonattainment due to biased data rather than true NAAQS exceedances is not a risk ODEQ can continue to take. As such, ODEQ Ambient Air Monitoring staff are

[10] See Attachment A, slides 27 – 28.
[11] See U.S. EPA technical note "$PM_{2.5}$ Continuous Monitor Comparability Assessment" (updated May 18, 2018).

currently not purchasing T640 or T640X analyzers, replacement parts, or factory repairs for these devices, and are evaluating options to transition Oklahoma's entire continuous $PM_{2.5}$ Monitoring network towards alternative FEM samplers.

- Texas Commission on Environmental Quality (TCEQ) continues to evaluate data from sites where it has an FRM collocated with a Teledyne T640X. The data reviewed to date indicates a general high bias in the Teledyne T640X data when compared to the FRM data. This high bias ranges from +8 percent to +37 percent across six monitoring sites in the TCEQ network. In addition to the high bias, known problems with poor build quality in the sample inlets have affected sampler operations, making it difficult to compare data across multiple instruments and methods. Currently, TCEQ has no plans to purchase or deploy additional Teledyne T640X samplers in its network and is evaluating options to replace or redesignate Teledyne T640X samplers already being used.
- West Virginia Department of Environmental Protection (WVDEP) provided comments to U.S. EPA responding to the Agency's update of $PM_{2.5}$ data from T640/T640x PM Mass Monitors to indicate remaining concern that the applied adjustment does not adequately correct WVDEP's data compared with FRM data at the same locations. Using 2023 data at the Moundsville, WV, monitoring site as an example, the historical uncorrected T640X FEM (31.44 percent above FRM) was corrected using the alignment factor, however, the corrected data (22.46 percent above FRM) does not sufficiently align the FEM data to within 5 – 10 percent of the FRM data as expected. Furthermore, using Georgia EPD's alternate alignment factor on 2023 data at Moundsville would result in an average of the FEM running 8.33 percent higher than the FRM.[12]

AAPCA requests that Teledyne Technologies re-evaluate the bias adjustment algorithm implemented on the Teledyne T640/X instruments such that the comparability with the collocated FRM measurements result in an overall bias much closer to zero. Without an updated bias adjustment algorithm, state and local air agencies are likely to continue to invalidate the Teledyne T640/X measurements and look for alternatives to the Teledyne T640/X instruments.

AAPCA also urges U.S. EPA to revisit retroactively correcting particulate matter with a diameter of 10 microns or smaller (PM_{10}) data. Teledyne's Network Data Alignment is applicable to PM_{10} measurements moving forward, and despite being potentially diminutive,[13] correcting the bias associated with PM_{10} data is important to some states and provides a more accurate dataset for regulatory, scientific, and public use. We agree with the Agency's prioritization of implementing the Network Data Alignment for $PM_{2.5}$ given approaching implementation deadlines for the 2024 revised annual $PM_{2.5}$ NAAQS; however, U.S. EPA should begin working with air agencies to implement the alignment, as appropriate, for PM_{10} data as well. Developing and implementing the bias adjustment was a time- and resource-intensive process that resulted in the delayed release of 2023 $PM_{2.5}$ design values.[14] Transparent, early engagement with state and local co-regulators is critical as U.S. EPA continues to further evaluate and improve the performance of FEMs operating in the national regulatory monitoring network.

Thank you for considering the Association's comments on improving PM monitoring method comparability between FRMs and the Teledyne T640/T640X PM Mass Monitor FEM. If you have any questions, please contact

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[12] See Attachment D.
[13] See U.S. EPA's "Supplemental Information on the EPA's Update of $PM_{2.5}$ Data from T640/T640X PM Mass Monitors" (May 13, 2024).
[14] U.S. EPA released 2023 $PM_{2.5}$ Design Values on August 9, 2024, while design value reports for all other criteria pollutants were made available on June 12, 2024.

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Sincerely,

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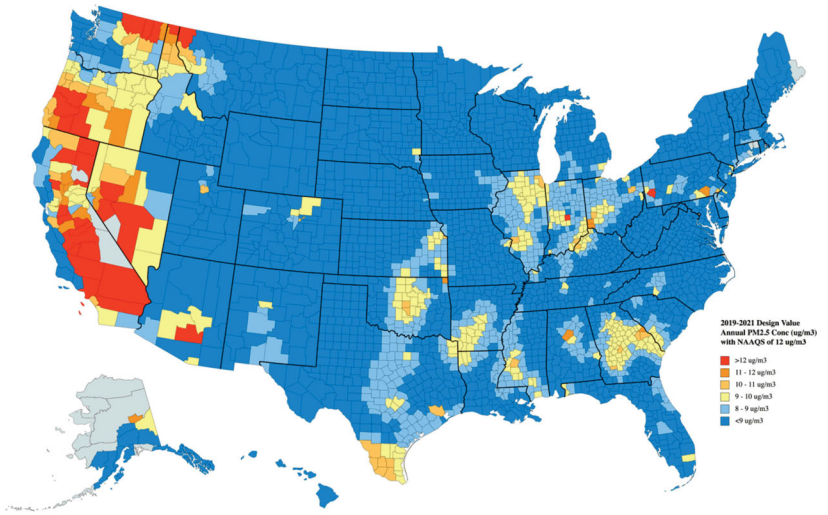


2019-2021 $PM_{2.5}$ Design Values.
Source: Providence Engineering and Environmental Group LLC.

Charting Recent NAAQS Developments and Implications for Air Agencies

by Jason Meyers and Laura Crowder

An overview of state and local air pollution control agencies' roles and responsibilities in implementing control strategies necessary to achieve the NAAQS in light of recent developments.

The U.S. National Ambient Air Quality Standards (NAAQS) program is foundational to improving the nation's air quality. Structured under the U.S. Clean Air Act's (CAA) framework of cooperative federalism, the NAAQS program is administered by the U.S. Environmental Protection Agency (EPA), which reviews and sets health-based (or primary) and public welfare (or secondary) ambient air standards for six "criteria" pollutants.[1] Section 101 of the CAA specifies that air pollution control at its source is the primary responsibility of state and local governments. Actions by state and local governments, which also involve regulated entities and other stakeholders, have successfully achieved significant reductions in the emissions and ambient concentrations of pollutants regulated by NAAQS.[2]

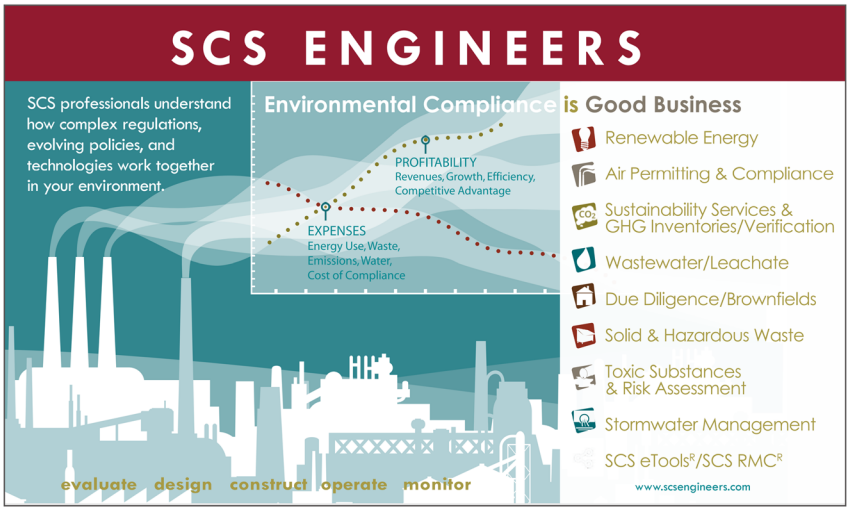
Section 109(d) of the CAA stipulates that EPA, in consultation with the chartered Clean Air Scientific Advisory Committee (CASAC), shall review each criteria pollutant NAAQS at five-year intervals.[3] The review timeline has differed historically, and EPA recently completed the first change to a standard in nearly nine years, tightening the fine particulate matter ($PM_{2.5}$) NAAQS by 25%.[4] As the 2024 $PM_{2.5}$ NAAQS are implemented and EPA reviews multiple other NAAQS, there are key regulatory, legal, and technical issues that have important implications for state, local, and tribal air agencies responsible for implementation, monitoring, enforcement, and permitting.

$PM_{2.5}$ NAAQS: Review and Early Implementation

In June 2021, EPA initiated a reconsideration of the agency's December 2020 determination to retain the primary and secondary PM NAAQS. Based on the CASAC "supplemental" review of underlying science and health data, a proposal was issued in January 2023 to take public comment on a range between 9.0 and 10.0 micrograms per cubic meter ($\mu g/m^3$) for the primary $PM_{2.5}$ annual standard, a reduction from 12.0 $\mu g/m^3$ on an annual arithmetic mean, averaged over three years.[5] As a result, EPA promulgated a new primary annual $PM_{2.5}$ NAAQS of 9.0 $\mu g/m^3$ on February 7, 2024. The primary 24-hr $PM_{2.5}$ NAAQS of 35 $\mu g/m^3$; the primary 24-hr NAAQS for coarse particulate matter (PM_{10}) of 150 $\mu g/m^3$; and the secondary NAAQS for both $PM_{2.5}$ (15.0 $\mu g/m^3$) and PM_{10} (150 $\mu g/m^3$) were retained. The final rule was published in the Federal Register on March 6, 2024, with an effective date of May 6, 2024.[6]

Implementation of the new standard, which was last revised in 2012, will require significant resources and effort from state, local, and tribal air agencies. A February 7, 2024, memorandum from EPA's Office of Air and Radiation (OAR) outlined the process for determining if an area is attaining the 2024 $PM_{2.5}$ NAAQS.[7] The memorandum prescribes a deadline of February 7, 2025, for states and tribes to submit attainment/nonattainment recommendations for their jurisdictions, which are determined by a complex five-factor analysis that evaluates the most recent three years of monitoring data, emissions data from current sources, meteorology, geography/topography, and area boundaries. Agencies will also have to perform public outreach and associated environmental justice analyses.

A number of complicating factors will need to be addressed as air agencies strive to meet the one-year deadline for



providing attainment recommendations. Foremost, wildfires and prescribed fires account for 44% of direct $PM_{2.5}$ emissions[8] and are outside the control of agencies that regulate air pollution (and regularly outside of jurisdictional borders, as with the 2023 Canada wildfires). Because fires will significantly increase three-year design values (DV)[9] used for recommendations, air agencies must develop exceptional event (EE) demonstrations to exclude smoke-impacted data. Developing an EE demonstration for EPA approval is resource-intensive, involving detailed analyses and often spanning hundreds of pages in length. By January 1, 2025, air agencies must provide initial notification to EPA of the intent to submit EE demonstration(s) and then submit said EE demonstration(s) by February 7, 2025, alongside attainment recommendations.[10]

Importantly, state, local, and tribal agencies undertake extensive public outreach efforts during these events to keep the public informed about health risks from smoke and associated PM. As air agencies develop exceptional events packages following a wildfire, prescribed burn, or other event, opportunities for the public to review and comment on the data and demonstration packages are provided.

Another technical hurdle is EPA's correction of biased PM data from approximately 400 Teledyne T640/T640X continuous monitors across the United States. Despite receiving approval by EPA's Reference and Equivalency Program as a Federal Equivalent Method (FEM), these continuous monitors consistently measure $PM_{2.5}$ levels about 20% higher than collocated filter-based Federal Reference Method (FRM) monitors. Smoke impacts from fires can result in even higher biases from these instruments. EPA approved a Network Data Alignment in April 2023 to correct the positive bias moving forward, and then took comment on a plan to retroactively apply the Alignment to data back to 2017.[11] State and local agencies note that this is important for having consistent and accurate monitoring data for regulatory, scientific, and public purposes,[12] but requires agencies to submit, review, and certify nearly seven years of data during the limited attainment recommendations period (with additional analyses necessary for smoke-impacted data).

Using quality-assured ambient air monitoring data, EPA intends to make formal area designations two years after the promulgated standard, or February 6, 2026. One year later, in February 2027, "infrastructure" state implementation plans (SIPs) are due from states to document their ability to implement, maintain, and enforce the new NAAQS. For areas not meeting the $PM_{2.5}$ NAAQS, nonattainment SIPs will be due in August 2027.[13]

While the revised $PM_{2.5}$ NAAQS was promulgated on February 7, 2024, for attainment purposes, the standard became applicable for permitting purposes on May 6, 2024. As the primary CAA permitting authorities implementing the NAAQS, air agencies must evaluate permits using the $PM_{2.5}$ standard for the Prevention of Significant Deterioration (PSD), which was established by Congress for the New Source Review (NSR) permitting program to ensure that projects can occur while air quality is maintained. The tightened $PM_{2.5}$ NAAQS substantially impacts the PSD program, and air agencies have noted difficulties in $PM_{2.5}$ modeling for projects as the standard approaches background levels, potentially limiting opportunities for new economic development projects. In some areas, exceptional events and monitors sited near roads may also factor into planning and permitting efforts.

Ozone NAAQS Review

As with the PM NAAQS, EPA announced a reconsideration of the December 2020 decision to retain the ozone NAAQS in October 2021. The reconsideration included a "supplemental" review of the supporting science and health studies. Unlike the PM NAAQS, the agency determined that the current evidence did not support lowering the ozone NAAQS. Ultimately, EPA initiated a full statutory review of the ozone standards in August 2023, returning it to the CAA-stipulated five-year interval.[14]

Last revised in 2015, the current primary and secondary NAAQS for ground-level ozone is set at 70 parts per billion (ppb), based on the annual fourth-highest daily maximum eight-hour average concentration, as averaged over three years. EPA concluded that the current ozone NAAQS are adequate to protect human health during the review that was completed in 2020, as well as the supplemental review that ended in 2023. The CASAC majority, though, suggested a significant reduction of the ozone NAAQS, noting in its review of the associated policy assessment: "All of the CASAC members, except one, recommend a revised NAAQS level in the range of 55 to 60 ppb to be protective

of public health."[15] During deliberations, the CASAC majority also called for setting a separate, distinct secondary standard for ozone to address ecological effects, which would be "uncharted territory" in the words of the CASAC chair.

EPA has indicated that an Integrated Review Plan (IRP) is forthcoming later this year to guide the new review process. The *Fall 2023 Unified Agenda of Regulatory and Deregulatory Actions* (released December 6, 2023) identifies the rule as a long-term action, indicating that a proposal is not expected in 2024.[16]

Other NAAQS Reviews

In addition to $PM_{2.5}$ and ozone, EPA is also in the process of three other reviews that include multiple primary and secondary standards:

- The Lead NAAQS were last revised in 2008 and then retained in 2016. The CASAC completed review of the associated IRP in September 2023 and a final rule is not expected in 2024.[17]
- Revisions to the nitrogen dioxide (NO_2) NAAQS were last made in 2010, though the agency does not expect regulatory action this year.[18] The CASAC held a meeting to review the associated IRP in April 2024.
- Facing consent decree deadlines, EPA issued a proposed rule in April 2024 based on a combined review of the secondary NAAQS for nitrogen oxides (NO_X) and sulfur oxides (SO_X) that was announced in August 2013, as well as for PM that was announced in December 2014. The proposal would revise the secondary sulfur dioxide (SO_2) NAAQS "to an annual average, averaged over three consecutive years, with a level within the range from 10 to 15 [ppb]" and retention of the secondary NO_X and PM standards. EPA must issue a final rule by December 10, 2024.[19]

Other Factors

Air agencies have begun implementation, enforcement, and permitting efforts for the 2024 $PM_{2.5}$ NAAQS, but there are a few distinct issues that could impact state, local, tribal, and federal work. On March 6, 2024, the day the final rule was published, multiple petitions for review were filed in the U.S. Court of Appeals for the D.C. Circuit challenging the new standard, including petitions from 25 states.[20] Judicial review could ultimately determine if (or what of) the final rule remains in effect, even though a court decision may come well into the implementation process.

A more immediate challenge for state and local air agencies is meeting a growing list of CAA obligations in the face of continued resource and staffing constraints. In addition to the $PM_{2.5}$ NAAQS, several significant regulations will enter the implementation phase in 2024, including entirely new rules to control emissions from power plants and the oil and gas sector. Heightened monitoring efforts, such as the ongoing deployment of continuous regulatory monitors and proliferation of air sensors, require commensurate workload

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increases for maintenance, data analysis, and public communication. Despite air agencies shouldering this work, federal funding directed to their air quality programs has remained mostly static for more than a decade and emissions reductions from permitted sources have led to less revenue generated from emissions fees. Further, air agencies have indicated difficulties hiring and retaining a qualified, technical, and experienced workforce.[21]

Conclusion

From review through implementation, EPA's NAAQS program requires a broad range of expertise to inform processes that have important implications for the nation's air quality and public health. This is particularly true for resource-constrained air agencies that are responsible for the complex and technically challenging core monitoring, modeling, emissions inventory, and planning efforts that. These agencies have a profound understanding of how national environmental efforts must intertwine with local priorities, economic development strategies, and social needs. While air quality standards may change, the foundation for successful implementation requires deep coordination among EPA and the state, local, and tribal agencies working on the ground. **em**

Jason Meyers is the Air Planning & Assessment Division Administrator for the Louisiana Department of Environmental Quality and 2024 President of the Association of Air Pollution Control Agencies (AAPCA; **www.cleanairact.org**). **Laura Crowder** is the Director for the West Virginia Division of Air Quality and AAPCA 2024 Vice President.

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18. *See:* RIN: 2060-AW08; https://www.reginfo.gov/public/do/eAgendaViewRule?pubId=202310&RIN=2060-AW08. EPA indicates in Volume 1 of the IRP for NO_2 (pg. 4-1) that: "In September 2023, the Center for Biological Diversity, Sierra Club, and Center for Environmental Health filed a deadline suit regarding completion of the review of the health-based air quality criteria and the primary NAAQS for oxides of nitrogen. That citizen suit has not yet been resolved, and the EPA anticipates that resolution of those claims would inform the schedule for completion of the review." (https://www.epa.gov/system/files/documents/2024-03/no2-irp-volume-1_march-2024.pdf).
19. 89 Fed. Reg. 26620 (April 15, 2024); https://www.govinfo.gov/content/pkg/FR-2024-04-15/pdf/2024-07397.pdf.
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Understanding the Impact of a

Lower Fine Particulate Matter National Ambient Air Quality Standard

by Michael Abraczinskas, Jason Meyers, and Jason Sloan

A look at the potential impact of the proposed new, lower $PM_{2.5}$ standard on state and local air agencies.

In early January, the U.S. Environmental Protection Agency (EPA) announced a proposal to revise the National Ambient Air Quality Standards (NAAQS) for Particulate Matter (PM).[1] The proposal, which was open for public comment through March 28, 2023, was the culmination of supplemental scientific and policy assessments developed following EPA's June 2021 announcement that the agency would reconsider its December 2020 decision to retain the existing PM NAAQS.[2] A final rule—expected in August 2023—could tighten the current annual standard. State and local air agencies will play a critical role in determining if an area is attaining, or meeting, the NAAQS. In coordination with EPA, agencies will also develop and update state implementation plans (SIPs) to ensure the NAAQS are met and maintained within and across state lines.

Background: NAAQS Program and PM Standards Review

The NAAQS program, created under the U.S. Clean Air Act (CAA) Amendments of 1970, determines the health-based (or primary) and public welfare (or secondary) ambient air quality levels for six "criteria" pollutants, including coarse (PM_{10}) and fine ($PM_{2.5}$) particulate matter (42 U.S.C. §7409(b)). CAA Section 109(d) sets forth that EPA, in coordination with the independent Clean Air Scientific Advisory Committee (CASAC), shall review each criteria pollutant NAAQS at five-year intervals, however the actual timeline has varied.

Periodic reviews of the PM NAAQS have resulted in the standard evolving over time as scientific understanding of exposure levels and health effects has increased.[3] The original particulate standard of Total Suspended Particulates (TSP) was established in 1971, then changed to PM less than 10-micron (PM_{10}) in 1987. Following the 1997 review, EPA established a standard for PM less than 2.5-micron ($PM_{2.5}$) and set the primary NAAQS of 15.0 micrograms per cubic meter ($\mu g/m^3$) as an annual mean, averaged over three years. In 2012, EPA tightened the $PM_{2.5}$ NAAQS to 12.0 $\mu g/m^3$, which was retained in 2020 after CASAC review. In mid-2021, the agency announced the reconsideration and supplemental review of the determination to retain the existing 2012 PM NAAQS.

EPA's current proposal to revise the PM NAAQS is informed by the CASAC evaluations of updated science and policy assessments totaling more than 1,000 pages and a 467-page Regulatory Impact Analysis (RIA).[4] The January 2023 proposal lowers the primary $PM_{2.5}$ annual standard from 12.0 $\mu g/m^3$ to within the range of 9.0–10.0 $\mu g/m^3$ while retaining the current primary daily NAAQS for $PM_{2.5}$ and PM_{10}, as well as the secondary PM NAAQS. The proposal sought further comment on alternative annual standard levels down to 8.0 $\mu g/m^3$ and up to 11.0 $\mu g/m^3$ and various ranges for the daily and secondary NAAQS. The agency is now reviewing comments received ahead of a final rule anticipated later this year.

Historical Trends, Sources, and Projected Impacts

The NAAQS program has dramatically improved the nation's air quality through cooperation between EPA, state, local, and tribal agencies, and regulated entities.[5] A 2017 article in the *Annals of the American Thoracic Society* states that "Actions to control emissions from vehicles, factories, electric power plants, and more have reduced emissions of the most prominent pollutants [...] by 73%, even while the U.S. gross domestic product has grown by more than 250%."[6] EPA's June 2022 report, *Our Nation's Air: Status and Trends Through 2021*,[7] finds that the national annual average for ambient $PM_{2.5}$ was reduced from 13.5 $\mu g/m^3$ in 2000 to 8.5 $\mu g/m^3$ in 2021. U.S. gross domestic product more than doubled over that same period, underscoring that environmental protection and economic development are not mutually exclusive.

EPA tracks the criteria pollutant emissions of major sources, which can contribute to direct (primary) emissions or secondary formation of particles in the atmosphere. Importantly, most concentrations of $PM_{2.5}$ in the atmosphere form from precursor emissions of sulfur oxides (SOx), nitrogen oxides (NOx), volatile organic compounds (VOCs), and ammonia (NH3). Figure 1 presents the sources of primary $PM_{2.5}$ emissions per the agency's Air Pollutant Emissions Trends Data for 2021.[8]

EPA's RIA for the $PM_{2.5}$ NAAQS reconsideration found substantial benefits to public health, the environment, economic growth, and social welfare. For example, reducing the annual $PM_{2.5}$ standard to 10.0 $\mu g/m^3$ while maintaining the 24-hr $PM_{2.5}$ standard at 35 $\mu g/m^3$ is estimated, in 2032, to avoid as many as 1,700 deaths and 110,000 lost workdays and reduce hospital visits for a range of health conditions. EPA estimates the economic value of these avoided morbidities and premature deaths to be between US$7.6 billion and US$17 billion.[9]

Revising the $PM_{2.5}$ NAAQS to within the proposed ranges could bring more than 100 counties (out of about 3,100 counties) in the country into nonattainment. In a preliminary analysis,[10] EPA found that monitoring data from 2019 to 2021 indicated that at least 50 counties would not meet an annual standard of 10.0 $\mu g/m^3$; the number of impacted counties would more than double under a 9.0 $\mu g/m^3$ $PM_{2.5}$ NAAQS scenario, with an additional 62 counties—112 in total—out of attainment. Several counties may be designated nonattainment for $PM_{2.5}$ for the first time. Under current air pollution control efforts, EPA's analysis further projects that 51 counties would not meet the most stringent standard proposed of 9.0 $\mu g/m^3$ by 2032. State and local agencies with areas designated nonattainment must develop air quality attainment plans for their jurisdictions, which could be subject to additional emission reduction requirements through permitting restrictions to, under certain situations, withholding federal highway funding if attainment dates are not met.[11]

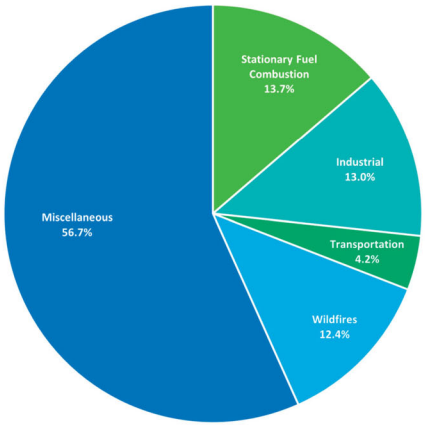

Figure 1. Sources of Fine Particulate Matter ($PM_{2.5}$)
Source: U.S. EPA Air Pollutant Emissions Trends Data for 2021.[8]

State Considerations When Implementing a New NAAQS

Determining attainment status is dictated by the CAA and takes several years. After a new NAAQS is promulgated, delegated programs at state, local, and tribal agencies are required to implement measures to meet the standards. EPA provides the following timeline[12] for designations and implementation:

- **Within 2 years after a final NAAQS:** For areas with available information, EPA must "designate" areas as meeting (attainment areas) or not meeting (nonattainment areas) the final NAAQS considering the most recent air quality monitoring data and input from states and tribes. All $PM_{2.5}$ nonattainment areas are initially designated as "Moderate."
- **Within 3 years after a final NAAQS:** CAA Section 110 requires all states to submit ["infrastructure" SIP] revisions to show they have the basic air quality management program components in place to implement the final NAAQS.
- **Within 18 months after the effective date of designations:** Nonattainment area $PM_{2.5}$ [SIPs] are due.
- **End of the 6th calendar year after the effective date of designations:** "Moderate" area attainment date.

To meet these timelines, air agencies will need tools, guidance, and appropriate flexibility to accommodate unique social, geographic, and economic factors. With each successive, tighter $PM_{2.5}$ NAAQS, achieving the standard becomes more difficult, particularly as the NAAQS potentially approach background concentrations while the majority of stationary sources have control measures to reduce $PM_{2.5}$ emissions. States have stressed as paramount the need for a timely implementation rule, known as a "SIP Requirements Rule," that addresses plan requirements for nonattainment areas under a newly promulgated NAAQS. To illustrate, the 2015 Ozone NAAQS SIP Requirements Rule was finalized in November 2018, well into the implementation timeline and state planning efforts. A timely rule and guidance will be particularly important for areas that have not previously been in nonattainment.

Additionally, the $PM_{2.5}$ NAAQS reconsideration has proposed changes to the Air Quality Index (AQI) and new monitoring requirements, including "a revision to the $PM_{2.5}$ network design to account for at-risk populations."[13] Operating an ambient air monitoring program involves network planning, monitor siting, shelter maintenance, instrument certification, and data handling, including quality assurance/quality control, recordkeeping, and reporting. EPA will need to coordinate directly with state and local air agencies, which serve as primary monitoring entities under the CAA. Agencies have concerns about ambient PM data comparability between monitors using federal reference methods (FRM) and federal equivalent methods (FEM) for continuous monitoring, which have been shown to measure higher concentrations than collocated FRMs and may bias design values used for attainment designations.[14] Resource or other constraints will also need to be taken into consideration.

While air agencies are responsible for developing strategies to meet and maintain the NAAQS, events such as wildfires and transatlantic Saharan dust can severely impact air quality and are clearly outside of regulatory control. EPA states in a fact sheet on the proposed PM NAAQS revisions that "Wildland fires—including both wildfires and prescribed fires—account for 44% of the nation's primary emissions of fine particulate matter ($PM_{2.5}$)."[15] The "exceptional events" provision established in Section 319 of the CAA allows data from events affecting air quality and "not reasonably controllable or preventable" or "caused by human activity that is unlikely to recur at a particular location or a natural event" to be set aside for regulatory purposes (42 U.S.C §7619). A lower PM NAAQS could substantially increase the number of regulatorily significant events and, therefore, EPA may need to update guidance, regulations, review processes, and other mechanisms for agencies to reasonably develop exceptional event demonstrations.

EPA's implementation of the Inflation Reduction Act (IRA) may also play an impactful role in meeting the PM NAAQS. Appropriately crafted and timed provisions on monitoring and consideration of overburdened communities (among others) can assist state and local agencies in planning,

EPA's implementation of the Inflation Reduction Act (IRA) may also play an impactful role in meeting the PM NAAQS.

permitting, enforcement, and other regulatory efforts. The agency's IRA funding directed at reducing diesel emissions from heavy-duty vehicles, including school buses and at ports, could improve PM emissions and air quality in some areas. Close coordination with state and local governments that have technical experts on the ground will help maximize air quality benefits as agencies seek to develop SIPs for meeting the PM NAAQS and other CAA programs.

In announcing the PM NAAQS reconsideration, Administrator Michael Regan noted that "EPA is committed to ensuring this review, and other upcoming NAAQS reviews, reflect the latest science and public health data." His comments align with Strategy 1 of the *FY 2022 – 2026 EPA Strategic Plan*, "Ensure Scientific Integrity and Science-Based Decision Making."[16] As the agency promulgates a new PM NAAQS, committing to Strategy 4 of the plan ("Strengthen Tribal, State, and Local Partnerships and Enhance Engagement") can drive successful implementation. Under the CAA, states, tribes, and local governments are co-regulators with EPA and central to meeting the NAAQS. This collaboration has resulted in cleaner and healthier air across the nation—and established a proven framework for achieving public health goals. **em**

Michael Abraczinskas is the Director for the North Carolina Division of Air Quality and the 2023 President of the Association of Air Pollution Control Agencies (AAPCA; **www.cleanairact.org**). **Jason Meyers** is the Air Planning & Assessment Division Administrator for the Louisiana Department of Environmental Quality and AAPCA 2023 Vice President. **Jason Sloan** is AAPCA's Executive Director. Email: **jsloan@csg.org.**

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2022-2024 Annual $PM_{2.5}$ Design Value Maps

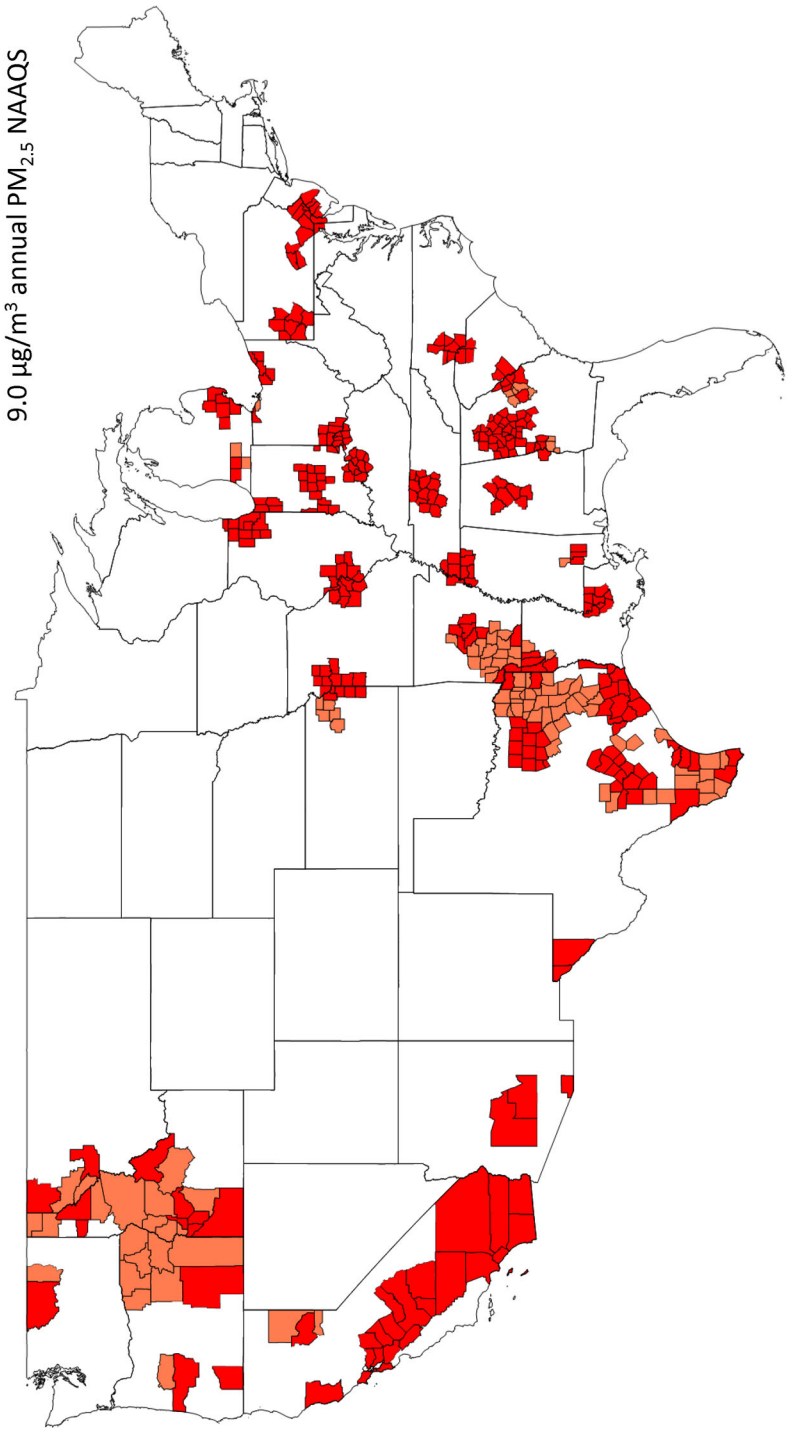
June 2025

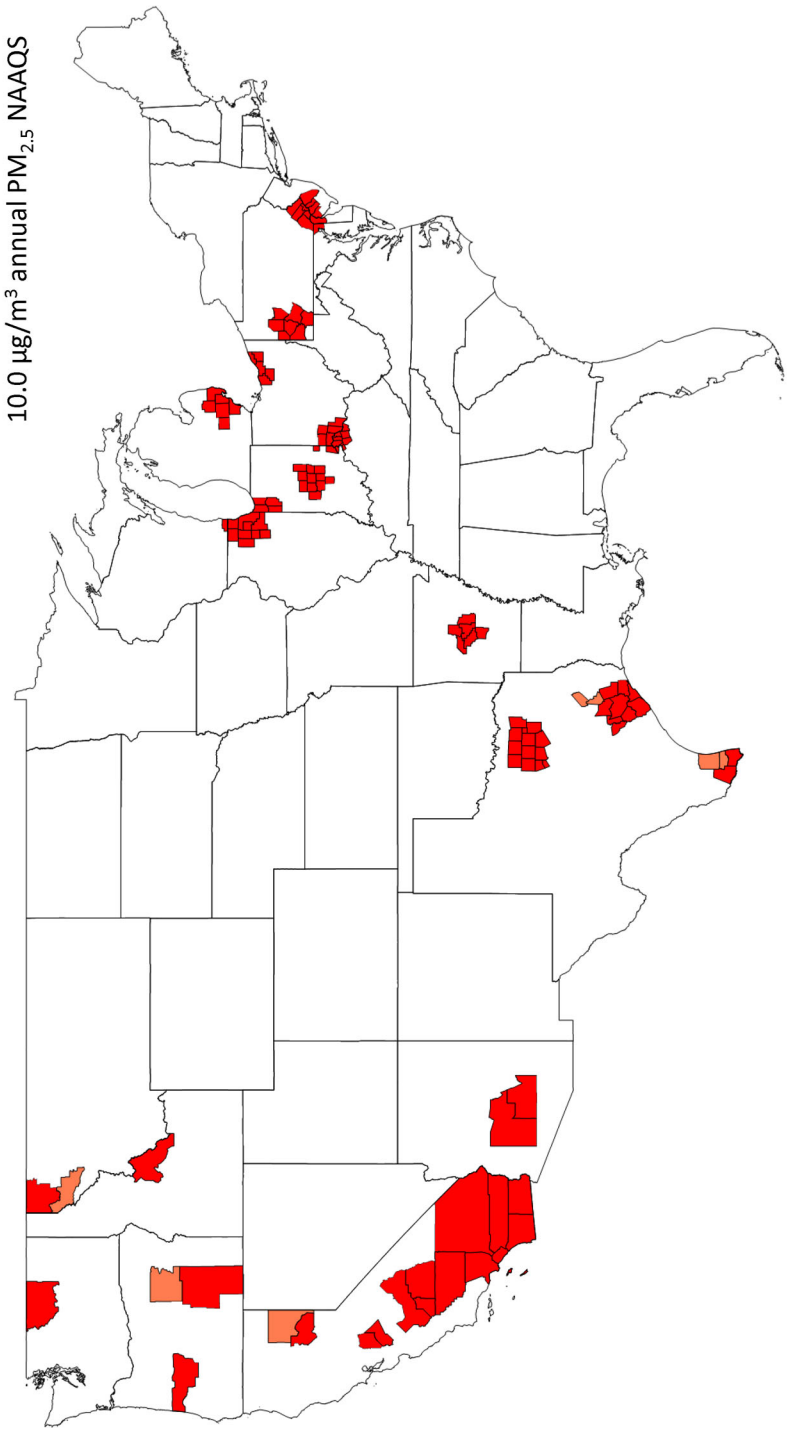
Prepared by Alpine Geophysics, LLC

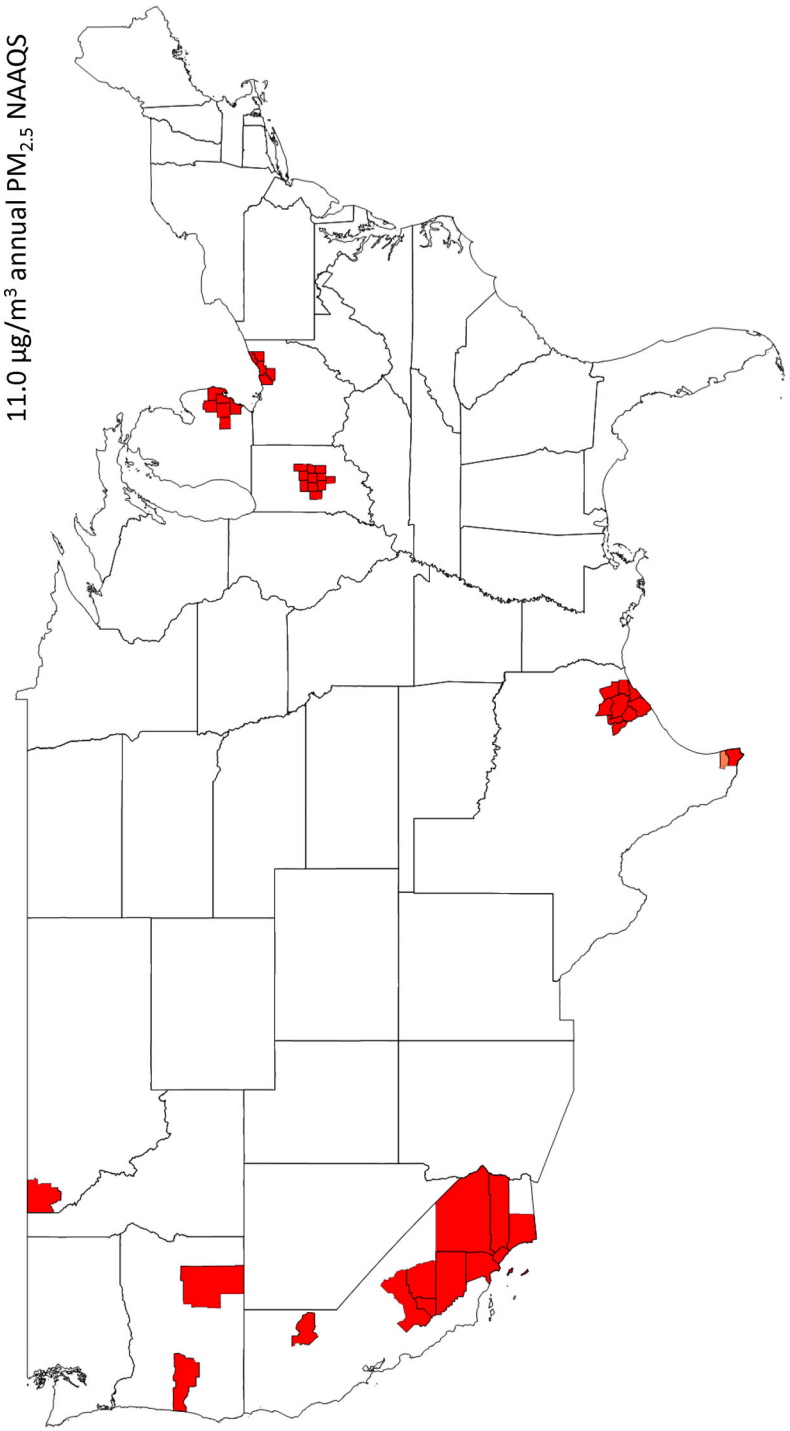
$PM_{2.5}$ Design Value Data and Map Key

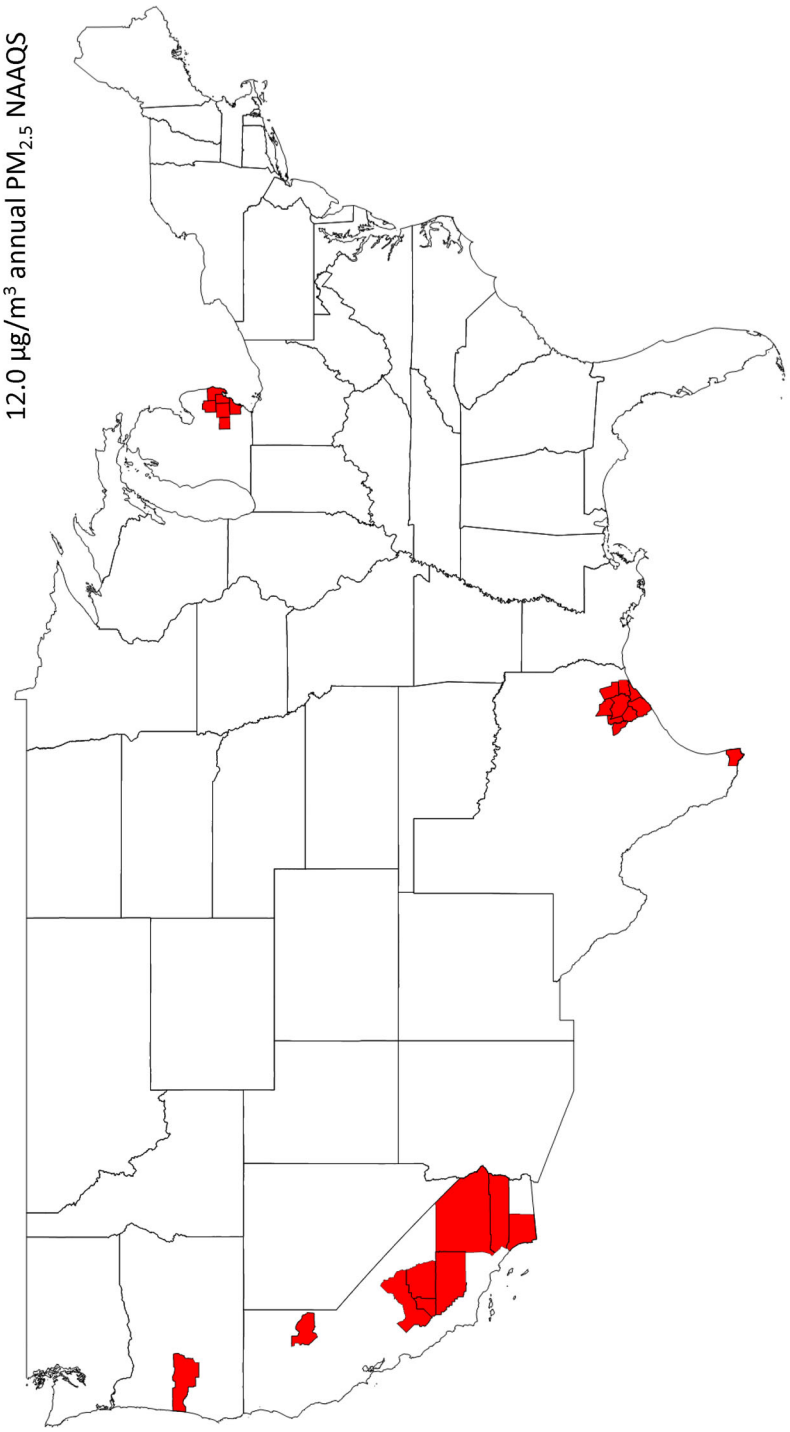
- All DVs obtained from EPA's site
  - https://www.epa.gov/air-trends/air-quality-design-values

- Map colors
  - "white" indicates attainment with the noted $PM_{2.5}$ NAAQS
  - "red" indicates nonattainment with noted $PM_{2.5}$ NAAQS at county/CBSA level
  - "orange" indicates nonattainment with noted $PM_{2.5}$ NAAQS using kriging


9.0 µg/m³ annual PM2.5 NAAQS


10.0 µg/m³ annual PM2.5 NAAQS

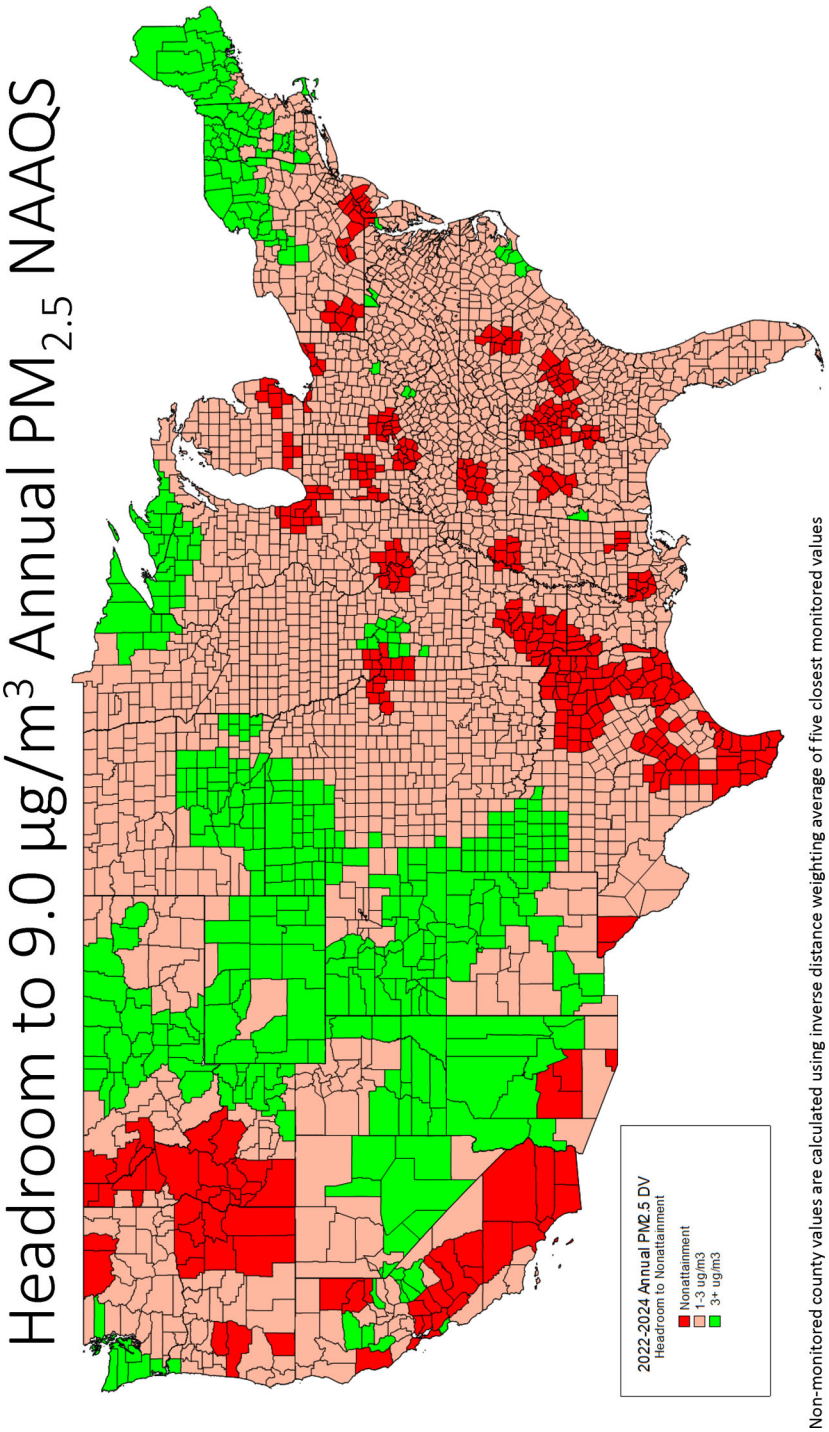

11.0 µg/m³ annual PM2.5 NAAQS


12.0 µg/m³ annual PM2.5 NAAQS

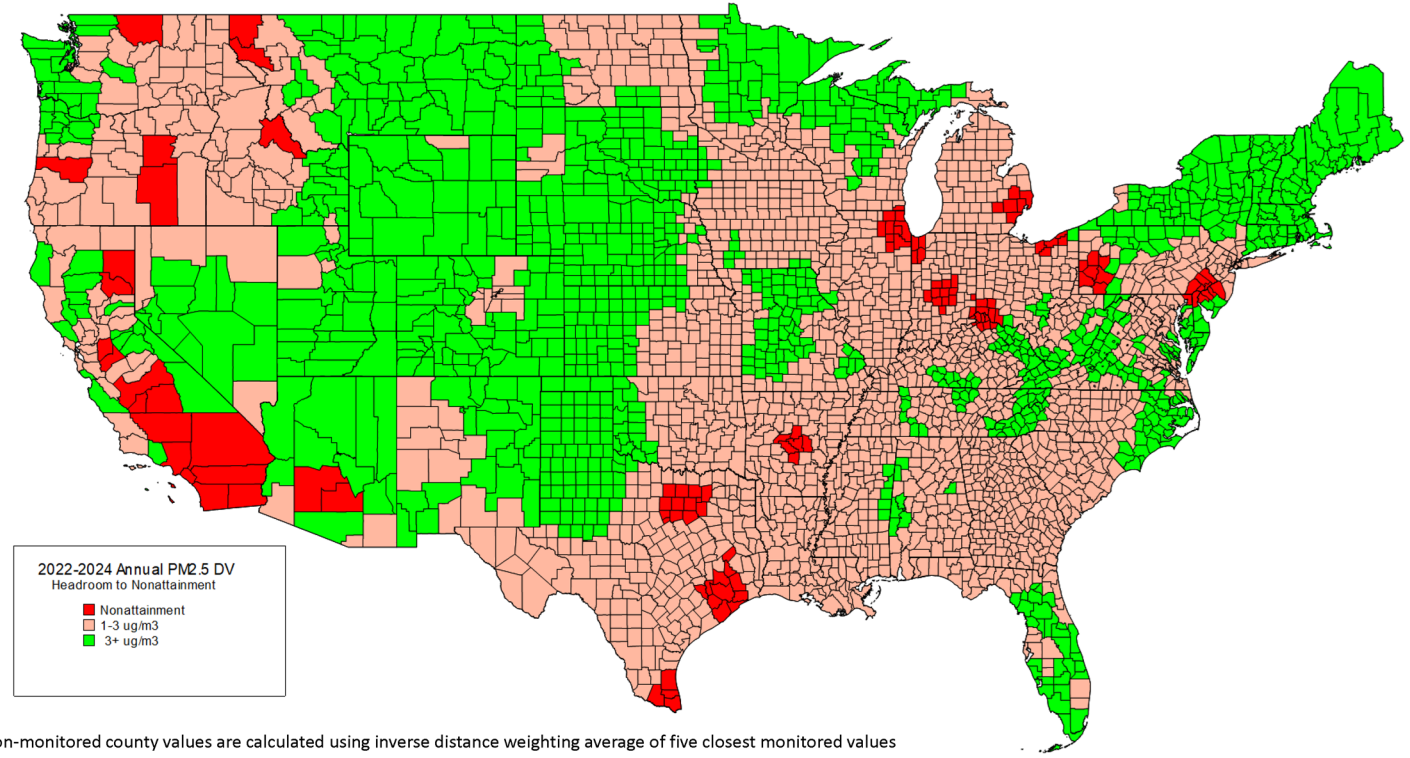
$PM_{2.5}$ DV Headroom Mapping

- Used maximum annual 2022-2024 $PM_{2.5}$ DVs to represent each monitored county and expanded to CBSA boundaries using maximum value within the CBSA

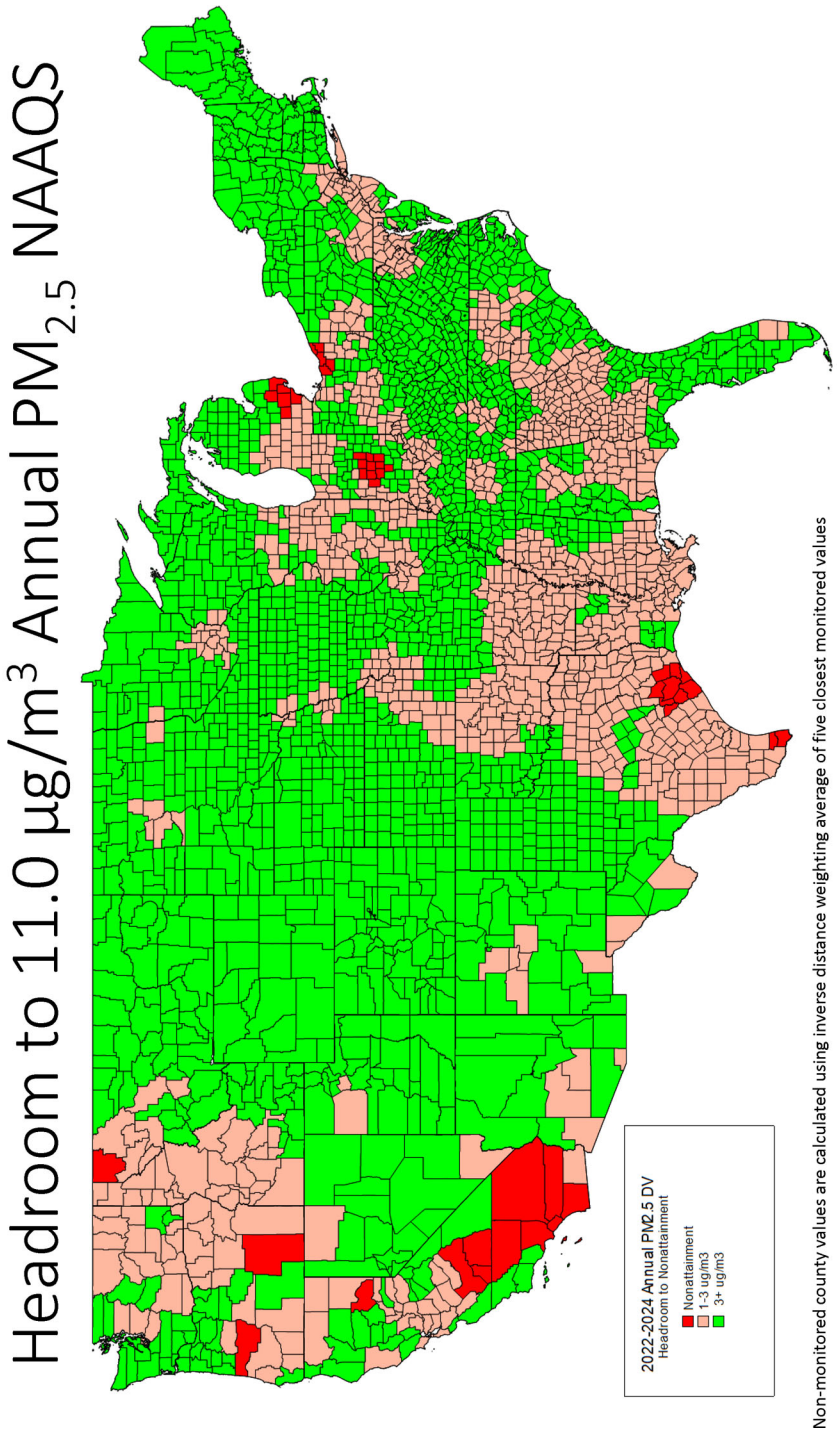
- "Headroom" is remaining $\mu g/m^3$ to reach annual $PM_{2.5}$ NAAQS


Headroom to 9.0 µg/m³ Annual PM2.5 NAAQS
2022-2024 Annual PM2.5 DV
Headroom to Nonattainment
Nonattainment
1-3 ug/m3
3+ ug/m3
Non-monitored county values are calculated using inverse distance weighting average of five closest monitored values

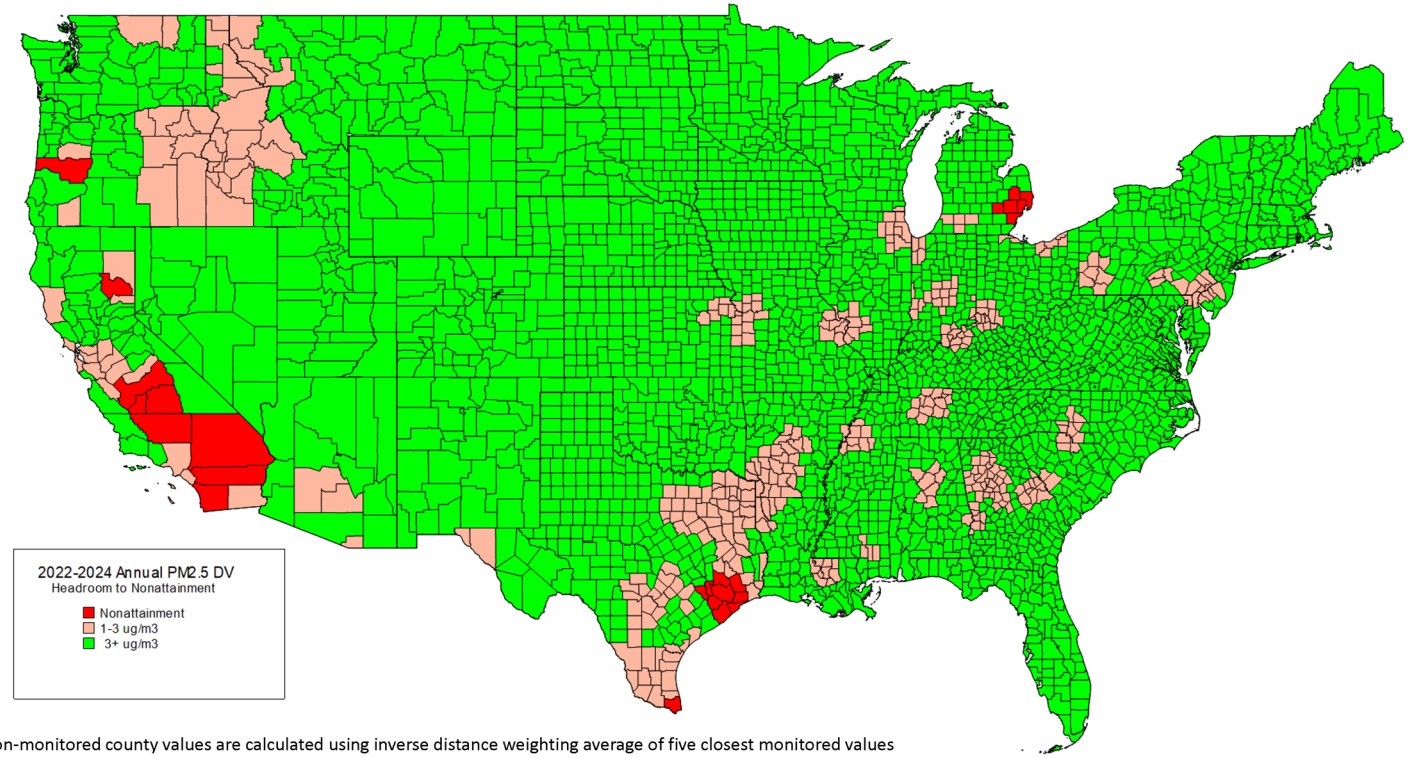
Headroom to 10.0 µg/m^3 Annual $PM_{2.5}$ NAAQS



Non-monitored county values are calculated using inverse distance weighting average of five closest monitored values


Headroom to 11.0 µg/m3 Annual PM2.5 NAAQS
2022-2024 Annual PM2.5 DV
Headroom to Nonattainment
Nonattainment
1-3 ug/m3
3+ ug/m3
Non-monitored county values are calculated using inverse distance weighting average of five closest monitored values

Headroom to 12.0 µg/m^3 Annual $PM_{2.5}$ NAAQS



Non-monitored county values are calculated using inverse distance weighting average of five closest monitored values

American Cement Association
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June 11, 2025

The Honorable Brett Guthrie
Chair
U.S. House of Representatives
Energy & Commerce Committee
Washington, DC 20150

The Honorable Frank Pallone
Ranking Member
U.S. House of Representatives
Energy & Commerce Committee
Washington, DC 20150

Dear Chairman Guthrie & Ranking Member Pallone

I am writing on behalf of the American Cement Association (ACA) in support of your hearing, *Short-Circuiting Progress: How the Clean Air Act Impacts Building Necessary Infrastructure and Onshoring American Innovation*. We support pragmatic and technically feasible air regulations that protect human health and the environment, while allowing American cement manufacturers to continue to produce the most widely used building material on Earth.

The American Cement Association, formerly known as the Portland Cement Association, is the leading voice for America's cement manufacturers. Founded in 1909, our association adopted its new name in May 2025 to reflect the industry's evolution beyond Portland cement. Today, our members are pioneering the production of innovative cements and emissions-reduction technologies to expand domestic manufacturing capacity.

Cement is essential to building and maintaining the nation's infrastructure – from highways and bridges to airports, mass transit systems, and water facilities. Our products enhance energy efficiency in buildings, improve fuel efficiency on roads, and contribute to the resilience of critical infrastructure. Cement and concrete manufacturing supports over 600,000 American jobs and contributes more than $100 billion to the U.S. economy annually.

The Committee is prepared to examine two bills at this hearing: the Clean Air & Economic Advancement Reform Act (Clear Act) and the Clean Air & Building Infrastructure Improvement Act (CABII Act). Both bills are expected to foster economic growth while supporting the significant improvements made by the NAAQS program. We encourage bipartisan collaboration to address the complexities of air permitting policy and find solutions that strike a balance between reducing air emissions, promoting economic growth, and protecting human health.

The National Ambient Air Quality Standards (NAAQS) program, while well-intentioned, has failed in certain aspects, such as the five-year review cycle, which is an insufficient amount of time to conduct a NAAQS review. A ten-year review period would allow the EPA to consider whether reductions are technologically feasible, analyze the latest available science, and collect data to inform a proper NAAQS review. A more extended review period would also permit the EPA to provide timely implementation regulations and guidance, as well as ensure that states are not required to develop regulations to meet standards that they do not have the authority to

change. The Clear Act seeks to expand the Environmental Protection Agency's (EPA) review cycle of NAAQS from the seldom-reached goal of five years to ten years.

The Clear Act would also allow for technical feasibility to be included in State Implementation Plans (SIPs) and more opportunities for innovative pollution control systems. Finally, natural events, such as fires, droughts, and heat, would be considered as part of the NAAQS process, which is not currently permitted. This lack of inclusion of these considerations in the current NAAQS process leads to states shifting reductions to industry in an inequitable manner.

The EPA should be required to release implementation guidance for any NAAQS when it is issued so manufacturers can adequately prepare for it to take effect. For projects underway in the permitting process, when a new NAAQS is finalized, the statutory language should clearly state that the new standard does not apply to those projects. The CABII Act would mandate the EPA to publish regulations and guidance for a revised NAAQS standard concurrently and prevent a new standard from applying to preconstruction permits until associated final regulations and guidance are issued.

Finally, the 2024 Fine Particulate Matter (PM 2.5) NAAQS is an example of how inconsistent, hasty, and faulty regulatory processes can harm economic growth while failing to substantively improve air quality. The CABII Act would ensure that the 2024 PM2.5 standard is not applied to permits until an area has a final designation.

Inconsistencies and ever-shifting regulatory hurdles are unfair to manufacturers seeking to innovate, expand their facilities, and improve energy efficiency. The bills meet the goals discussed at today's hearing.

For these reasons, we support the efforts of the Energy and Commerce Committee to evaluate the NAAQS program. We encourage bipartisan collaboration to tackle the complexities of air permitting policy and find solutions that balance the need to reduce air emissions, foster economic growth, and protect human health. We offer assistance with any technical or other drafting questions required for that effort. We appreciate your consideration of our views. If you have any questions, please contact me at soneill@cement.org or (202)719-1974.

Sincerely,

Sean O'Neill
Senior Vice President, Government Affairs
Portland Cement Association

Trump EPA rollbacks would weaken rules projected to save billions of dollars and thousands of lives

Spotlights

When the head of the Environmental Protection Agency announced a wide-ranging rollback of environmental regulations, he said it would put a “dagger through the heart of climate-change religion” and introduce a “Golden Age” for the American economy.

What Lee Zeldin didn’t mention: how ending the rules could have devastating consequences to human health.

The EPA-targeted rules could prevent an estimated 30,000 deaths and save $275 billion each year they are in effect, according to an Associated Press examination that included

the agency's own prior assessments as well as a wide range of other research.

It's by no means guaranteed that the rules will be entirely eliminated; they can't be changed without going through a federal rulemaking process that can take years and requires public comment and scientific justification.

But experts say the numbers are conservative and that even a partial dismantling of the rules would mean more pollutants such as smog, mercury and lead — and especially more tiny airborne particles that can lodge in lungs and cause health problems. It would also mean higher emissions of the greenhouse gases driving Earth's warming to deadlier levels.

"More people will die," said Cory Zigler, a professor of biostatistics at Brown University who has studied air pollution deaths from coal-fired power plants. "More of this type of pollution that we know kills people will be in the air."

What went into AP's examination of the pollution rules

The AP set out to look at what could happen if all the rules were eliminated, by first examining exhaustive assessments the EPA was required to produce before the rules were approved. Though the agency's priorities can change as presidential administrations change, the methods for the assessments have been largely standard since Ronald

Reagan's presidency and are deeply rooted in peer-reviewed scientific research.

The AP used those and eight different government and private group databases for its estimate of financial costs, some death estimates and analysis of pollution trends. AP performed additional analysis of potential deaths by drawing on peer-reviewed formulas and scientific research on the impacts of increased heat and pollution. And AP vetted its work with multiple outside health experts, who said it is scientifically justified, but likely an undercount.

Multiple experts say the science behind the rules is strong, and they pointed to the rigorous process that must be followed to change them, including requirements for public comment.

Zeldin acknowledged as much last month.

"I'm not going to prejudge outcomes with what will be a lot of rulemaking," Zeldin said in April.

Virtually all the benefits from the rules come from restricting the burning of coal, oil and natural gas. The fossil fuel industry was a heavy contributor to President Donald Trump's 2024 presidential campaign and Republicans overall. In announcing the proposed changes, the EPA repeatedly cited the costs of the rules and omitted the

benefits in all but one instance.

Calculating costs and benefits is contentious

Asked for comment on the AP findings, an EPA spokesperson said the agency's plans would "roll back trillions in regulatory costs and hidden 'taxes' on U.S. families."

"Unlike the Biden EPA attempts to regulate whole sectors of our economy out of existence, the Trump EPA understands that we do not have to choose between protecting our precious environment and growing our economy," spokesperson Molly Vaseliou said.

Scott Segal, an attorney at Bracewell LLP who represents energy and manufacturing interests, suggested that EPA analyses under the Biden administration emphasized worst-case scenarios, inflated health benefit claims and missed the big-picture economic benefits of booming industry.

"If you only count lives saved by regulation, not lives harmed by regulation, the math will always favor more regulation," Segal said. "This framing misses the larger point: public health isn't just about air quality — it's also about job security, housing, access to medical care, and heating in the winter."

The EPA regulatory analyses are immense documents that

numerous health and environment researchers and former officials say are grounded in science, not politics. For example, in January 2024, the EPA produced a 445-page analysis of tightening standards on dangerous particle pollution that cited more than 90 different scientific publications, along with scores of other documents. The Biden EPA presented four different regulatory scenarios and ultimately chose one of the middle options.

Two experts who reviewed AP's work said the EPA documents that underpinned the analysis were themselves conservative in their estimates. University of Washington health and environment professors Kristi Ebi and Howard Frumkin said that's because EPA looked at added heat deaths and air pollution mortality, but did not include climate change's expected deaths from increased infectious disease, flooding and other disaster factors.

"This is a rigorous, compelling and much-needed analysis," said Frumkin, who was appointed director of the CDC's National Center for Environmental Health during George W. Bush's administration. "It makes clear that regulatory rollbacks by the Trump administration will have major, direct consequences for health and well-being. Because of these regulatory rollbacks and funding cuts, Americans will die needlessly."

That's a sentiment echoed by two former Republican EPA

administrators, William Reilly and Christine Todd Whitman, who served in the George Bush and George W. Bush administrations respectively.

"This administration is endangering all of our lives — ours, our children, our grandchildren," said Whitman, who led EPA under George W. Bush.

How regulations helped clear the air

A visit to Evansville, Indiana, helps show how EPA regulations have made a difference.

The city of about 115,000 lies where the state's southwest tip meets Kentucky at the curving Ohio River. Industry lines the banks and coal barges float past carrying loads destined to fuel power plants.

Kirt Ethridge, 30, grew up in Evansville and still lives there. As a child, he recalls looking down from high ground into the bowl-shaped valley where the heart of the city lies and seeing a haze of pollution atop it. He thought that was normal.

He didn't think much of the looming smokestacks of the coal-fired power plants and factories that ringed the city, nor the line of inhalers waiting on a bench before he and his classmates ran the mile. He suffered asthma attacks in class, sometimes more than once a week, that sent him to the

nurse's office. Once, he was rushed to the hospital in an ambulance.

"It's a very scary feeling, particularly as a kid, to not be able to get enough air in your lungs," he said, describing it as like "breathing through a straw."

In southwestern Indiana, coal-fired power plants were to blame for between 19,000 and nearly 23,000 deaths from 1999 to 2020, according to work by Zigler published in the journal Science that examined death rates among Medicare recipients and modeled where plants' pollution would spread.

Nationally, he and his team found a sharp decline in air pollution deaths from coal-fired power plants after the mid-2000s, from an average of 43,000 a year to just 1,600 a year in 2020, with a similar cut in particle pollution. That's when two different forces came into play: Cheaper and less polluting natural gas pushed aside dirtier and costlier coal, while at the same time stricter regulations required more pollution control devices such as scrubbers.

Duke Energy operates its biggest power plant near Evansville — Gibson Station, which can power about 2.5 million homes. Emissions have declined significantly as the company installed scrubbers that pull unwanted chemicals out of smokestacks, along with other pollution control technology.

Duke Energy spokeswoman Angeline Protegere said the scrubbers were a response to "regulations over the years as well as market factors."

Put simply, the air got cleaner around places like Evansville. Vanderburgh County and neighboring counties violated national annual air standards for fine particles from 2005 to 2010, but no longer do, even as standards have tightened.

The same is true across the United States. The amount of tiny airborne particles in the last 10 years nationwide is one-third lower than 2000-2009, EPA statistics show. Smog pollution is down nearly 15% and sulfur dioxide has plunged 80%.

"The Clean Air Act, the EPA's founding legislation, has been a powerful engine for improving public health as our air has grown visibly clearer and cleaner," said Gina McCarthy, who headed the EPA under President Barack Obama and served as Biden's White House climate adviser. "Millions of Americans have avoided illnesses, hospital visits, and premature deaths thanks to EPA's cleaner car and truck standards in concert with rules that limit industrial pollution."

Five rules saving more than $200 billion a year

Five rules together were estimated to have more than $200 billion a year in net benefits, based on EPA documents that

estimated reduced illnesses and deaths and the costs for companies to comply.

Three rules dealt with cars and trucks. The "clean car rule" is a tightening of EPA emission standards for vehicles that was supposed to take effect for 2027 model years and eventually have annual net benefits of more than $100 billion a year, according to the agency's 884-page regulatory analysis. The EPA estimated that over the next three decades this rule alone would prevent 7.9 billion tons of heat-trapping carbon dioxide, 8,700 tons of particulate matter and 36,000 tons of nitrogen oxides.

Two other proposed rules — one that deals with car models from 2023 to 2027 and another aimed at heavy trucks and buses — are estimated to save nearly $38 billion a year combined through reduced health problems from air pollution, according to EPA's own detailed calculations.

EPA plays up costs, plays down benefits of targeted rules

Almost none of those benefits are to be found in 10 fact sheets the EPA produced in conjunction with Zeldin's announcement. Nine make no mention of benefits from the rules, while eight mention the costs.

In 17 of the 20 rules with explicit cost-benefit analyses, AP

found that estimated benefits are larger than the costs — and sometimes far larger.

For example, Biden's proposed power plant rule was designed to save more than $24 billion a year, prevent about 3,700 annual premature deaths and 3 million asthma incidents from fossil fuel-powered plants, according to EPA documents last year and work by the Environmental Protection Network. Under Trump, the EPA's fact sheet on that rule notes nearly $1 billion in costs but nothing about the far higher estimated benefits.

Another rule the EPA updated last year sets standards for pollution permitted in the air, called National Ambient Air Quality Standards. The update, required by the Clean Air Act, cuts allowable soot particles by 25% to reflect new science on the harms from such pollution. The EPA in Biden's time calculated the change would annually save as much as $46 billion, 4,500 premature deaths and 800,000 asthma incidents.

But the new EPA fact sheet only mentions the estimated costs of the change — about $614 million — and not benefits estimated at 76 times that amount.

"The human body count and human health toll of particulate matter alone is just absolutely massive," said K. Sabeel Rahman, a Cornell law professor who was a top federal

regulatory officer from 2021 to 2023. "Literally tens of thousands of people will lose their lives" if the standard is rolled back, he said.

A penguin-shaped nebulizer

In southwest Indiana, many people have noticed a positive difference from the EPA regulations. And they're concerned about changes.

In Bloomfield, Jessica Blazier's 11-year-old son Julian has multiple health conditions that make him more sensitive to air quality, including nonallergic rhinitis, which inflames his nasal passage and makes breathing "feel like a knife sometimes," in his words. Jessica Blazier said the proposed EPA rule rollbacks are "almost adding insult to injury in our particular circumstance."

In Evansville, Ethridge is now raising kids of his own, including a 5-year-old daughter who was born early and doesn't tolerate respiratory illnesses well. Whenever Eliza gets sick, she uses a children's nebulizer that is shaped like a penguin and stored in an igloo-shaped case.

"I want to raise my kids in Evansville," he said. "I don't want to raise my kids in a bowl of pollution."

Borenstein and Daly reported from Washington, Walling and Bickel from Evansville, Indiana, and Wildeman from Hartford, Connecticut.

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After years of waiting, people across the U.S. are finally celebrating a stronger limit on dangerous particulate matter air pollution. The new stronger standard will drive air pollution cleanup in communities across the country, preventing asthma attacks and saving lives.

But now that a stronger limit is across the finish line, the critical work of implementing it begins – and polluting industries are pushing back. Some are spreading misinformation in hopes of avoiding cleanup or filing lawsuits. They are even trying to get Congress to pass legislation that would prevent the public from receiving the health benefits of the new standards—or potentially any stronger standards.

EPA's New Particle Pollution Limit Will Prevent Thousands of Premature Deaths

The American Lung Association's mission is to save lives by improving lung health and preventing lung disease. The new, stronger limit on particle pollution that the U.S. Environmental Protection Agency (EPA) finalized in February 2024 will do just that.

Our "State of the Air" reports show that the air over time has gotten much cleaner, thanks to measures implemented under the Clean Air Act.[1] But it's not yet as clean as it needs to be to keep everyone healthy. Tens of millions of people live with unhealthy levels of particle pollution. This pollution comes from gasoline- and diesel-powered vehicles, coal and gas power plants, industrial facilities, woodstoves, wildfires and more. People who live near these sources, or near highways, railyards or ports, get a bigger dose of this deadly pollution.

Particle pollution is dangerous both in short-term spikes and in long-term, lower-level exposure. It causes serious respiratory and cardiovascular harm, cancer and premature death. It's especially dangerous for fetuses, babies, kids, seniors and people with lung and heart disease. It's also a health equity and environmental justice issue - people of color are disproportionately impacted by the health harms of particle pollution.

In 2024, EPA strengthened the annual limit on particulate matter from 12 micrograms per cubic meter (mg/m^3) to 9 mg/m^3. EPA estimates this will result in benefits - in the year 2032 alone - up to:

- 4,500 premature deaths avoided
- 800,000 cases of asthma symptoms avoided
- 290,000 lost workdays avoided
- $46 billion in health benefits to the public

This updated standard was necessary. The Lung Association and other leading national health organizations – including the American Medical Association, the American Academy of Pediatrics and the American Public Health Association – reviewed the research and agreed that more protective standards were needed to best protect health for people with lung disease and promote pollution cleanup in areas facing environmental injustice.[2] The independent experts on EPA's Clean Air Scientific Advisory Committee agreed that stronger standards were necessary.[3]

The Law is Smart and Science-Based

The new particle pollution limit was required by the Clean Air Act. Here's how: the Clean Air Act is a lifesaving law with a long history. One of its requirements is that the EPA set national limits on dangerous outdoor air pollutants – called the National Ambient Air Quality Standards (NAAQS). These standards are the legal limits on how much of these pollutants can be in the air. If a community's air has too much of one of these pollutants, they work with EPA and their state to create and implement a plan to clean up emissions. The new, stronger annual limit on particulate matter is one of the NAAQS.

The reason these standards are so successful is that they are required to be based on what the current scientific research shows is an acceptable level of that pollutant to breathe. And because the members of Congress who wrote the Clean Air Act knew that the science is always advancing, the law also requires that EPA review the science every five years and revise the standards if they no longer match what the research shows is safe to breathe.

Since these are health-based standards, EPA is required to consider only the health science when it sets the standards. That is because considerations like costs and technological feasibility are built into the process later, during implementation, when states write their plans to clean up pollution in places where the levels are too high. That way, the nation collectively works toward achieving pollution levels that the science shows adequately protect public health.

The Clean Air Act has a decades-long track record of success cleaning up pollution, but the work isn't done yet. Keeping these provisions in place – and opposing efforts to weaken or block them – is critical to protecting health from air pollution for the long term.

Implementation of the Standard is a Time-Tested, Reasonable Process

Now that the new standard is final, the work of implementing it begins. This process is critical for ensuring that the projected lifesaving benefits of the standard become reality.

The NAAQS implementation process is governed by the Clean Air Act and involves states, local air quality management agencies, Tribal nations and EPA. Within one year of the new particle pollution standard's finalization, states and Tribes will submit recommendations to EPA on whether or not areas within their jurisdiction are attaining the new standard, based on air quality data collected from monitors.

Then, the next step is for EPA to review the air quality data and the state and Tribal recommendations and then make designations. If the air quality in a geographic area meets or is cleaner than the NAAQS, EPA will designate the area as being in attainment of the standard (Geographic areas are determined by looking at factors like jurisdictional boundaries and topographical and meteorlogical data). The areas that do not meet the NAAQS are designated as nonattainment areas. Those areas that do not have adequate data to determine their attainment status are designated "unclassifiable."

Once the designations take effect, state and local governments develop State Implementation Plans (SIPs). For places that have too much particle pollution – those designated "nonattainment" – part of the nonattainment SIPs identify the specific emissions control requirements the state will rely on to attain and/or maintain the NAAQS. These SIPs contain control requirements like installing and operating pollution controls on power plants and incinerators and limiting woodburning on poor air quality days.

The process of implementing the standards is responsive to state and local situations and air quality challenges. SIPs are developed by the states, with input from the public. That's because the best opportunities for emissions reductions in the Midwest may not be the same for the Western U.S. and vice versa. The flexibility and individuality of the SIPs is what makes the implementation process work so well. And EPA is rolling out new resources, maps and tools to help states develop the best possible SIP to achieve the required amount of emissions reductions.

Attainment designations for the new particle pollution standard will likely be finalized in early 2026 and will likely include monitoring data from 2022, 2023 and 2024. However, EPA projected in the final rule that of the counties that may not meet the new annual standard, the vast majority will attain the standard by the likely legal deadline of 2032 with just the existing pollution reductions that EPA is implementing now.

That's because EPA's other rulemakings and investments will help communities across the country attain the stronger particle pollution standards. For example, new nationwide rules to clean up cars and trucks and further cut down on emissions from power plants will help reduce emissions that form particle pollution from these sources. EPA is also implementing investments from the Bipartisan Infrastructure Law and Inflation Reduction Act that further reduce emissions by aiding in the transition to zero-emission technology, such as replacing diesel school buses with electric ones, providing tax incentives for electric vehicles, building out EV charging infrastructure and building out more clean, renewable electricity. These actions all help reduce particle pollution.

As Always, Permitting of New Sources Will Continue Under the Stronger Standards

Arguments from industry that the stronger standards will prevent new construction are nothing new. The reality is the Clean Air Act lays out permitting programs that ensure that industry can build and expand without adding to the burden of pollution in their area. The New Source Review (NSR) program offers two different pathways depending on whether an area meets or does not meet the NAAQS for a given pollutant.

In an area that meets the standard or hasn't yet been designated, NSR ensures that when a big industrial source is being built or making modifications or upgrades, it will not contribute to violations of the NAAQS. The source has to document a Prevention of Significant Deterioration (PSD), meaning it must install and operate modern, effective and available pollution controls to ensure it won't contribute to violations of the particle pollution standard. The process provides sources significant flexibility in how they design their facilities and control their emissions. EPA works with states, localities and Tribes to make this process work.

Under the updated annual PM standard, these provisions kicked in on May 6 – 60 days after the final standard was published in the Federal Register. This means that across the country, big new polluting sources that are planning to start construction, or existing polluting sources planning a modification, will have to install and operate pollution controls to ensure they don't

pollute enough to make their area violate the new standard. This requirement is the subject of fear-mongering from opponents of the new standard. Some have conflated the requirements that kicked in on May 6 with the requirements of writing and meeting a State Implementation Plan if the area is later designated nonattainment. The latter is years down the road; for now, new sources – which already had to get permits – simply have to make sure those permits reflect the new particulate matter limit.[4] If these large facilities encounter difficulties showing compliance with air quality standards, EPA provides them a pathway forward: they can offset their emissions and proceed with construction.

Not only is this protective of health, it's also commonsense. Ensuring modern pollution controls are installed on facilities being built now will help states meet their pollution reduction obligations later, including by potentially keeping them in attainment.[5]

This process isn't new; it was successfully employed the last time EPA updated the annual particle pollution standard in 2012, with a wide array of projects using cost-effective emissions controls to obtain permits. EPA has since updated its guidance and other resources to make the process even easier this time.[6]

Once areas are designated nonattainment, a similar New Source Review permitting process will kick in for those areas to determine how new facilities can be built and existing facilities can make modifications (Areas designated attainment continue under the Prevention of Significant Deterioration permitting program). Under the Clean Air Act, in communities with unhealthy levels of pollution, large new facilities and existing facilities that make modifications that would increase emissions are required to install and operate modern pollution controls and offset their emissions. This means ensuring that existing polluting sources in the area reduce their emissions the same amount that the new or modified facility will add.

A 2023 Chamber of Commerce report misleads on both the facts and the law.[7] While the report claims to project which places would need to institute cleanup measures, it actually uses substituted data and different methods from what EPA uses. It misrepresents the permitting obligations on facilities and the process. The reality is this: we have seen time and again that this permitting system results in economic growth and air quality improvement simultaneously.[8]

Opponents of the new standards also claim, paradoxically, that the New Source Review process *prevents* pollution control. For example, a March 2024 op-ed falsely claimed that plants operating pollution controls may see hourly emissions increases (triggering permitting processes) even though annual emissions decline.[9]

Things the op-ed doesn't mention: first, the EPA report they cite is from 2002 – a report that was false to the tune of two successful lawsuits challenging the false claim that permitting rollbacks leads to cleaner air overall. Second, simply running plants more efficiently does *not* mean they pollute less. In fact, research has shown that by limiting actions to just improving the efficiency of existing plants, plants would actually run *more* often resulting in an estimated annual 3% increase in harmful air pollution.[10]

Tired Claims about "Background" Levels are Unfounded

One frequent claim when the NAAQS are updated – for particle pollution and for other pollutants – is that the standards are too close to "background levels" to allow for cleanup.[11] Under the Clean Air Act, this is pollution "formed from emissions other than U.S. anthropogenic emissions."[12] The implementation of the NAAQS is designed to respond to the circumstances

of each area with unhealthy levels of a given air pollutant. The law lays out pathways for areas to seek exemptions for exceedances of the standard due to "background" levels.[13] States can also receive exemptions for instances of pollution being transported from outside the U.S. Too often, opponents of stronger standards seek to undermine the entire process of setting or implementing the standards because of the individual circumstances of a specific location.

Addressing Wildfires is Critical – and EPA Provides a Path to Doing So under the New Standards

The misleading 2023 Chamber of Commerce Report also spreads misinformation about how wildfire smoke is addressed under the Clean Air Act. It falsely claims that wildfire smoke would mean that communities nationwide would fail to meet the standards.[14] Thankfully, the Clean Air Act has a process to address this. Its "exceptional events" provision allows states to write off air quality monitoring data for days when air pollution levels spike because of a natural event (or a one-time human-caused event) that isn't reasonably controllable or predictable. It's a key tool that communities use every year to avoid having their attainment status be affected by days where air quality was hampered by events like wildfires. The law recognizes that these types of events are far more outside of a community's control than the pollution from smokestacks or vehicles within their borders.

The law also provides for communities to use this same process if air quality is harmed in a regulatorily meaningful way by prescribed fire, which the American Lung Association supports as a tool used under the right conditions to mitigate the risk of worse, catastrophic wildfires in the future.[15]

EPA has built out several new resources over the past few years to help states address this topic as it applies to the NAAQS. In 2016, EPA issued final rules on exceptional events that further clarified how wildfire and prescribed fire can qualify. The 2016 rule also added a mitigation plan requirement to address repeated air pollution events. Under the rule, areas that experience an event (of the same type and pollutant) that recurs three times in a three-year period must submit mitigation plans that include (i) public notification and education programs for potentially affected communities, (ii) steps to identify, study, and implement mitigating measures and (iii) periodic review of the mitigation plan.[16]

Some forest management groups and members of Congress have expressed concern that the new, stronger air quality standards would make it more difficult for land managers to implement prescribed fire at the scale needed to mitigate wildfire risk.[17] However, research shows that lack of capacity, funding, resources and coordination challenges across federal, state, and local agencies are the most significant barriers to implementing prescribed fire. Air quality standards, including the Clean Air Act, were *not* found to be a primary barrier to increasing use of prescribed fire.[18] Furthermore, the federal Wildland Fire Mitigation and Management Commission came to a consensus in its recent recommendations to Congress that there are "opportunities to work within the Clean Air Act and the associated regulatory systems and processes to accommodate both increased use of beneficial fire and protection of public health from smoke impacts."[19]

EPA and other federal agencies are actively working to address these challenges. For example, in November 2023, EPA, the Department of Interior, the Department of Agriculture and the Centers for Disease Control and Prevention signed a Memorandum of Understanding in which they agreed to work together to develop a more efficient pathway for states to submit

exceptional events demonstrations and accompanying guidance.[20] Since then, EPA has worked with the U.S. Forest Service, California and relevant air districts to develop an exceptional events demonstration for prescribed fire that can serve as an example for state and local agencies when a prescribed fire causes an exceedance of the standard.[21] The agency is also developing prescribed fire demonstration FAQs, a demonstration template and example analyses for clear causal relationship demonstrations that will help facilitate exceptional event demonstrations when appropriate.

All in All, Industry's "Sky is Falling" Claims are Baseless

Every time EPA updates air quality standards, the same arguments get recycled to oppose them – false and exaggerated claims that industry cannot possibly clean up to meet the standards and eye-popping, inaccurate claims about the number of counties that will be in nonattainment and the purported ramifications of nonattainment designations. Despite their griping, those same industries ultimately do clean up, the economy continues to grow and the air gets cleaner.

A 2023 report from the National Association of Manufacturers came up with a wildly inflated number of economic activity "exposed" to impacts from stronger standards. The report looked at places that would have to clean up under a standard of 8 mg/m^3, which is tighter than what EPA adopted, then simply tallied up all the manufacturing economic activity in those places. These numbers have nothing to do with the actual cost of reducing particulate matter pollution, nor will all these manufacturers be required to install and operate new pollution controls. The report explicitly states multiple times, "This is not a projection of the likely impact of a tighter $PM_{2.5}$ standard." But that qualifier did not appear in the TV ads, media releases or many other publicly available documents using the report.[22]

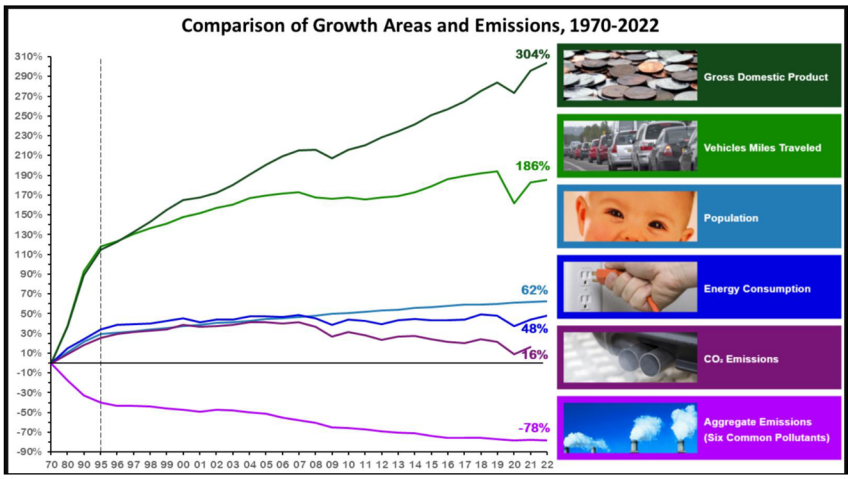
"Missing from National Association of Manufacturers' quote is the fact that clean air progress occurred thanks to increasingly strong National Ambient Air Quality Standards – and that they vehemently opposed those updated standards that led to the progress they are now celebrating."

A 2023 letter from several trade associations notes, "Our members have innovated and worked with regulators to lower $PM_{2.5}$ concentrations significantly, and further progress is being made as part of the energy transition investments. The EPA recently reported that $PM_{2.5}$ concentrations have declined by 42% since 2000, driven by major emissions reductions from both mobile sources and the power sector. As a result, America's air is cleaner than ever." Missing from National Association of Manufacturers' quote is the fact that clean air progress occurred thanks to increasingly strong National Ambient Air Quality Standards – and that they vehemently opposed those updated standards that led to the progress they are now celebrating.[23]

Too often, opponents of stronger standards attempt to downplay this logical inconsistency by calling for a need to "modernize" the Clean Air Act. The tools they propose to "modernize" the law – like taking into account factors other than human health when setting the standards, or weakening the permitting process – would actually undermine or remove the very parts of the law that have driven clean air progress to this point. For them, "modernize" means "weaken."

The nation does not have to choose between healthy air and a healthy economy. In 2011, EPA provided to Congress a projection of the costs and benefits of the Clean Air Act over the years

from 1990 to 2020. EPA calculated that the benefits would exceed the costs by a minimum of $3 for every $1 spent. The benefits may have been as much as $30 to $90 for every $1 spent.[24] Furthermore, we have more than 50 years of evidence to show that the economy has improved even as we have cut pollution. The economy (gross domestic product) grew more than 300% from 1970 through 2022, while aggregate pollution has been cut by 78% (see this chart prepared by EPA).[25]



A 2023 Earthjustice analysis compared real GDP, unemployment rates, and $PM_{2.5}$ and ozone pollution air quality indices across 14 wide-ranging metropolitan areas, many of which have been designated nonattainment, from 2012 to 2021, and found that unemployment rates went down, GDP went up, and air pollution went down at the same time.[26]

Having to Clean Up Air Pollution Isn't the Problem – Air Pollution Is

Being designated in nonattainment of the new, more health-protective standard is not the problem; having pollution levels that harm public health is the problem.

The bottom line is that EPA's new annual limit on particle pollution will save lives. It's part of EPA's obligations under the Clean Air Act to set air quality standards at the level that protects health. The official Clean Air Scientific Advisory Committee and the broader health and medical community agreed that these standards were necessary to protect health. Now, local, state and Tribal governments and EPA must fully implement and enforce these lifesaving standards.

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1200 Pennsylvania Avenue, NW
Washington, DC 20460

Administrator Zeldin:

The undersigned health and medical organizations write to offer ourselves as a resource as you take charge as the new administrator of the Environmental Protection Agency. We strongly support the mission and lifesaving work of EPA. The Agency plays a critical role in protecting health for all people across the country, including by reducing air pollution. American prosperity depends on a healthy workforce and healthy children, and clean air is fundamental to good health.

Our organizations work across a variety of areas and activities – from representing healthcare providers who treat patients, to training health professionals, to running programs that reduce kids' risk of health harm from pollution – but we are united by our common focus on protecting people's health. Our organizations have worked together with EPA for decades to reduce pollutants in outdoor air and protect the health of all people. We look forward to helping EPA continue its work of reducing air pollution to ensure a clean and healthy environment for all.

One area of particular importance for our organizations is the National Ambient Air Quality Standards (NAAQS). The Clean Air Act has clearly laid out the schedules, the requirements, and the processes with which EPA is required to regulate air quality and reduce air pollution. For the most common pollutants, the criteria air pollutants, the Clean Air Act requires EPA to review the latest science on the health impacts of these pollutant exposures every five years, in order to determine if the existing primary human health-based NAAQS align with the science. If the science and the standards don't match, then the Act requires that the NAAQS be revised.

The multidisciplinary science that underlies the NAAQS encompasses a wide spectrum of research fields: epidemiology, toxicology, laboratory-based controlled exposure research, air quality modeling, atmospheric physics and chemistry, to name a few. As part of the NAAQS review process, the Clean Air Act requires that an independent Clean Air Scientific Advisory Committee (CASAC) constituting scientific experts evaluate

current science and advise the EPA administrator on setting the NAAQS. CASAC is a critical part of EPA's work because of the expertise the committee has to offer. Also critical are the additional pollutant-specific panels that past EPA administrators have overseen under CASAC, which provide additional expertise on extremely complex air pollution topics.

To best serve the Agency and the public, we ask that as EPA works through the process of securing new CASAC members, it ensures strong representation from health science experts. We further ask the same for the pollutant-specific individual CASAC panels. The Clean Air Act has requirements for CASAC membership, and within these requirements, memberships should be drawn from the mainstream of scientific thinkers across various fields (represented by academia, health and medical institutions, non-profit organizations, and state and local government officials from different parts of the country). These individuals must have the depth of knowledge to evaluate research data objectively and rigorously and follow the NAAQS process with scientific integrity and without any conflict of interest.

Most immediately, the NAAQS of ozone and nitrogen dioxide that are currently in the review process require scientifically robust pollutant-specific panels to ensure that the standards align with current science to best protect public health.

We look forward to continuing to engage in all aspects of the NAAQS process, including these reviews and the implementation of the existing standards.

We are hopeful that under your leadership the EPA continues to build on its historic work in protecting human health and our environment. We look forward to working with you and engaging in the regulatory process.

Signed,

Allergy & Asthma Network
American College of Chest Physicians (CHEST)
American Heart Association
American Lung Association
American Public Health Association
American Thoracic Society
Asthma and Allergy Foundation of America
Children's Environmental Health Network
Climate Psychiatry Alliance
Medical Society Consortium on Climate and Health
Medical Students for a Sustainable Future
National Association of County and City Health Officials
National Association of Pediatric Nurse Practitioners
National Environmental Health Association
National League for Nursing
OUCH - International
Physicians for Social Responsibility

Smoggy Skies Act Will Codify Unhealthy Air

The undersigned health, medical and nursing organizations strongly oppose the **Air Quality Standards Implementation Act of 2024 – better named the Smoggy Skies Act**. Many versions of this bill have tried and failed to become law in the past because at the end of the day, this bill would undermine sound science and public health.

Clean air is fundamental for good health and the Clean Air Act promises all Americans air that is safe to breathe. The Clean Air Act works – decades of implementation have shown that the law's provisions have cleaned up pollution at the same time as the economy has grown, with the benefits far outweighing the costs. Since the passage of the 1970 Clean Air Act amendments, the United States Gross Domestic Product has grown by 304% while emissions of criteria air pollutants have been reduced by 78%, evidence that cleaner air supports economic growth. **This bill would permanently weaken the Clean Air Act by gutting one of its most important programs: the National Ambient Air Quality Standards.**

Despite decades of progress, air pollution still kills. In 2019, deaths in the United States attributable to particle pollution was estimated to be nearly 48,000. Air pollution also contributes to morbidities such as asthma attacks, cardiovascular harm, emergency room visits, onset of lung cancer and more every year. The National Ambient Air Quality Standards are a critical path to continued pollution reductions and more lives saved. But despite the clear evidence of the need for greater protection from air pollution matched with the Clean Air Act's balanced process for continued cleanup, **the Smoggy Skies Act would impose additional delays and sweeping changes that threaten health, particularly the health of children, seniors and people with chronic disease.**

The National Ambient Air Quality Standards have driven much of the Clean Air Act progress. Under the law, EPA must regularly review the scientific evidence of health harms from six common and dangerous outdoor air pollutants, including particulate matter. If the science shows that the current limit on a given pollutant does not accurately reflect the science, EPA must update it. **Under the Smoggy Skies Act, EPA would have to wait as much as a decade to consider new evidence when setting standards. Ten years is far too long to wait to protect public health from levels of pollution that science shows are dangerous.**

A key success of the National Ambient Air Quality Standards is the requirement that standards be set based on what the latest science says is necessary to protect health. Cost and feasibility are fully considered in the implementation phase of the standard, where states work with EPA to develop a flexible plan to clean up air pollution if their levels are unhealthy. This health-based approach has been upheld by the Supreme Court in an opinion issued by Justice Antonin Scalia. **The Smoggy Skies Act would permanently weaken the core health-based premise of the Clean Air Act by incorporating considerations of technological feasibility into the standard-setting – basically, siding with the polluters.**

While the text might have modifications from previous versions, make no mistake: This bill is a wolf in sheep's clothing. It is the same failed attempt to weaken the Clean Air Act and codify unhealthy air that the public health community has strongly opposed in the past and will continue to oppose.

Please prioritize the health of your constituents and vote NO on the Air Quality Standards Implementation Act – the Smoggy Skies Act.

Sincerely,

Allergy & Asthma Network
Alliance of Nurses for Healthy Environments
American Heart Association
American Lung Association
American Public Health Association
American Thoracic Society
Asthma and Allergy Foundation of America
Children's Environmental Health Network
Climate Psychiatry Alliance
Health Care Without Harm
Medical Students for a Sustainable Future
National Association of Pediatric Nurse Practitioners
National Environmental Health Association
National Hispanic Health Foundation
National Hispanic Medical Association
National League for Nursing
Oncology Advocates United for Climate and Health - International
Physicians for Social Responsibility
Public Health Institute

Environmental Protection Network

September 2024

Environmental Protection Network

Principal authors (in alphabetical order)

Daksh Goyal (Wake Forest University; EPN staff intern); Jeremy Symons (Former Climate Policy Advisor, EPA Office of Air and Radiation; EPN Senior Advisor); June Taylor (Former Liaison to Non-Governmental Organizations, Office of Intergovernmental and Regional Affairs, EPA Region 9, EPN co-founder); Rob Wolcott (Former EPA Deputy Assistant Administrator for Policy and EPN founding Board Chair).

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"America needs a strong EPA.

An EPA that can respond to the communities shattered by catastrophic wildfires and hurricanes...

An EPA that partners with the advocates who have dedicated their lives to fighting for cleaner air, safer water, and healthier communities...

An EPA that empowers the parents who are working tirelessly to protect their children from PFAS and lead exposure...

And an EPA that invests in young leaders who are dedicating their lives to protecting our planet."

— EPA Administrator Michael Regan, 2024

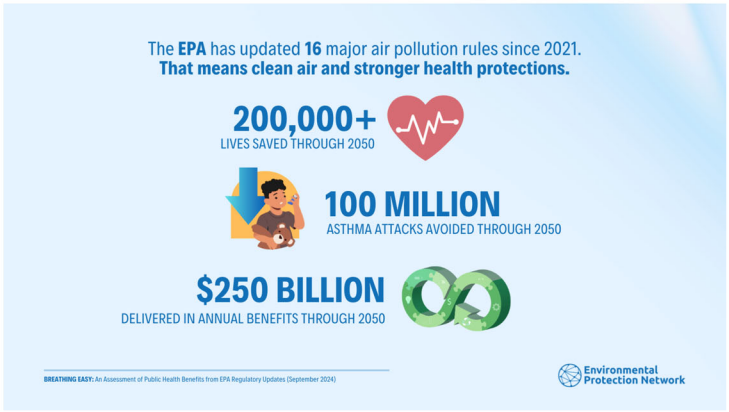
Environmental Protection Network

I. Executive Summary

Environmental Protection Network (EPN), an association of 650 former Environmental Protection Agency (EPA) staff who volunteer their time to support EPA's mission, analyzed sixteen major EPA air pollution rule updates issued from 2021 to 2024. Based on data published by EPA for these rules, EPN concludes that the air pollution reductions from smokestacks, tailpipes, and pipelines will:

- Save over 200,000 lives through 2050. That's the equivalent of a convoy of thousands of buses stretching along the highway from Philadelphia to New York City. The children, grandparents, moms, and dads on those buses will live longer, healthier lives thanks to these rules.
- Avoid over 100 million asthma attacks in the United States through 2050. That means fewer missed school days, missed work days, and trips to the school nurse or the emergency room.
- Deliver over $250 billion in net benefits annually, with total monetized public health and climate benefits exceeding regulatory costs by a ratio of six-to-one. That is, the public health and climate benefits of the rules will exceed compliance costs by trillions of dollars through 2050

These figures likely ***significantly underestimate*** the benefits of EPA's regulatory updates for two reasons. First, this assessment focused on air pollution regulations and therefore reflects only a portion of EPA's recent achievements. EPA's work on toxic chemicals, clean water, and other environmental threats likely multiply these numbers. Second, numerous health benefits are often left unquantified in EPA assessments due to technical limitations, including the health benefits of reducing a number of hazardous air pollutants known to be dangerous carcinogens and otherwise harmful to human health, including benzene, formaldehyde, arsenic, lead, and more.



Environmental Protection Network

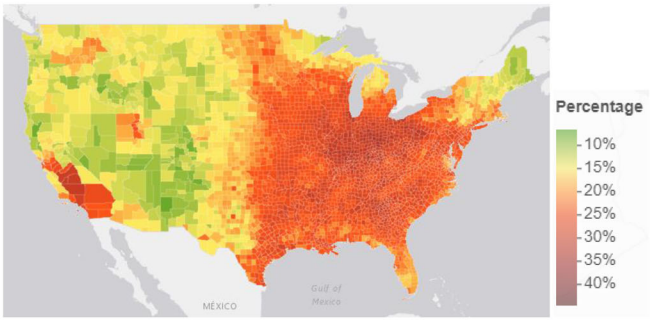
Life with Asthma

Asthma is one of the most common and costly diseases in the United States. Imagine trying to live your life while struggling to breathe. That's what life is like for the asthmatic children and adults who have uncontrolled asthma, frequently sending them to the emergency department or forcing them to miss work.

- One in 12 people in the U.S. have asthma. That's over 27 million people, including 4.5 million children!
- Asthma is a leading chronic disease in children.
- Asthma rates are highest in American Indian or Alaska Native adults, and non-Hispanic Black children are nearly 2 times more likely to have asthma compared to non-Hispanic White children.
- Asthma accounts for 5 million doctors' office visits and one million emergency department visits annually.
- Severe asthma can also be fatal; an average of 10 Americans die every day because of it.

Source: Asthma and Allergy Foundation of America

Burden of Childhood Asthma Due to PM 2.5 (2010)



Source: Texas A&M (2019)

Environmental Protection Network

II. Overview of EPA Accomplishments, 2021-2024

By the end of President Donald Trump's four years in office nearly 700 had scientists left EPA. Ignoring advice from staff scientists, Trump's political appointees orchestrated a series of regulatory rollbacks undermining America's bedrock environmental laws, including the Clean Air Act and the Clean Water Act. The rollbacks came with potentially heavy public health costs—millions of avoidable asthma attacks, emergency room visits, heart and respiratory illnesses, and premature deaths.

In 2020, EPN, supported by six former EPA administrators who served in Republican and Democratic administrations, offered a blueprint to "Reset the Course of EPA." It addressed the most significant and pervasive threats to public health and our environment. Many of its recommendations were advanced by the Biden administration to correct damaging actions by the Trump administration that limited health protections.

By any standard, EPA has undergone an impressive reset in the past three and a half years. EPA has:

- Reestablished scientific integrity at EPA and reversed Trump EPA rules intended to undermine science, including benefit-cost analysis;
- Issued 60 final rules, including historic actions to address climate pollution, boost environmental justice, and protect America's waters, air, and lands; and
- Invested tens of billions of dollars in underserved communities, to support clean air, clean water, and clean energy.

Protecting Public Health and Drinking Water

In the past three years, EPA has also taken huge strides to protect public health and drinking water, including:

- Stronger clean air standards to reduce harmful soot pollution — preventing up to 4,500 premature deaths and 290,000 lost workdays. This yields up to $46 billion in net health benefits in 2032. According to EPA, for every $1 spent to meet the new fine particle air quality standards, there could be as much as $77 in human health benefits in 2032;
- The first-ever national drinking water standard to protect 100 million people from "forever chemicals" (PFAS) pollution;
- Funding replacement of more than 220,000 lead service lines to ensure healthier drinking water for communities across the country;
- A ban on ongoing uses of asbestos linked to more than 40,000 deaths in the U.S. each year; and
- A proposal for stronger air pollution standards for municipal solid waste incinerators.

Environmental Protection Network

A Focus on Environmental Justice

EPA has taken unprecedented steps to advance environmental justice. EPA elevated environmental justice to its highest levels, establishing a new Office of Environmental Justice and External Civil Rights with more than 200 staff focused on solving environmental challenges in underserved communities.

In April 2024, EPA strengthened clean air standards for chemical plants in order to reduce the number of people with elevated cancer risk in nearby communities by 96%.

Under the Inflation Reduction Act ("IRA"), the EPA is making the largest investment in environmental justice history, awarding $3 billion to help thousands of communities overcome the legacy of toxic pollution. To put this funding in perspective, it is 80 times more money than EPA has awarded over the last 30 years under its Environmental Justice Small Grants Program.

Combating Climate Change

Over the past three years, EPA has updated a number of critical rules to cut future climate pollution from the leading sources of emissions, including:

- A Carbon Pollution Plan to cut emissions from coal and natural gas power plants that will avoid more than 1.3 billion metric tons of greenhouse gas pollution, which is equivalent to preventing emissions from 328 million gasoline cars for one year.
- New standards to reduce harmful air pollutants from new passenger cars, light trucks, and larger pickups and vans, which EPA estimates will reduce 7.2 billion metric tons of CO2 over the life of the program;
- A final rule that will sharply reduce methane, a climate "super pollutant," and other air pollutants from the oil and natural gas industry;
- A proposed rule that assesses a fee on large emitters of methane from the oil and gas sector (as authorized in the IRA);
- A final rule to cap and phase down the production and consumption of hydrofluorocarbons (HFCs), which are potent greenhouse gasses; and
- The strongest-ever greenhouse gas standards for heavy-duty vehicles. (EPA estimates the standards will avoid 1 billion tons of greenhouse gas emissions and also reduce dangerous air pollution, especially for the 72 million people in the United States who live near truck freight routes.)

> *"This is the challenge of our collective lifetimes. The existential threat to human existence as we know it. And every day we delay, the cost of inaction increases... So let this be the moment that we answer history's call."*
>
> — President Biden, 2021

Environmental Protection Network

Broad Public and Stakeholder Support for EPA's Actions

EPA has taken an approach that is ambitious and meticulous with attention to law and science, ensuring agency actions are more durable in the courts. Many of EPA's actions have won praise not only from public health organizations and environmental groups, but also from labor and businesses.

The United Auto Workers, for example, applauded EPA for "taking seriously the concerns of workers and communities" when finalizing the agency's landmark clean car rule, which will eliminate billions of tons of pollution from tailpipes.

A number of major oil companies praised EPA for its final rule that will slash methane emissions from oil and gas operations by 80%.

Some of the biggest, highest impact actions taken in the past three plus years by EPA enjoy strong, bipartisan public support. For example, 82% of voters support EPA setting stricter limits on power plant pollution, 78% of voters support EPA's new, stricter clean air standards for soot, and 72% of voters support EPA's new rule setting tighter limits on carbon emissions from heavy-duty vehicles.

Producing a Stronger Economy, Safer Environment, and Better Health

EPA is making unprecedented investments to build a clean energy economy, tackle climate change, and protect public health. These investments are leveraging vast amounts of private capital in support of these goals. The overall impact is an expansion of aggregate investment with a growth-inducing effect on the US economy. Pursuant to the 2022 IRA and the 2021 Bipartisan Infrastructure Law, EPA is investing:

- $7 billion in grants to install affordable community solar for 900,000 low-income and disadvantaged households nationwide;
- $20 billion in grants to finance tens of thousands of clean energy and climate solution projects, ensuring communities have access to the capital they need to participate in and benefit from a cleaner, more sustainable economy;
- $50 billion dollars to replace lead pipes, protect our nation's treasured waters, and build drinking water and wastewater systems that are resilient to the climate crisis;
- $5 billion dollars for cleaner school buses, reducing pollution exposure and risk for millions of kids across this country as they go to and from school;
- $5 billion to clean up Superfund and brownfield sites in every region; and
- $3 billion in clean ports investments, funding zero-emission port equipment.

Environmental Protection Network

III. Assessment of Health Benefits

This report compiles economic impact and health incidence data from Regulatory Impact Analyses (RIAs) prepared for 16 different economically significant rules finalized during the past three years by the EPA's Office of Air and Radiation (OAR).

Results – Monetized Costs and Benefits

From the 16 air quality rules analyzed for this report, total monetized benefits, including health and climate benefits, total $303 billion dollars on an annualized basis. Total costs, including compliance and implementation costs, add up to $50 billion dollars, resulting in total net benefits of $253 billion dollars. That's a benefits-to-cost ratio of six-to-one.

RULE	ANNUAL COSTS* (2023 $, IN MILLIONS)	ANNUAL BENEFITS* (2023 $, IN MILLIONS)	ANNUAL NET BENEFITS* (2023 $, IN MILLIONS)
Air Quality Standards for Fine Particle Pollution (Soot)	$573	$43,903	$43,330
Boiler Rule	$62	$150	$88
Carbon Pollution Standards for Fossil Fuel-Fired Power Plants	$1,067	$23,568	$22,501
Clean Car Rule (2027)	$28,945	$125,290	$96,345
Clean Trucks Rule (Phase 3)	$1,137	$11,371	$10,234
Cross-State Air Pollution Rule	$31	$3,463	$3,432
Federal Good Neighbor Rule	$1,130	$17,342	$16,212
Gasoline Distribution Facilities and Terminals Standards	-$4	$19	$23
Heavy-Duty Vehicle Standards	$4,634	$21,952	$17,317
HFC Phasedown (Allocation Framework)	-$646	$15,739	$16,385
HFC Phasedown (Technology Transitions Rule)	-$569	$360	$929
Iron and Steel NESHAP	$5	$207	$201
Light Duty Vehicle Emissions Standards (Model Years 2023 and Later)	$11,684	$29,567	$17,883
Mercury and Air Toxic Standards	$108	$53	-$55
Oil & Gas Methane Rule	$1,759	$10,600	$8,841
Polymers and Resins Rule	$166	$7	-$159
TOTAL	**$50,082**	**$303,591**	**$253,509**

*Equivalent Annualized Value, 3% Discount Rate

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Results – Health Benefits

EPN analyzed the health benefits of the ten air pollution rules since 2021 that have the most significant quantified health impacts. Health incidence benefits were compiled for three categories, chosen because of the inclusiveness and confidence in the statistical data supporting analysis, with the following results:

- 202,632 avoided all-cause premature mortality.
- 107 million avoided symptomatic asthma incidents.
- 94 million avoided minor-restricted activity days. Minor-restricted activity days result when individuals reduce most usual daily activities and replace them with less strenuous activities or rest, yet not to the point of missing work or school.

RULE	Avoided Premature Mortality	Avoided Symptomatic Asthma Incidents	Avoided Minor Restricted-Activity Days
Air Quality Standards for Fine Particle Pollution (Spot)	85,595	15,200,000	32,300,000
Carbon Pollution Standards for Fossil Fuel-Fired Power Plants	14,973	5,168,800	5,142,000
Clean Car Rule (2027)	3,026	1,043,857	2,267,465
Clean Trucks Rule (Phase 3)	142	48,769	106,746
Cross-State Air Pollution Rule	4,999	5,940,010	3,060,010
Federal Good Neighbor Rule	35,800	33,214,000	18,568,000
Heavy-Duty Vehicle Standards	54,580	43,790,000	29,870,000
Light Duty Vehicle Emissions Standards (Model Years 2023 and Later)	1,778	865,622	1,921,705
Mercury and Air Toxic Standards	52	7,466	13,536
Oil & Gas Methane Rule	1,689	2,185,000	990,000
COMBINED STREAM TOTALS TO 2050	**202,632**	**107,463,525**	**94,239,462**

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Methodology and Uncertainties

The analysis uses estimated annualized values (EAVs) for total costs and benefits reported in each RIA, at a 3% discount rate, adjusted to 2023 dollars using the GDP deflator. The health incidence data presented report here, on a cumulative basis up to the year 2050, is compiled using a combination of methods. These reflect the differing ways in which the data is calculated by the EPA across different RIAs.

For rules where multiple single-year snapshots of health incidence data are provided, linear interpolation and extrapolation is used in correspondence with the monetized stream estimates of health benefits. For rules without health incidence snapshots, the EPA's sector-specific incidence-per-ton tables are used to produce health incidence data from estimated changes in emissions.

Unquantified Benefits

EPA does not currently quantify the benefits of air pollution rules that arise from alleviating the following impacts of air pollution:

- Cancer
- Respiratory effects, including pulmonary function, non-asthma ER visits, and chronic diseases beyond bronchitis
- Nervous system effects, including autism, cognitive decline, and dementia
- Metabolic effects, such as diabetes
- Reproductive and developmental effects
- Decreased outdoor worker productivity

"The [Hazardous Air Pollutants (HAPs)] for which benefits remained unquantified include a long list of chemicals known to be dangerous to human health, like benzene, formaldehyde, polycyclic organic matter (POM), toluene, MTBE, arsenic, chromium, lead, and many more. Many of these compounds have been listed for many years as known or probable carcinogens. Many are also linked to a variety of other impacts on human health, including immunotoxicity, genotoxicity, nervous system disorders, respiratory effects, and reproductive and developmental effects."

–Amy Sinden, "The Problem of Unquantified Benefits," Temple University, 2019

The cumulative benefits laid out in this report only represent a subset of EPA's work, based on air pollution regulations updated since 2021. Even these estimates are highly likely to underestimate the true real-world benefits that will accrue as a result of the analyzed rules. There are a large number of different types of benefits resulting from the analyzed rules, which have not been quantified or monetized.

In addition, the analysis in this report takes a conservative approach to calculating benefits, using a 3% discount rate for future monetized benefits when in some cases a lower discount rate may be more appropriate, and using the smaller amount when multiple estimates are provided for a benefit.

Environmental Protection Network

Although there is some potential for double counting, it is limited by the fact that EPA estimates benefits of each rule on top of a 'baseline' of the then-current regulatory environment, meaning pre-existing rules are already accounted for. When multiple rules are being finalized in parallel, or rules are in different realms of EPA's jurisdiction (for instance, air vs. water pollution), their impacts may not be represented in each rule's RIA. This creates a risk for the summation of monetized benefits in this analysis to include some double-counting. We minimized this risk by limiting our analysis to air pollution regulations.

Using EAVs means that the combined monetized estimate may not be representative of a particular time period. This is due to differing years of analysis between RIAs and differing average estimates if narrower periods of analysis are used than in the RIAs. As such, the combined EAV estimates provided in this report should be interpreted primarily as an indication of the combined scale and impact of the analyzed rules, rather than a precise empirical evaluation of a specific year.

The New York Times
How Lee Zeldin Went From Environmental Moderate to Dismantling the E.P.A.
He once talked about the need to fight climate change. Now, he embraces Elon Musk, lavishes praise on the president and strives to stand out in a MAGA world.

He once talked about the need to fight climate change. Now, he embraces Elon Musk, lavishes praise on the president and strives to stand out in a MAGA world.

Listen to this article · 11:25 min Learn more

By Lisa Friedman

Published March 29, 2025 Updated March 30, 2025

When President Trump's cabinet secretaries clashed with Elon Musk this month over the billionaire's chain saw approach to shrinking government, Lee Zeldin, the administrator of the Environmental Protection Agency, made it clear where he stood.

Mr. Musk had just traded barbs with Sean Duffy, the transportation secretary, and Marco Rubio, the secretary of state. Things were tense. That's when Mr. Zeldin chimed in to say he had no complaints about Mr. Musk, according to three people briefed on the March 6 meeting.

It was a telling moment for Mr. Zeldin, who has evolved from moderate blue state Republican to full MAGA warrior, taken to dismantling the agency he oversees with zeal.

Over the past nine weeks, Mr. Zeldin has withheld billions of dollars in climate funds approved by Congress, tried to fire hundreds of employees, recommended the elimination of thousands more E.P.A. scientists, and started trying to repeal dozens of environmental regulations that limit toxic pollution. He has filled the leadership ranks at the agency with lobbyists and lawyers from industries that have fought environmental regulations.

He has embraced Mr. Musk, calling theirs "an incredible partnership" and requiring that any expenditure at the E.P.A. over $50,000 be approved by Mr. Musk's advisory group, the Department of Government Efficiency. Two members

of the DOGE team, Kathryn Loving and Cole Killian, occupy an office outside Mr. Zeldin's wood-paneled executive suite on the third floor of the E.P.A. headquarters. A handwritten note was recently taped to the door that said "Welcome to DOGE."

Mr. Zeldin, 45, has canceled programs focused on marginalized communities that are disproportionately burdened by pollution, including an area in Louisiana known as Cancer Alley. He says he wants clean air and water, yet is taking steps scientists say will endanger both, while also working to ensure that the E.P.A. can never again limit the greenhouse gases that are dangerously heating the planet.

The New York Times

Haiyun Jiang for The New York Times

And throughout, Mr. Zeldin has been running an aggressive public relations campaign, appearing on Fox News and Fox Business nearly two dozen times, writing opinion pieces for the New York Post and The Wall Street Journal, and

using his taxpayer-funded press office to excoriate news outlets that fact-check his assertions. He posts direct-to-the-camera videos on X, demonstrating the communications skills he has polished throughout several political campaigns.

"He's doing the job in a way that is a lot more visible than many of his predecessors of both parties," said Kevin S. Minoli, a lawyer who worked in the E.P.A. Office of General Counsel from the Clinton through the Trump administrations. "I would imagine that he's motivated to do things that his boss is going to like and see and reward."

The E.P.A. did not respond to several requests to interview Mr. Zeldin. In a written statement, Mr. Zeldin said the Biden administration had used environmental regulations "to put a stranglehold on the American auto industry in their quest to destroy the American economy in the name of climate change."

He was referring to strict limits imposed by the Biden E.P.A. on tailpipe emissions, regulations that were designed to speed the transition to electric vehicles.

"This administration does not support that policy posture, and we are doing everything in our power to revitalize this quintessential American industry," he said.

Mr. Zeldin has sought the president's notice by trying to claw back $20 billion that had been approved by Congress under the Biden administration for clean energy projects around the country.

He has framed the money as a slush fund for Democratic issues, citing a hidden-camera video made by Project Veritas, a conservative group known for using covert recordings to embarrass its political opponents.

In the video, which was made in the final weeks of the Biden administration, an E.P.A. employee likened the efforts to spend federal money on climate programs to throwing "gold bars" off the Titanic.

Demonstrators rallied in Philadelphia this month to protest cuts at the Environmental Protection Agency. Tyger Williams/The Philadelphia Inquirer, via Associated Press

Mr. Zeldin has made the most of the "gold bars" line, claiming that he has discovered rampant fraud in the clean energy program, which he has shut down. Despite a request from a federal judge, the Trump administration has not provided evidence of fraud in that program and some of the nonprofit organizations that had been approved to receive the funds are now suing the administration.

John Podesta, who oversaw the implementation of the clean energy program during the Biden administration, said it had followed "extremely" stringent rules when selecting grantees. "We followed the law and they're breaking the law," he said of the Trump administration.

Mr. Zeldin's other priorities at the E.P.A. have little to do with the agency's half-century mission of protecting public health and the environment. They include increasing fossil fuel use, fast-tracking permits for energy projects, increasing jobs

in the auto industry and advancing artificial intelligence.

"It's quite shocking to have an administrator who in announcing his own vision did not even mention protecting public health and the environment," said Daniel C. Esty, professor of environmental law and policy at Yale Law School.

Christine Todd Whitman, who led the E.P.A. under President George W. Bush, called Mr. Zeldin "a water boy for the president and Elon."

A lawyer, leukemia survivor and a former Army captain who is now a reservist, Mr. Zeldin comes from a small coastal community on Long Island that borders a national wildlife refuge and is struggling with rising sea levels linked to climate change. During four years in the New York State Legislature and four terms on Capitol Hill, he was a moderate on environmental issues. Mr. Zeldin joined a bipartisan caucus to address climate change and supported solar energy and offshore wind. He voted to protect the E.P.A.'s budget and against a Republican effort to restrict the agency's ability to curb carbon dioxide emissions.

But he moved to the right during his unsuccessful bid for governor of New York in 2022. He campaigned to end New York's ban on hydraulic fracturing and to slow the state's landmark law designed to reduce greenhouse gas emissions.

"It's very hard for me to rectify the Lee Zeldin I've known and met with for over a decade with the person we see now," said Adrienne Esposito, the executive director of the Citizens Campaign for the Environment, an environmental group in Farmingdale, N.Y., in Mr. Zeldin's former congressional district.

Mr. Zeldin would say "things like 'science tells us climate change is real and we must act,'" Ms. Esposito said. "Now, it's as if he has transformed into a completely different person. Was he acting for his first decade in elected office?"

Mr. Zeldin's spokeswoman, Molly Vaseliou, said that his values have remained consistent.

Lee Zeldin met with volunteers for an environmental group in East Moriches, N.Y., in 2015 when he was a member of Congress. Brian Harkin for The New York Times

Mr. Zeldin's admirers say he is a workhorse, someone who prefers staying up late reading briefing books to socializing. When he ran for Congress, he'd ask his staff each morning how much money he needed to raise that day and then he'd meet the goal.

As E.P.A. administrator, Mr. Zeldin has kept a peripatetic travel schedule. Five days after he was sworn in, he was in East Palestine, Ohio, the site of a 2023 train derailment and toxic chemical spill, with Vice President JD Vance. Then he was in Los Angeles to survey wildfire damage, and North Carolina to visit families rebuilding after a devastating hurricane. Last week, he was in the Midwest talking to farmers and in the Southwest meeting with tribal leaders.

"He's the kind of guy who feels guilty taking a day off," said Matt Scott, who worked for Mr. Zeldin during his first two terms in Congress.

Mr. Zeldin hitched his wagon early to Mr. Trump. He was one of the first Republicans in Congress to endorse Mr. Trump in 2016. He led Mr. Trump's impeachment defense and then helped to sow doubt about the 2020 election result. Mr. Trump showed his appreciation, reposting Mr. Zeldin's statements about the impeachment proceedings on social media and later endorsing him for governor.

Mr. Zeldin spoke at a Trump campaign event in Hazel Township, Penn., on the Sunday before Election Day. Eric Lee/The New York Times

Chapin Fay, who managed Mr. Zeldin's first campaign for Congress, said that Mr. Zeldin has a keen understanding of Republican voters and was taking his cues from them as much as from the president.

The E.P.A. is one of the most disliked federal agencies among conservatives, according to a Pew Research Center poll, with only 32 percent of Republicans having a favorable view of the agency.

"Opponents are going to say this is against the American people's interests, but Lee believes what he is doing is good for the American people," Mr. Fay said.

So far, Mr. Zeldin appears to be adhering to Project 2025, the conservative blueprint for a government overhaul that was published by the Heritage Foundation. It recommends deep cuts at the E.P.A. and an end to the agency's legal authority to regulate carbon dioxide and other gases that are heating the planet. It also calls for weakening the agency's independent science office.

Mandy Gunasekara, who served as chief of staff at the E.P.A. during the first Trump administration and who wrote the E.P.A. section of Project 2025, said Mr. Zeldin was off to a good start. "He's very good at communicating to the public what he's doing and why he's doing it," she said.

Mr. Zeldin showed his political instincts by winning campaigns for both the State Legislature and Congress despite the feeling among some in the New York Republican Party that he wasn't ready. And while Mr. Zeldin lost the governor's race to Kathy Hochul, a Democrat, he came closer to winning than any Republican had in the previous 20 years.

Benji Backer is a Republican environmental advocate whose new organization, Nature is Nonpartisan, said it was too early to judge the E.P.A. administrator.

"He expressed to me that he wants to be remembered as somebody who cares about the environment," Mr. Backer said.

Harry Allen, the Los Angeles team lead for the E.P.A., center, with Mr. Zeldin in Altadena, Calif., after a wildfire swept the area. Mark Abramson for The New York Times

Mr. Backer said he believed Americans wanted sensible environmental regulation. While the Trump administration is in a "burn it to the ground" mode, Mr. Zeldin must protect air and water quality, reduce plastic pollution and address climate change, or the Trump administration will lose popular support, Mr. Backer said.

"My call to him would be, leave your legacy on this," Mr. Backer said. "This is your opportunity to build something really positive for the environment."

One thing that comes naturally to Mr. Zeldin's is building his own profile, Mr. Fay said, and that is happening.

Mr. Fay recalled that during Mr. Zeldin's campaign for governor, he hammered the Democratic incumbent on crime and carefully timed almost-daily appearances in front of bodegas and subway stops where violence had occurred.

"He understood that if you have the press conference in the afternoon, you'll be on the B-roll all day," Mr. Fay said, referring to the supplementary film that is used to enhance storytelling and add visual variety in newscasts.

"Lee is trying to break through the clutter and make a name for himself," he said. "One of his political talents is not getting left behind."

Jonathan Swan and Maggie Haberman contributed reporting.

***A correction was made on March 30, 2025**: An earlier version of this article incorrectly cited the year of the East Palestine train derailment. It was 2023, not 2024.*

When we learn of a mistake, we acknowledge it with a correction. If you spot an error, please let us know at nytnews@nytimes.com. Learn more

Lisa Friedman is a Times reporter who writes about how governments are addressing climate change and the effects of those policies on communities.

A version of this article appears in print on , Section A, Page 1 of the New York edition with the headline: Environmental Moderate Turns MAGA Warrior

MEGAN MOLTENI SCIENCE NOV 20, 2019 11:00 AM

Air Pollution Is Still Killing Thousands of People in the US

Soot steals lives through dementia, kidney disease, and hypertension—even when the air quality is within the permitted levels.

Air pollution from fine particulate matter, known as PM2.5, has been newly linked to deaths from nine diseases, including chronic kidney disease, hypertension, and cancer. PHOTOGRAPH: KEVIN SCHAFER/GETTY IMAGES

SAVE

SOOT KILLS. STILL! Even in America, even in 2019. Those suspended fragments and droplets smaller than 2.5 micrometers across, small enough to be inhaled into the deepest recesses of the lungs and slip into the bloodstream—that's soot. Or PM2.5 in technical terms. Breathing it in can inflame airways, triggering respiratory troubles, heart problems, even dementia. And, as study after study have shown, these adverse health effects can trim years off a person's life.

The situation is most dire in China, India, and other parts of Southeast Asia. Yet even in the US, which has stricter laws and cleaner air, the levels of particulate pollution permitted by the Environmental Protection Agency still claim the lives of thousands of people every year. That's the message behind a massive new study published today in *JAMA Network Open*. The investigation combined EPA air quality data with a decade of medical records for 4.5 million US veterans to find links between chronic PM2.5 exposure and nearly 200,000 deaths.

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The data suggests the standards might not be strict enough, says Ziyad Al-Aly, a clinical epidemiologist at Washington University and one of the study's coauthors. "If you do the math, it tells us we could save at least 200,000 lives if we cleaned the air further," he says.

These results track well with previous research, including a 2017 study among Medicare recipients that found the more soot raining down in your zip code, the higher the death rates. A study published in August connected surges in deaths across 652 cities around the world to spikes in PM2.5. This latest study adds the first ever links between particle pollution and deaths from chronic kidney disease, hypertension, and dementia. It's the kind of epidemiological study that under normal circumstances would contribute to the mounting evidence that regulators need to do more to reduce fine particle pollution. But this is 2019 and nothing is normal.

The Clean Air Act requires that every few years a group of independent scientists sit down and review all the evidence that regulated air pollutants might be causing adverse health effects. That group, called the Clean Air Scientific Advisory Committee (or CASAC) then files a report to the EPA, and the agency decides if the existing standards are good enough, or if stricter measures need to be pursued. Under the Trump administration, this process has been turned upside down.

Before Scott Pruitt resigned from his post as EPA chief in 2018 amid ethics scandals, he revamped the agency's policies on who could serve on scientific advisory panels. Pruitt's successor, Andrew Wheeler, then used those policies to fire all the scientists who had been appointed to the CASAC in 2015 and replace them with a pool of consultants, many with ties to the oil, gas, and chemical industries. He also disbanded a particulate matter sub-committee that in the past had contributed expertise to the CASAC's review and recommendation process.

In October 2018, the EPA released a draft review of the public health impact of fine particulate pollution. After assessing nearly 2,800 studies in its 1,900-page report, the agency concluded that the science supported lowering the annual exposure limit for PM2.5 by as much as one-third. CASAC is now trying to block that assessment. In a December meeting, and later in a draft letter to Wheeler, the group's chair, Louis Anthony Cox, argued against its findings, suggesting that the kinds of studies CASAC has long relied on, including epidemiological studies that don't show direct causality, should be tossed out. Scientists have since publicly decried that claim as being "fringe" and ignoring long-established scientific consensus.

The situation puts the EPA in an unusual predicament. It could accept Cox's opinion and keep existing air pollution standards that risk public health. Or it could ignore his committee's advice and potentially erode public confidence in the science advisory process. At least one outside group is advocating for the latter. The disbanded ex-CASAC experts, who in an unprecedented move regrouped to form a parallel independent panel with support from the Union of Concerned Scientists, conducted their own review in line with the EPA's draft. Last month, at a CASAC public meeting they presented a letter to Administrator Wheeler offering their assessment of the evidence, and urging him to "follow the science."

John Balmes, a public health researcher at the University of California, Berkeley, and one of the 20 dismissed scientists to sign on to the letter, says if Cox gets his way, few studies will be left to support a stricter PM2.5 standard. "They just don't want to hear any of the new scientific evidence," he says. Yet the data keeps accumulating.

Today's *JAMA* study, which he was not involved in, provides another strong argument for cutting down on particulate pollution. "It's a big study, it's a good study, and it's just more support of what we already know."

The CASAC will meet again in December and offer its recommendations to the EPA Administrator. In the end, it's Wheeler who will have ultimate authority over whether the agency sets a new standard for PM2.5. Balmes says he and the rest of his merry band of disbanded scientists didn't go through the pains of a review because they think it'll convince Wheeler to update the soot standards. Rather, he's betting it will come in handy for any lawsuits that might arise if the agency sticks with the status quo.

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Megan Molteni is a science writer at STAT News. Previously, she was a staff writer at WIRED, covering biotechnology, public health, and genetic privacy. She studied biology and ultimate frisbee at Carleton College and has a graduate degree in journalism from the University of California, Berkeley. ... Read more

U.S. Chamber of Commerce

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August 1, 2025

The Honorable Gary Palmer
Chairman
Subcommittee on the Environment
2125 Rayburn House Office Building
Washington, DC 20515
c/o Calvin Huggins, Legislative Clerk

Dear Chairman Palmer:

Thank you for the opportunity to respond to the additional question for the record following my appearance before the Subcommittee on Environment hearing on June 11, 2025, entitled, "Short-Circuiting Progress: How the Clean Air Act Impacts Building Necessary Infrastructure and Onshoring American Innovation."

In response to questions from Rep. Morgan Griffith:

1. Do you have any additional policy recommendations related to NAAQS implementation that we should consider as the Subcommittee looks for ways to promote reshoring manufacturing and securing our nation's supply chains?

The recent tightening of the particulate matter National Ambient Air Quality Standards (NAAQS) from 12 µg/m3 down to 9 µg/m3 is expected to hinder reshoring efforts and disrupt supply chains by increasing regulatory micromanagement of businesses and the economy. Due to the broad applicability of the standards across the economy, more restrictive permitting is expected across many sectors of the economy, from agriculture to energy, mining, manufacturing, transportation infrastructure, and more. The overly stringent standards are estimated by EPA to require emissions reductions from small businesses and even individual households. Even with the EPA's long list of potential emissions control measures, the agency was not able to find cost-effective means of meeting the standards. As I noted in my testimony, the rule is subject to serious legal defects, and we believe it should be vacated. To help ease implementation of the rule while it remains in force, below are a few recommendations for policies to consider:

Standard-setting – The current legislative language would improve the Clean Air Act (CAA) standard-setting process, but additional changes are needed to reflect the

stringency of today's standards given higher background levels of pollution from foreign sources and events such as emissions from fires that are beyond the ability of states to control. Despite extensive controls already in place, many areas of the country will likely face unreasonably tighter standards and possibly sanctions unless action is taken to allow the Administrator to consider the attainability of a new standard and the progress or lack of progress states are making to achieve the prior standards, which is a factor relevant to considering the attainability of the new standard.

Revoking old standards - Even when EPA tightens an existing standard, states are required to continue to submit State Implementation Plan (SIP) amendments and meet deadlines for outdated and less stringent standards – a process that is overwhelming both state agencies and EPA. For instance, many states continue to be subject to at least three different 8-hour ozone standards and three different PM2.5 standards. EPA's inability to clearly revoke these outdated standards when they are replaced has contributed to the SIP backlog at EPA and the need for states to often withdraw SIPs to update them due to EPA's inability to review on a timely basis. We recommend that the law be amended to explicitly authorize EPA to revoke old standards when they have been replaced by stricter standards.

Prevention of Significant Deterioration (PSD) Applicability - Instead of merely suspending the application of PSD permitting, if the Administrator fails to publish final regulations and guidance regarding the submission and consideration of PSD under the new standard, sources that have already begun the permitting process should be provided 12 to 18 months to obtain a permit under the pre-existing NAAQS before the new standard applies to their permit application. Given the complexity of permitting and the time it takes to obtain a new PSD permit, the immediate application of a new NAAQS creates tremendous uncertainty and causes delay for new projects that are critically needed to foster economic opportunities. These new projects offer opportunities to support energy affordability and reliability, drive innovations in manufacturing and agriculture, and position the United States to lead in the global race for AI leadership, among other benefits.

179B But-For Provisions Should Also Apply at Designation - The current CAA Section 179B "but-for" provision allows an area to avoid reclassification and certain sanctions if it can show that it would have attained a NAAQS "but for" the contribution of emissions originating outside the United States. This provision should be clarified to apply not just to the time of attainment demonstrations, but also to the time of initial nonattainment designations. Areas across the country should not be penalized at the time of initial designation when foreign emissions are responsible for nonattainment.

Multi-state Exceptional Event Demonstrations - Given the high cost and uncertainty associated with submitting an exceptional event petition, EPA should be required to conduct multi-state analyses of exceptional events and amend the design values as appropriate. The recent Canadian wildfires are a good example of exceptional events

that have multi-state impacts on air quality but currently need to be evaluated by each individual state. Without correcting the skewed design values from ongoing exceptional events, states will face a greater challenge, making future exceptional events claims against an inflated baseline.

2. What are some of the cost impacts that EPA could have evaluated in its Regulatory Impact Analysis prior to tightening the particulate matter National Ambient Air Quality Standards?

Details of a few of the cost impacts EPA could have evaluated are given in the answers below. A few highlights include providing estimates of complete compliance costs as opposed to just partial compliance costs, cumulative regulatory costs considering EPA relied upon emissions reductions from programs that have yet to be implemented, opportunity costs of delays or blocked infrastructure projects, and better air quality modeling forecasts that would allow for the inclusion of the full costs of nonattainment in all counties expected to be out of attainment with the standards as opposed to just the limited set of nonattainment counties with air quality monitors. Additional details can be found in the Chamber's comments on the PM NAAQS proposed rulemaking.[1]

a. Did EPA consider the complete costs of implementing the standards and achieving the estimated number of emissions reductions to avoid nonattainment?

No, EPA only considered part of the costs of meeting the more stringent primary annual NAAQS for $PM_{2.5}$, as demonstrated by EPA's own Regulatory Impact Analysis (RIA). The RIA reports partial attainment costs for meeting $PM_{2.5}$ standards at 9 $\mu g/m^3$ ("9/35") as being $590 million annually, but there are multiple gaps in EPA's analysis.[2] A report by NERA points out deficiencies in EPA's Control Strategy Tool (CoST) model and estimates the costs to bring all counties into full attainment at between 4 to 15 times more costly than the RIA's partial attainment estimate.[3] Specifically, NERA finds that EPA was not able to find sufficient control measures in its CoST model for numerous counties to even comply with the previous annual standards set at 12 µg/m3 of $PM_{2.5}$, let alone more stringent standards that the new rule tightened by 25 percent down to 9 µg/m3. Another glaring omission is that EPA placed significant constraints in the CoST analysis that skewed the results by adding an artificial ceiling of $160,000/ton on the estimated cost of candidate control measures. Capping the costs artificially lowers the cost estimate and omits the

[1] Comments of U.S. Chamber of Commerce on EPA PM NAAQS Proposed Rule, March 28, 2023, https://www.regulations.gov/comment/EPA-HQ-OAR-2015-0072-2428.
[2] 89 Fed. Reg. 16202 (March 6, 2004), Table 3.
[3] NERA Economic Consulting, Potential Costs of Fully Attaining Proposed Lower $PM_{2.5}$ NAAQS Standards: Technical Comments on the Cost Estimates in the Regulatory Impact Analysis for the Proposed $PM_{2.5}$ NAAQS Rule at 14, n.30.

costliest emissions controls, which are those needed to obtain the last remaining emissions reductions after the lower cost options have been implemented.[4]

b. What assumptions did EPA make about other regulatory programs that would need to be fully implemented in order for states to comply with the standards?

The EPA's modeling analysis includes dozens of federal regulations, consent decrees, and estimated emissions reductions due to the tax incentives for various clean energy technologies from the Inflation Reduction Act (IRA) of 2022. The emissions reductions from several of the rules included in EPA's modeling baseline were recently finalized and are subject to ongoing litigation. One such rule, the EPA's Good Neighbor Plan from 2023, has been temporarily blocked by the Supreme Court and was estimated by EPA to yield almost 120,000 tons of NOx emissions reductions, which contribute to particulate matter formation in the atmosphere.[5] With the repeal and scaling back of many of the IRA tax incentives, it draws into question the 500,000 tons of estimated SO2 and NOx emissions reductions EPA projected those tax incentives would yield.[6] With the Good Neighbor rule being blocked and portions of IRA funds repealed, compliance with the already overly stringent 2024 particulate matter standards will become significantly more challenging. Industrial emissions sources are already highly controlled, and as the NAAQS emissions standards progressively approach zero, achieving further reductions will require increasingly burdensome and impractical measures, making the standards nearly impossible to implement effectively.

3. **Will you explain the difference between the industry map and EPA map that projects the number of counties that are expected to be out of attainment with the tightened PM2.5 NAAQS standards?**

First, EPA underestimated the number of counties that would be in violation or nonattainment with the tighter 2024 standards. We estimate as many as 428 counties to be above the 9 µg/m3 annual standard and in violation of the standards, while EPA estimated 119 counties. EPA underestimated the counties in violation, in part, by counting only the counties that have PM2.5 air monitors, even though many adjacent counties that do not have ambient air monitors will also be in violation of tighter standards. EPA has historically designated many counties adjacent to those counties with air monitors as being in violation of the standards, based on the agency's five-factor guidance that considers air quality, emission sources, vehicle miles traveled, topography, and local meteorology. As air emissions do not stop at monitored county

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[4] EPA, Final Regulatory Impact Analysis for the Reconsideration of the National Ambient Air Quality Standards for Particulate Matter, January 2024, ES.1.3. https://www.epa.gov/system/files/documents/2024-02/naaqs_pm_reconsideration_ria_final.pdf

[5] 88 Fed. Reg. 36654 (June 5, 2023), Table V.C.1-2, Table V.C. 2-1.

[6] Electricity Sector Emissions Impacts of the Inflation Reduction Act, U.S. EPA, September 2023, https://www.epa.gov/system/files/documents/2023-09/Electricity_Emissions_Impacts_Inflation_Reduction_Act_Report_EPA-FINAL.pdf

borders, it is easy to see how expansive the number of counties in violation could be simply by considering air quality beyond the monitored counties. In Figure 1 below, the business community projections for areas in attainment are represented in green and dark red for those counties in nonattainment.

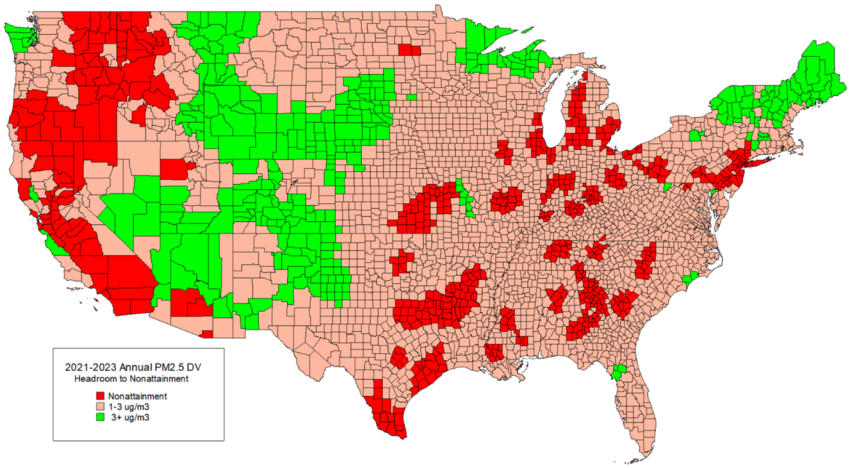

Figure 1. Business Community County-Based Map of Areas Projected to be in EPA Nonattainment or Close to Nonattainment with the 9 µg/m3 PM standards.

Second, counties that are not expected to be in violation of the 2024 standards, a large swath of the country, identified by the counties shaded in light red in Figure 1, are so close to violating the tighter standards that these counties too are expected to experience permitting gridlock. The light red areas, more than 1,800 counties, account for almost 60 percent of the counties in the United States. These light red counties are only 1-3 µg/m3 lower than the new 9.0 µg/m3 annual standard, leaving little emissions headroom or buffer for additional development to meet growing demands for energy, housing, and manufacturing. Unless the 2024 rule is appropriately revisited, it will block the permitting of new manufacturing facilities and associated good-paying jobs, pushing investment overseas just at a time when we are trying to bring back manufacturing and stronger supply chains.

Third, EPA failed to account for the PM emissions from the massive 2023 fire season when conducting their analysis for the 2024 PM NAAQS standard-setting process. Instead of incorporating 2023 ambient emissions data, the agency chose to use the three-year period of emissions including years 2020, 2021, and 2022. The Chamber conducted air quality modeling using the 2023 emissions data and years 2021, 2022, and 2023. Chamber modeling accounted for the 2023 data resulted in an

increase in the number of modeled nonattainment areas by as much as 50 percent.[7] If EPA had used more recent ambient emissions data for years 2021, 2022, and 2023 as the Chamber had done, the agency would have projected a much higher number of nonattainment counties and associated compliance costs. EPA's decision to exclude the 2023 data is particularly unfortunate because the nonattainment designation step conducted as part of the implementation of the 2024 standards and typically conducted within two years after the setting of the standards, will likely use the 2023 air quality data. This practical challenge underscores the importance of the Clean Air and Economic Advancement Reform Act (CLEAR Act) provisions that boost the use of the exceptional events category to exclude emissions from fires.

a. Has EPA ever underestimated the number of areas that would be put in nonattainment with the standards?

Historically, EPA has underestimated the number of areas that would fall into nonattainment under tightened standards. EPA made similar underestimations in the 2015 ozone NAAQS rulemaking, where the agency claimed only 14 counties outside of California would be in nonattainment in 2025.[8] But, based on EPA's June 2025 update, there are 182 counties in nonattainment with the 2015 ozone standards—an order of magnitude more than what EPA projected in their 2015 ozone rulemaking analysis.[9]

b. How many states are expected to have nonattainment area designations?

As seen in Figure 1 above, 28 states are projected to have nonattainment area designations under the 2024 PM2.5 standards, but almost every state will have areas with little headroom (i.e. only between 1-3 µg/m3 below the 9 µg/m3 annual standard), throwing much of the country in permitting gridlock.

Looking at the twenty-five Energy and Commerce's Environment subcommittee members' districts, below are the counties that would either be in nonattainment (red counties in Figure 1) or have little headroom to build (light red counties in Figure 1).

Rep. Jake Auchincloss - Massachusetts (District 4)
- Worcester County, Norfolk County, Plymouth County

Rep. Nanette Diaz Barragan - California (District 44)
- Los Angeles County

Rep. Buddy Carter - Georgia (District 1)

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[7] EPA's Proposed Air Quality Standards Will Cause Permitting Gridlock Across Our Economy, US Chamber of Commerce, November 2023, https://www.uschamber.com/assets/documents/AChamber-PM2.5-Report-_-11.8.23-Final-Draft.pdf.
[8] U.S. Environmental Protection Agency, 2015 Final Air Quality Standards for Ground-Level Ozone, "By the Numbers," https://www.epa.gov/sites/default/files/2015-10/documents/20151001_bynumbers.pdf.
[9] U.S. Environmental Protection Agency, Green Book, 8-hour Ozone (2015) Nonattainment Area Summary, https://www3.epa.gov/airquality/greenbook/jnsum.html.

- Wayne, Charlton, Bacon, Brantley, Camden, Pierce, Liberty, Appling, Glynn, McIntosh, Ware, Chatham County, Long, Bryan, Effingham County

Rep. Troy Carter – Louisiana (District 2)

- St. Charles Parish, St. John the Baptist Parish, Orleans Parish, Jefferson Parish, St. James Parish, Ascension Parish, East Baton Rouge Parish

Rep. Dan Crenshaw – Texas (District 2)

- Montgomery, Harris County

Rep. Gabe Evans - Colorado (District 8)

- Adams County, Weld County

Rep. Julie Fedorchak – North Dakota (At Large)

- Golden Valley, Slope, Billings, Dickey, Bowman, McKenzie, Mercer, Stark, Sioux, Dunn, LaMoure, Logan, Williams, Adams, Divide, Hettinger, Emmons, Pembina, Benson, Walsh, Mountrail, Sargent, Steele, Stutsman, Ward, Grand Forks, McLean, Ransom, Wells, Barnes, Kidder, Renville, Foster, Traill, Burke, Eddy, Grant, Griggs, Oliver, Richland, Bottineau, Cass, Cavalier, McHenry, Ramsey, Morton, Nelson, Towner, Pierce, Rolette, McIntosh, Sheridan, Burleigh

Rep. Morgan Griffith – Virginia (District 9)

- Bedford, Dickenson, Scott, Roanoke (Partial), Wise, Norton, Buchanan, Russell, Craig, Tazewell, Bristol, Franklin, Montgomery, Washington, Radford, Bland, Giles, Pulaski, Wythe, Floyd, Henry, Smyth, Carroll, Lee, Patrick, Galax, Grayson, Martinsville

Rep. Brett Guthrie - Kentucky (District 2)

- Barren, Edmonson, Butler, Grayson, Hart, Green, Daviess, Hancock, Breckinridge, Bullitt, Hardin

Rep. John Joyce – Pennsylvania (District 13)

- Somerset, Huntingdon, Blair, Cambria, Bedford, Franklin, Mifflin, Fulton, Juniata, Perry, Adams

Rep. Nick Langworthy – New York (District 23)

- Chemung, Tioga, Chautauqua, Allegany, Niagara, Cattaraugus, Erie, Schuyler

Rep. Greg Landsman - Ohio (District 1)

- Warren, Hamilton

Rep. Laurel Lee – Florida (District 15)

- Pasco, Polk, Hillsborough

Rep. Bob Latta - Ohio (District 5)

- Putnam, Henry, Mercer, Van Wert, Hancock, Paulding, Wood, Huron, Lorain, Wyandot, Crawford, Seneca

Rep. Rob Menendez – New Jersey (District 8)

- Hudson, Union, Essex County

Rep. Mariannette Miller-Meeks – Iowa (District 1)

- Van Buren, Jefferson, Lee, Henry, Keokuk, Mahaska, Marion, Warren, Iowa, Jasper, Muscatine, Cedar, Johnson, Clinton, Jackson, Jones, Louisa, Washington, Des Moines, Scott

Rep. Frank Pallone – New Jersey (District 6)

- Monmouth, Middlesex County

Rep. Gary Palmer - Alabama (District 6)
- Bibb, Coosa, Elmore, Autauga, Chilton, Shelby, Jefferson

Rep. Scott Peters - California (District 50)
- San Diego

Rep. August Pfluger - Texas (District 11)
- Glasscock, Sterling, Coke, Midland (part), Runnels, Ector, Reagan, Irion, Tom Green, Bell (part), Lampasas, Schleicher, San Saba, Sutton, McCulloch, Brown, Coleman, Kimble, Concho, Llano, Mason, Menard

Rep. Ruiz, Raul – California (District 25)
- Riverside, Imperial

Rep. Ian Schakowsky – Illinois (District 9)
- Lake, McHenry, Cook County

Rep. Darren Soto - Florida (District 9)
- Osceola County, Orange, Polk

Rep. Paul Tonko – New York (District 20)
- Rensselaer, Schenectady, Montgomery, Albany

Rep. Randy Weber – Texas (District 14)
- Galveston, Chambers, Jefferson, Brazoria, Orange

c. Historically, how many states have typically been designated as non-attainment under prior NAAQS designations compared to what is expected under the 2024 PM NAAQS standards?

Historically, fewer states have been designated as nonattainment under prior NAAQS standards compared to the significant increase expected under the 2024 standards, highlighting the unprecedented stringency and scope of the proposed changes.

EPA issued these overly stringent standards even though the United States has some of the best air quality in the world, thanks to steady reductions in pollutants over the last several decades. The United States has reduced all of the pollutants covered under the NAAQS program by a combined 78 percent.[10] According to the World Health Organization, the average annual PM2.5 concentration in the United States is the 11th cleanest of 198 countries, bested only by sparsely populated Canada, Norway, Sweden, Finland, and some small island states.[11] By contrast, PM2.5 concentrations in other major economies are significantly higher than the U.S., including in France (45 percent higher), Germany (49 percent), Japan (51 percent), Italy (98 percent), and China (431 percent).

Unless the 2024 rule's standards are appropriately revisited, the rule will block the permitting of new manufacturing facilities and associated good-paying jobs, pushing investment overseas just at a time when we are trying to bring back

[10] U.S. Environmental Protection Agency, Our Nation's Air: Status and Trends Through 2023, https://www.epa.gov/air-trends.
[11] World Health Organization Air Quality Database: Update 2022. https://www.who.int/data/gho/data/themes/air-pollution/who-air-quality-database/2022#.

manufacturing and stronger supply chains. The rule will also prevent and delay the construction of roads, bridges, and other infrastructure funded by recently passed legislation such as the Infrastructure Investment and Jobs Act.

d. Can you explain further what types of industries would have their permits blocked due to the tighter PM2.5 NAAQS standards?

Industries such as manufacturing, construction, energy production, mining, agriculture, transportation, and others would face permitting gridlock due to the tighter standards, delaying critical projects and economic growth. This would further strain efforts to revitalize supply chains and infrastructure.

e. What does it mean that sanctions on transportation funding can be imposed on local communities if their county or area are found to be in nonattainment with the tighter PM2.5 standards?

Sanctions on transportation funding mean that local communities in nonattainment areas could lose federal funding for infrastructure projects. This would hinder economic development and place additional financial burdens on local governments, exacerbating the challenges of meeting stricter standards. These sanctions could delay or block authorized funds under the Infrastructure Investment and Jobs Act, which authorized $1.2 trillion for transportation and infrastructure spending.

4. In EPA's decision-making, did the agency consider the surge in electricity demand and need to maintain electric reliability and affordability?

The recent projections from S&P Global,[12] IEA,[13] and EPRI[14] highlight a significant surge of as much as 20 percent growth in electricity and energy demand driven by the rapid deployment of data centers to support AI leadership, growing natural gas needs in Europe, and reshoring manufacturing in the U.S. These trends underscore the critical importance of maintaining energy reliability and affordability to meet both domestic and global energy demands. Given EPA's position that it may not consider costs and feasibility considerations in setting NAAQS standards, it seems very unlikely that EPA adequately accounted for these factors in its decision-making when tightening the PM NAAQS standards. Expanded permitting to areas previously unaffected by the PM NAAQS is expected to cause permitting delays and associated costs for the critical infrastructure needed to meet growing consumer demand.

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[12] Power of AI: Wild predictions of power demand from AI put industry on edge, S&P Global, October 13, 2023, https://www.spglobal.com/commodity-insights/en/news-research/latest-news/electric-power/101623-power-of-ai-wild-predictions-of-power-demand-from-ai-put-industry-on-edge.

[13] AI is set to drive surging electricity demand from data centers while offering the potential to transform how the energy sector works, International Energy Agency, April 10, 2025, https://www.iea.org/news/ai-is-set-to-drive-surging-electricity-demand-from-data-centres-while-offering-the-potential-to-transform-how-the-energy-sector-works.

[14] Reindustrialization, Decarbonization, and the Prospects for Demand Growth, Electric Power Research Institute (EPRI), 2023, https://www.epri.com/research/products/000000003002027930.

Ensuring a balanced approach that addresses environmental goals while supporting energy reliability and economic growth is essential.

5. Will you explain what you stated in answers to questions from the Subcommittee about what you mean by the particulate matter standards were set so low that they are close to background levels?

EPA chose to set the 2024 PM NAAQS standards at 9 µg/m3, which is just above the national ambient average of 8.5 µg/m^3—leaving virtually no margin for economic expansion. For context, the first PM NAAQS standards were set in 1971 with the annual standard set at 75 µg/m3. The U.S. Chamber has emphasized in testimony to the Clean Air Scientific Advisory Committee, public comments to EPA, and various letters that setting PM NAAQS standards so close to background levels leaves little room for economic growth because the majority of particulate matter emissions, more than 80 percent, now come from non-point sources like wildfires, construction, and road dust, which are difficult to control.

a. What is the practical impact of setting standards so close to background levels?

Setting the standards so low creates significant challenges for states and industries to comply with the standards, as those sources are already well controlled. Overly stringent standards, like those issued for PM in 2024, risk stifling manufacturing, industrial investment, and infrastructure development, exacerbating permitting challenges and hindering economic progress.

Recent Congressional testimony highlights how new facilities from steel, power, cement, brick, paper, and others need sufficient emissions headroom to accommodate EPA's conservative modeling approach even with the best available emissions controls installed.[15] Not only would conventional manufacturers bump into the lower air quality ceiling, but other manufacturers spurred by renewable energy investments may face the same challenges. For example, the CS Wind facility, which broke ground on construction in 2023 and would manufacture wind turbines, would contribute as much as a 1.9 µg/m3 increase in fine particulate matter emissions in their area based on EPA's conservative air quality modeling methodology. The CS Wind facility is estimated to bring 850 new jobs to Pueblo, Colorada.

In another example, Charter Manufacturing Company, based out of Wisconsin, was looking to site a greenfield facility and hired a consultant who found 400 potential sites across seven states in the upper Midwest and South that met their size and labor requirements. Only eight sites were found to be possible once the company considered environmental permitting restrictions. That factor narrowed the choices

[15] Testimony of Timothy Hunt, American Forest & Paper Association, September 19, 2023, https://d1dth6e84htgma.cloudfront.net/09_19_23_ENV_Testimony_Hunt_4b415cf010.pdf, page 26.

so much that after considering other factors (such as energy supply, supply chains, and accessibility), the company decided to not pursue the facility.

The potential for added costs for increasingly stringent air permits for these examples and many others often lead to a manufacturing facility not being built. It is why we support legislative amendments, like those in the Clean Air and Economic Advancement Reform Act (CLEAR Act), that would allow for the secondary consideration of the attainability of a proposed standard before the standard is finalized.

Thank you for considering our perspective on this critical issue. We look forward to working with the Committee to advance policies that modernize the permitting process so we can build the infrastructure of the future.

Sincerely,

Chad Whiteman,
Vice President, Environment and Regulatory Affairs
Global Energy Institute
U.S. Chamber of Commerce

GEORGIA
DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL PROTECTION DIVISION

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July 31, 2025

Mr. Calvin Huggins
Legislative Clerk
Committee on Energy and Commerce
2125 Rayburn House Office Building
Washington, DC 20515

Subject: Hearing entitled "Short-Circuiting Progress: How the Clean Air Act Impacts Building Necessary Infrastructure and Onshoring American Innovation"

Dear Mr. Huggins,

Thank you for the opportunity to appear before the Subcommittee on Environment on Wednesday, June 11, 2025, to testify at the hearing entitled "Short-Circuiting Progress: How the Clean Air Act Impacts Building Necessary Infrastructure and Onshoring American Innovation."

In the attachment, you will find my responses to the additional questions for the record that were submitted by the Honorable Morgan Griffith (R-VA), the Honorable Rick Allen (R-GA), and the Honorable Nick Langworthy (R-NY).

Please feel free to contact me at 470-524-0697 or James.Boylan@dnr.ga.gov if you have any additional questions or wish to discuss any of my responses.

Sincerely,

James W. Boylan

James W. Boylan, Ph.D.
Chief, Air Protection Branch
Georgia Environmental Protection Division

Attachment

Additional Questions for the Record

The Honorable Morgan Griffith (R-VA)

1. **Your written testimony points out that the PM NAAQS rule fails to address the largest source of PM2.5 by far, which is wildfires. What do you recommend to address that problem?**

   PM from wildfires and prescribed fires are the largest source of PM2.5 in most areas of the country. It is critical that the Clean Air Act be updated to add "or action to mitigate wildfire risk" to the section of the Act that covers Exceptional Events. This would allow the contribution from both wildfires and prescribed fires to be removed from consideration when evaluating compliance with the PM NAAQS.

2. **To what extent did the Canadian Wildfires from 2023-2024 impact national PM2.5 levels? The chart used by the minority does not include data from those years. To what extent where the wildfires a determinative event and why is it important to use current data when modeling the effect of the Biden-Harris PM2.5 rule?**

   The chart used by the minority included data from 2020-2022 and does not include data from 2023-2024. The Canadian Wildfires from 2023-2024 resulted in significantly higher PM2.5 levels across the country. Under the new PM2.5 NAAQS, EPA will use PM2.5 data from the three most recent years (2022-2024) to determine which counties will be designated attainment and which will be designated nonattainment. Therefore, it is critical that any discussions of the Biden-Harris PM2.5 rule involve the most current PM2.5 data along with any wildfire events that impacted that data.

The Honorable Rick Allen (R-GA)

1. **You're from my home state of Georgia and have an abundance of experience with the challenges of the NAAQS process.**

   a. **Does the NAAQS program need a legislative fix to best encourage both a healthy environment and economic growth?**

      The NAAQS program needs a legislative fix to address the setting of the NAAQS as well as the implementation of the NAAQS. I believe there are ways to modernize the NAAQS process that could help states implement the new standard in a way that continues to protect air quality without restricting economic opportunities.

   b. **Have some of these programs become counterintuitive to the goal of the Clean Air Act?**

      The goal of the Clean Air Act is to protect human health and the environment from the adverse impacts of air pollution. However, some of these programs have become counterintuitive to the goal of the Clean Air Act. For example, the "Once In, Always In" policy under the Clean Air Act requires that facilities subject to major source standards would always remain subject to those standards, even if

they reduced their potential to emit hazardous air pollutants (HAPs) below the major source thresholds. This policy discourages voluntary HAP reductions and technological innovations. I believe there are ways to modernize the NAAQS process that could help states implement the Clean Air Act in a way that continues to protect air quality without restricting economic opportunities.

2. **At what point should Congress consider a legislatively fixed floor on particulate matter for NAAQS?**

Currently, there is nothing stopping EPA from setting the particulate matter NAAQS at or below background levels (levels in the absence of human-made emissions). The proximity of new standards to background levels can put many states in a situation where the new standard is not achievable for many impacted areas for reasons that are beyond a state's control, such as wildfires, international transport, and Saharan dust events. Therefore, the EPA Administrator should be allowed to consider likely attainability of the standard as proposed NAAQS levels approach background concentrations.

   a. **If most of the levels come from sources outside of industry control should Congress step in and set a standard?**

   I believe there are ways to modernize the NAAQS process that could help states implement the new standard in a way that continues to protect air quality without restricting economic opportunities.

3. **As you're aware Georgia has a thriving economy and is home to many innovative companies and individuals, does the particulate matter rule threaten that growth and success?**

Yes, the current level of the particulate matter standard will impact Georgia's thriving economy. Particulate matter levels are currently above the new PM2.5 standard in five metropolitan statistical areas in Georgia (Atlanta, Columbus, Macon, Sandersville, and Augusta). A designations of nonattainment in these areas would threaten the growth and success in these areas and bring economic development to a grinding halt.

   a. **As someone who has worked with the economic development side of the state, what can you tell us about the rule's potential to chill expansion and growth in my home state?**

   For areas designated nonattainment, they will be required to implement the most restrictive New Source Review (NSR) permitting process not only for new but also for existing sources. Existing sources will be required to install Reasonably Available Control Measures (RACM) and Reasonably Available Control Technology (RACT). New sources will be required to install Lowest Achievable Emissions Rate (LAER) controls and purchase expensive emission offsets for the precursor pollutants. In many nonattainment areas, industrial sources have dramatically reduced their emissions, yet are still subject to the enhanced controls that come with nonattainment.

For manufacturing or other projects proposed in areas meeting the standard, they must comply with stringent prevention of significant deterioration (PSD) program requirements, including a Best Available Control Technology (BACT) analysis. An even bigger issue is the lack of headroom (difference between the standard and the background levels), making it very difficult to approve permits especially when more than one new source of emissions or facility is modeled based on their cumulative impact.

For many years, I was the Georgia EPD liaison to the Georgia Department of Economic Development and met with many companies looking to locate in Georgia. I quickly learned that companies in Georgia and other states avoided nonattainment areas and attainment areas with little headroom for Prevention of Significant Deterioration (PSD) modeling. In 2012, the annual PM2.5 standard was dropped from 15.0 micrograms per cubic meter to 12.0 micrograms per cubic meter. As a result, we had no new large permitting projects in the four areas designated nonattainment until those areas were eventually redesignated back to attainment. Also, the number of PSD applications were significantly reduced in the attainment areas due to the lack of headroom between the background values and the standard. In 2024, the annual PM2.5 standard was dropped from 12.0 micrograms per cubic meter to 9.0 micrograms per cubic meter. Again, many locations in Georgia are currently over the standard or lack enough headroom for new projects.

The Honorable Nick Langworthy (R-NY)

1. **Georgia has been a success story in attracting manufacturing and energy investment. But I imagine all that growth doesn't come without headaches. What are you hearing from companies on the ground about how Clean Air Act red tape — specifically New Source Review — is slowing them down or pushing projects elsewhere?**

   For many years, I was the Georgia EPD liaison to the Georgia Department of Economic Development and met with many companies looking to locate in Georgia. I quickly learned that companies in Georgia and other states avoided nonattainment areas and attainment areas with little headroom for Prevention of Significant Deterioration (PSD) modeling. In 2012, the annual PM2.5 standard was dropped from 15.0 micrograms per cubic meter to 12.0 micrograms per cubic meter. As a result, we had no new large permitting projects in the four areas designated nonattainment until those areas were eventually redesignated back to attainment. Also, the number of PSD applications were significantly reduced in the attainment areas due to the lack of headroom between the background values and the standard. In 2024, the annual PM2.5 standard was dropped from 12.0 micrograms per cubic meter to 9.0 micrograms per cubic meter. Again, many locations in Georgia are currently over the standard or lack enough headroom for new projects.

2. **In 2024, the Biden EPA proposed expanding the NSR "project" definition and imposing stricter rules requiring emission reductions be "enforceable," plus broader monitoring and reporting. Fortunately, we've had a change in Administration since that proposed rulemaking began. However, from your perspective, how would the**

Biden EPA's proposed changes have impacted state-led efforts to support economic growth and infrastructure development?

The Biden EPA proposed rule expanding the NSR "project" definition and other proposed rule requirements would have significantly impacted economic growth and infrastructure development across the U.S. by making it more difficult for permit applicants to meet PSD permitting thresholds and requiring additional emission reductions, monitoring, and reporting.

3. **Across the country, efforts to expand energy infrastructure — whether to power chip fabs, support data centers, or keep up with rising computing demands — are increasingly stalled by burdensome regulatory hurdles. Even routine upgrades to substations or power plants can trigger NSR, despite improving efficiency and reliability. Mr. Boylan, as states push to carry out the Trump Administration's goals of building out critical energy infrastructure and bring advanced manufacturing back to America, how does the red tape and uncertainty created by NSR undermine efforts to secure grid reliability and drive the private investment we desperately need?**

While red tape and uncertainty created by NSR may impact economic development, I do not feel qualified to speak specifically on efforts to secure grid reliability and private investments.

Responses by John Walke, the Natural Resources Defense Council, to Questions for the Record for the Legislative Hearing on H.R.___, the Clean Air and Economic Advancement Reform Act and H.R.___, the Clean Air and Building Infrastructure Improvement Act, before the Subcommittee on Environment, Committee on Energy and Commerce, U.S. House of Representatives, June 11, 2025

The Honorable Morgan Griffith (R-VA)

Question 1. In response to questions at the hearing, you noted that the NAAQS reviews take an average of eight to ten years, which is considerably longer than allowed under the Clean Air Act's Section 109(d) mandatory five-year review deadline. Do you support amending the Clean Air Act to extend the review cycle deadline from five years to eight or ten years, assuming the new deadline remains an enforceable, non-discretionary duty subject to citizen suits under the Act?

Answer 1. No. NAAQS reviews historically have taken an average of eight to ten years when the Clean Air Act's statutory review deadline of five years (42 U.S.C. § 7409(d)(1)) is currently and long has been an enforceable, non-discretionary duty subject to citizen suits under the Act. Congress should not weaken the Clean Air Act and delay review and revision of the national health standards for harmful air pollution from five years to eight or ten years. The historic record demonstrates that EPA would violate the new statutory deadline of eight or ten years by additional years, and deny Americans safe, healthy air quality for even longer than is currently the case with a five-year NAAQS review deadline.

There is overwhelming proof for this conclusion in the implementation history of the 1990 Clean Air Act Amendments. There, Congress adopted an outside 10-year deadline for EPA to adopt emissions standards for all categories and subcategories of sources emitting hazardous air pollutants, with an enforceable, non-discretionary duty subject to citizen suits to promulgate all such standards "not later than 10 years after November 15, 1990," 42 U.S.C. § 7412(e)(1)(E), that is not later than November 15, 2000. Indeed, Congress was even more prescriptive and required EPA to issue standards covering at least 40 categories/subcategories by 1992; 25 percent of all categories/subcategories by 1994; 25 percent of all categories/subcategories by 1997; and all categories/subcategories by no later than 2000. *See* 42 U.S.C. § 7412(e)(1)(A) - (E).

EPA violated and missed *each* of these two-year, four-year, and seven-year statutory deadlines for the vast majority of categories and subcategories of Clean Air Act section 112 sources. The agency also violated the 10-year statutory deadline and failed to promulgate emissions standards by November 15, 2000 for the vast majority of categories and subcategories of sources.

Disproportionately few emissions standards were even promulgated during the 1990s. Instead, the record reflects that EPA issued 10 emissions standards 12 years after 1990;[1] 19 standards 13 years after 1990;[2] nine standards 14 years after 1990;[3] one standard 15 years after 1990;[4] one standard 16 years after 1990;[5] 10 standards 17 years after 1990;[6] five standards 18 years after 1990;[7] two standards 19 years after 1990;[8] one standard 20 years after 1990;[9] two standards 21 years after 1990;[10] and one standard 22 years after 1990.[11] *See generally* https://www.epa.gov/stationary-sources-air-pollution/national-emission-standards-hazardous-air-pollutants-neshap-8. Startlingly, if one adds up the total number of years that EPA was late promulgating just the Clean Air Act section 112 emissions standards for which EPA missed the 10-year enforceable, non-discretionary statutory deadline, those years would total 296 years. These are regulatory-year-equivalents that Americans were denied the benefits of safeguards against hazardous air pollution that cause cancer, brain damage, infertility and birth defects.

EPA violated this one *outside* 10-year enforceable, non-discretionary statutory deadline *over 60 times*, which *additionally* encompassed multiple violations of the separate two-year, four-year and seven-year enforceable, non-discretionary statutory deadlines. Against this historic record spanning nearly four decades, it is not plausible or responsible to assert that EPA would meet delayed NAAQS review deadlines of eight or ten years, even if the new deadline remained an enforceable, non-discretionary duty subject to citizen suits. Instead, the unmistakable result would be that Americans would be denied the health and air quality benefits of safe, healthy air for far longer than today's average eight-to-ten-year review cycles, and even longer than today's five-year enforceable, non-discretionary statutory review deadline. No witness or member at the June hearing offered any reasonable justification why Americans should be denied safe, clean air longer than the Act's five-year statutory deadline. If Congress wants to improve the timeliness of the Clean Air Act's NAAQS review cycles, the better and more responsible way to do that is to appropriate adequate funds to EPA to complete NAAQS reviews within the five-year statutory deadline, accompanied by the clear directive that the agency must do so.

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[1] *See* https://www.epa.gov/stationary-sources-air-pollution/national-emission-standards-hazardous-air-pollutants-neshap-8 (40 C.F.R. Part 63, Subparts QQQ, HHHH, JJJJ, NNNN, SSSS, TTTT, UUUU, XXXX, QQQQQ, SSSSS).
[2] *Id.* (40 C.F.R. Part 63, Subparts FF, AAAA, FFFF, OOOO, QQQQ, RRRR, WWWW, BBBBB, CCCCC, FFFFF, GGGGG, HHHHH, IIIII, JJJJJ, KKKKK, MMMMM, PPPPP, RRRRR, TTTTT).
[3] *Id.* (40 C.F.R. Part 63, Subparts M, PPP, EEEE, IIII, YYYY, ZZZZ, AAAAA, EEEEE, MMMMM.
[4] *Id.* (40 C.F.R. Part 63, Subpart LLLL).
[5] *Id.* (40 C.F.R. Part 63, Subpart YYYYYY).
[6] *Id.* (40 C.F.R. Part 63, Subparts OOOOO, YYYYY, DDDDDD, EEEEEE, FFFFFF, GGGGGG, PPPPPP, QQQQQQ, SSSSSS, TTTTTT).
[7] *Id.* (40 C.F.R. Part 63, Subparts ZZZZZ, BBBBBB, CCCCCC, HHHHHH, XXXXXX).
[8] *Id.* (40 C.F.R. Part 63, Subparts ZZZZZZ, CCCCCCC).
[9] *Id.* (40 C.F.R. Part 63, Subpart DDDDDDD).
[10] *Id.* (40 C.F.R. Part 63, Subparts JJJJJJ, EEEEEEE).
[11] *Id.* (40 C.F.R. Part 63, Subpart UUUUU).

Question 2. In response to questions, you also said that areas should not be designated as nonattainment if a combination of background concentrations and wildfires pushes an area over the standard. You further stated that you would support changes to existing rules and processes under the Clean Air Act for Exceptional Events and International Transport if needed to expedite and make these processes more efficient. Given the significant number of states impacted by wildfire emissions and the cost of developing and submitting petitions under Section 319 for Exceptional Events and international transport demonstrations under Section 179B, what specific reforms would you recommend to make these programs workable for states? How do you define background concentrations?

Answer 2. I would support responsible regulatory or guidance-based changes and improvements to make exceptional event determinations more workable for air quality violations caused by wildfires. I am not an expert in Community Multiscale Air Quality (CMAQ) photochemical modeling or the Expedited Modeling of Burn Events Results (EMBER) dataset used by EPA, state and local air pollution control agencies, and other experts to address air quality monitoring data influenced by wildfires or prescribed fires eligible to be treated as exceptional events. Nor am I a fire manager or state, local or tribal air pollution control official submitting exceptional even petitions related to wildfires. I have submitted public comments in response to two rulemaking proposals by EPA related to its Exceptional Events Rule, however; it is in that capacity that I am prepared to offer comments and recommendations in response to any regulatory or guidance changes proposed by EPA, informed by the experience and views of the aforementioned experts.

Both EPA and the U.S. Court of Appeals for the D.C. Circuit define "background ozone"—as one example of "background concentrations"—under the Clean Air in the following manner:

> Under the Clean Air Act, "background ozone" is ozone "that would exist in the absence of any man-made emissions inside the U.S." 80 Fed. Reg. at 65,436. This includes ozone generated by both natural sources anywhere (*e.g.*, a wildfire) and foreign man-made sources (*e.g.*, a factory in Mexico). *See id.*

Murray Energy Corp. v. EPA, 936 F.3d 597, 622 (D.C. Cir. 2019). I have no different, contradictory definition of "background concentrations."

Question 3. Dr. James Boylan from the Georgia Environmental Protection Division stated at the hearing that he has fourteen staff members currently working on preparing Exceptional Event petitions. He has also noted in public presentations that the state is preparing 129 Exceptional Event petitions for 2021 to 2023 air quality measurements. Do you believe this is a reasonable burden to place on states? How many states do you think have the budget and staffing to support this level of effort?

Answer 3. The information in the question appears to suggest that there have been *more than* 129 monitored violations of national clean air health standards in Georgia from 2021 to 2023 (since no one is arguing that all monitored violations in the state are eligible for treatment as exceptional events). That is an unreasonable burden on the health and air quality of Georgians or any Americans that demands the attention and concern of public officials and the public at large, whether caused by wildfires or pollution from industry or motor vehicles. The Clean Air Act allows the exclusion of monitored violations of national health standards caused by air pollution that results from eligible exceptional events. A better solution than accepting incorrect determinations would be having Congress and administrations adequately fund grants to state and local air pollution control agencies, under Clean Air Act Sections 103 and 105 of the Clean Air Act, part of the State and Tribal Assistance Grant (STAG) program. The National Association for Clean Air Agencies (NACAA) testified before the Senate Appropriations Committee in June of this year that:

> [f]ederal grants to state and local air quality agencies (under Sections 103 and 105 of the CAA) were not much higher in FY 2024 than 20 years ago, representing a substantial decrease in purchasing power when factoring in inflation. During this time, air quality issues have become more complicated and costly. Moreover, while federal grants were originally intended to cover 60 percent of the cost of implementing the CAA, they cover less than a quarter of that amount today, with the remainder already coming largely from state and local programs themselves.

Testimony of the National Association of Clean Air Agencies (NACAA) Submitted to the Senate Appropriations Committee Subcommittee on Interior, Environment, and Related Agencies Regarding the FY 2026 Budget for the U.S. Environmental Protection Agency (June 13, 2025), https://www.4cleanair.org/wp-content/uploads/NACAA-6_13_25-Senate-Testimony-FY-2026-1.pdf. The current administration proposed extreme cuts of 55% to the FY26 EPA budget, which in turn would devastate federal funding to the STAG program.[12]

NACAA's testimony asked Congress to "provide increased, rather than reduced, funding for state and local agencies to implement the Clean Air Act," noting a survey of NACAA member state and local agencies indicating "that the appropriate federal funding role for supporting state and local agencies would require more than double the FY 2024 appropriation of $236 million." *Id.*, NACAA Testimony, at 1, n. 1 (https://www.4cleanair.org/wp-content/uploads/NACAA-FY26-Funding-Survey-Memo-4-2-25.pdf). The Clean Air Act guarantees all Americans the right to clean, safe air. Congress should carry out its appropriations role to fund state and local air pollution control agencies at levels sufficient to uphold that right. Congress should not weaken

[12] https://www.epa.gov/system/files/documents/2025-05/fy-2026-epa-bib.pdf.

the Clean Air Act to eliminate or diminish that right, in the name of burden reduction or otherwise.

Question 4. Section 319 of the Clean Air Act defines Exceptional Event to mean "an event that affects air quality, is not reasonably controllable or preventable, and is an event caused by human activity that is unlikely to recur at a particular location." Given that prescribed burns are reasonably controllable and likely to recur in line with forest management practices, do you believe the statute, as currently drafted, clearly allows prescribed burns to be considered Exceptional Events? Would you support statutory amendments to clarify the exclusion of prescribed burns and other activities to reduce the risk of wildfires?

Answer 4. No, I would not support that unnecessary statutory amendment. The Clean Air Act defines an exceptional event in relevant part as "an event caused by human activity that is unlikely to recur at a particular location"—not one merely 'likely to recur in line with forest management practices.' Those reflect two different conceptions of recurrence. Moreover, since adoption of EPA's 2016 Exceptional Events Rule, agency regulations have stated that prescribed fires can be a human-caused event eligible for treatment as an exceptional event.[13] The EPA regulations and related guidance address each prong of the statutory "exceptional event" definition, including the "not reasonably controllable or preventable" prong. No party challenged the 2016 Exceptional Events Rule's regulatory treatment of air quality monitoring data influenced by prescribed fires. The period for timely lawsuits challenging the 2016 Rule has long since passed. There is no need or cause for amending the Clean Air Act to treat prescribed fires as exceptional events. That is especially true for legislation that also suffers from so many other elements weakening the Clean Air Act, as detailed at length in my written testimony opposing the two draft bills under consideration at the June 11, 2025 hearing.[14]

Question 5. The Sierra Club has challenged EPA's approval of a 2023 Michigan Exceptional Event petition (88 Fed. Reg. 32,584 May 19, 2023) and (88 Fed. Reg. 32,594), claiming in part that Michigan had failed to demonstrate a "clear causal" relationship between the wildfires and the standard violation despite submitting extensive evidence. This litigation and related uncertainty further discourage states from spending limited

[13] *See* 81 Fed. Reg. 68,216, 68,247-57, 68,277-78 (Oct. 3, 2016) (revised 40 C.F.R. § 50.14(b)(3), treatment of prescribed fires as eligible exceptional events), https://www.epa.gov/sites/default/files/2018-10/documents/exceptional_events_rule_revisions_2060-as02_final.pdf; *see also*, EPA, *Exceptional Events Guidance: Prescribed Fire on Wildland that May Influence Ozone and Particulate Matter* Concentrations (Aug. 2019), https://www.epa.gov/sites/default/files/2019-08/documents/ee_prescribed_fire_final_guidance_-_august_2019.pdf.

[14] *See generally* https://www.congress.gov/119/meeting/house/118385/witnesses/HHRG-119-IF18-Wstate-WalkeJ-20250611.pdf.

resources on Exceptional Event petitions. How would you define a "clear causal" relationship, and what changes would you recommend simplifying this demonstration and reduce uncertainty? Do you support the Sierra Club's challenge?

Answer 5. I am unfamiliar with the disputed factual and/or legal issues underlying the Sierra Club's challenge to EPA's approval of the 2023 Michigan petition. I am similarly unfamiliar with the submitted evidence. Accordingly, I can offer no informed view about the challenge or the evidence. The Clean Air Act, EPA regulations, and common sense warrant a clear causal relationship between wildfires and the violation of national clean air health standards; otherwise, Americans rightly would lack confidence in the process, its accuracy, and its reliability. I do not have additional suggestions for defining a "clear causal" relationship at this time. The one strong recommendation I do have at this time is to increase federal funding to state and local air pollution control agencies, as discussed in my answer to Question 3, above. Because every approved exceptional event petition involves the excusal of a violation of a monitored national health standard and the acceptance of unsafe air pollution, however, Americans should expect the process to be conducted thoroughly and correctly, not hastily or inaccurately in the name of simplification or reducing uncertainty for petitioners.

The Honorable Frank Pallone, Jr. (D-NJ)

Question 1. Republicans have repeatedly attacked the final Reconsideration of the National Ambient Air Quality Standards for Particulate Matter, 89 Fed. 16,202 *et seq.* (March 6, 2024). During the hearing, one of my Republican colleagues indicated that a majority of states oppose this new standard and that opposition "says an awful lot about that standard and whether it is accurate or not". Do you have a response to that assertion?

Answer 1. The National Association of Clean Air Agencies (NACAA) in December 2023 supported strengthening the NAAQS for particulate matter (PM) and urged EPA to reconsider the unsafe 2012 $PM_{2.5}$ annual health standard left in place by EPA in December 2020. NACAA wrote that EPA's reconsideration "reinforce[s] our association's support for swift action by your Administration to finalize more protective National Ambient Air Quality Standards (NAAQS) for particulate matter (PM)."[15] NACAA is "the national, nonpartisan, nonprofit association of

[15] https://www.4cleanair.org/wp-content/uploads/NACAA-PM-NAAQS-Letter-to-President-Biden-12_21_2023-1-1.pdf (Dec. 2023 NACAA Letter).

157 air pollution control agencies in 40 states, including 117 local air agencies, the District of Columbia and five territories." *Id.*

Addressing the failure by EPA in December 2020, to strengthen the unsafe 2012 annual $PM_{2.5}$ health standard, NACAA went on to state in its December 2023 letter:

> From the outset of this Administration, NACAA has encouraged EPA's reconsideration of the agency's December 18, 2020, final decision to retain, without revision, the 2012 PM NAAQS. We have done so because after closely observing the review process that led to the April 30, 2020, proposal of that decision we concluded that the review process was flawed; that it resulted in a flawed proposed decision by the EPA Administrator, particularly with respect to the health-based (primary) $PM_{2.5}$ standards; that the Administrator's proposed action should be withdrawn; and that a revised review process should be undertaken.

Id., at 1.

While it is unclear what 'majority of states' the member was referring to at the June 2025 hearing, it appears the reference may have been to 24 Republican state attorneys general suing to overturn the safer standard[16]—not bi-partisan state and local air pollution control officials who are members of NACAA, more expert in air quality standards under the Clean Air Act than state attorneys general, and who supported the safer standard and its scientific basis.

Finally, opposition to a safer annual health standard for $PM_{2.5}$ air pollution under the Act says nothing, in itself, about the scientific accuracy of the standard. The Clean Air Act and a unanimous Supreme Court decision[17] require health standards for $PM_{2.5}$ and other criteria air pollutants to be set at levels that are "requisite to protect the public health" with "an adequate margin of safety," 42 U.S.C. § 7409(b)(1), without any authority on EPA's part to consider implementation costs or other economic considerations. *Whitman v. Am. Trucking Associations*, 531 U.S. 457, 464-476 (2001). In the press release announcing the March, 2024 lawsuit by the state attorneys general challenging the safer $PM_{2.5}$ standard, Kentucky Attorney General Russell Coleman charged that the safer standard was about "advancing President Biden's radical green agenda."[18] Attorney General Coleman went on to charge that "the new rule could block permitting of new manufacturing facilities, drive out good paying jobs from Kentucky, prevent new infrastructure construction and raise costs on small businesses." *Id.* These characterizations have nothing to do with the accuracy of the health standard or the scientific evidence on which it

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[16] *See* March 6, 2024 Petition for Review in the U.S. Court of Appeals for the D.C. Circuit, https://www.ag.ky.gov/Press%20Release%20Attachments/States%20Petition%20for%20Review.pdf (lawsuit challenging the safer 2024 EPA health standard for $PM_{2.5}$, filed by 24 state attorneys general).

[17] *Whitman v. American Trucking Assoc. Inc,* 531 U.S. 457 (2001).

[18] *See* "Kentucky Attorney General Russell Coleman is suing the U.S. Environmental Protection Agency over revised air quality standards for soot pollution," https://www.lpm.org/news/2024-03-08/kentucky-sues-the-epa-over-strengthened-particle-pollution-standards.

was based. Moreover, these implementation cost allegations leveled against the safer health standard are ones that the Clean Air Act and a unanimous Supreme Court decision make clear are unlawful considerations. *Id.*; *see Whitman*, 531 U.S. at 464-476.

In 2022, *all* members of EPA's expert Clean Air Scientific Advisory Committee concluded that the annual $PM_{2.5}$ health standard left unchanged by EPA in December 2022, 12 $\mu g/m^3$, was "not sufficiently protective of public health and should be lowered," "agree[ing] with the EPA's assessment that there are large populations at risk of $PM_{2.5}$ health effects" at 12 $\mu g/m^3$.[19] A strong majority[20] of CASAC members found "that an annual average in the range of 8-10 $\mu g/m^3$ would be appropriate." *Id.* at 3. The CASAC majority highlighted studies showing:

> positive associations between $PM_{2.5}$ exposure and mortality with precision among populations with mean concentrations likely at or below 10 $\mu g/m^3$; epidemiologic studies in the United States showing such associations at concentrations below 10 $\mu g/m^3$ and below 8 $\mu g/m^3$; Canadian studies, some of which show such associations at concentrations below 10 $\mu g/m^3$ and below 8 $\mu g/m^3$; a meta-analysis of 53 studies, 14 of which report such associations at concentrations below 10 $\mu g/m^3$ down to 5 $\mu g/m^3$; [and] protection of at-risk demographic groups....

Id. Even the sole non-concurring CASAC member agreed that a strengthened "range of 10-11 $\mu g/m^3$ for the annual $PM_{2.5}$ standard would be appropriate." *Id.* No CASAC member supported retaining the unprotective standard of 12 $\mu g/m^3$ backed by the state attorneys general lawsuit. *Id.* EPA adopted a $PM_{2.5}$ annual health standard of 9 $\mu g/m^3$,[21] squarely within the 8-10 $\mu g/m^3$ range recommended by CASAC.

Question 2. During the hearing, Republicans frequently referred to background levels of $PM_{2.5}$. Republicans and some witnesses claimed that the current $PM_{2.5}$ standard is close to a "background level" of 8 $\mu g/m^3$, which leaves industries little "headroom" to add to the area's pollution level before the area would be out of compliance. As a result, witnesses and Republicans claim that the new standard will impede manufacturing and innovation.

a. Is this an accurate representation of "background" $PM_{2.5}$?

b. Republicans shared a map using data from the National Association for Manufacturers (NAM), which implied that most counties would not be able to meet

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[19] Letter from CASAC to EPA Administrator Michael S. Regan, at 2 (March 18, 2022), https://www.4cleanair.org/wp-content/uploads/PM-NAAQS-CASAC-Responses-to-EPA-PM-Draft-PA-031822.pdf.
[20] Just one CASAC member did not concur with the lower end of this recommended range. *See id.*, Letter from CASAC.
[21] 89 Fed. Reg. 16,202 (March 6, 2024), https://www.govinfo.gov/content/pkg/FR-2024-03-06/pdf/2024-02637.pdf.

the new standard of 9 μg/m³.1 Does this map accurately represent the regulatory landscape for the new $PM_{2.5}$ standard? Why or why not?

Answer 2a.

This is not an accurate representation of "background" $PM_{2.5}$. In the preamble to the final 2024 $PM_{2.5}$ reconsideration rule, EPA said that "background PM is defined as all particles that are formed by sources or processes that cannot be influenced by actions within the jurisdiction of concern."[22] This "background" PM "cannot be influenced by actions within the jurisdiction of concern" and is uncontrollable by domestic authorities and thus is conceptually distinct from pollution that is created from human activities in the United States, which could be controlled. *Id.*

The "background" PM at any specific location cannot be directly measured, but may be assessed via computer modeling and by drawing inferences based on the types of PM captured at certain air quality monitoring stations. *Id.* EPA reports that, based on these assessments, "background" levels of $PM_{2.5}$ likely range from 0.5-3 $\mu g/m^3$ or 1-3 $\mu g/m^3$, *id.*—nowhere close to the 8 $\mu g/m^3$ asserted at the June 2025 hearing. This has led EPA to conclude that "[a]t annual and national scales, estimated background PM concentrations in the U.S. are small compared to contributions from domestic anthropogenic sources." *Id.* EPA's assessment aligns well with the lowest $PM_{2.5}$ levels reported at air quality monitors in the United States.[23]

Others sometimes give "background" PM different meanings, such as including pre-existing air pollution, regardless of its source, a usage that suggests current pollution conditions in an area are somehow natural and not possible to reduce. That suggestion is wrong. Human-caused pollution touches all parts of our nation—46% of the population in the U.S. (over 156 million people) live in counties with unhealthy levels of air pollution.[24] Worldwide, air pollution leads to nearly 8.1 million premature deaths every year.[25]

Answer 2b.

The red map presented at the hearing does not accurately represent the regulatory landscape for the new $PM_{2.5}$ standard. There are over 3,000 counties in the nation. *See, e.g.*, 82 Fed. Reg. at 54,232 n.2. In the rulemaking record, EPA projected how many counties would need additional

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[22] 89 FR 16,202, 16,218 (Mar. 6, 2024).
[23] U.S. EPA, $PM_{2.5}$ Design Values, 2022, tbl.5a (May 23, 2023), https://www.epa.gov/system/files/documents/2023-05/PM25_DesignValues_2020_2022_FINAL_05_23_23.xlsx.
[24] *See, e.g.*, *EPA v. EME Homer City*, 572 U.S. 489, 496-97 (2014); American Lung Association, State of the Air report, *available at* https://www.lung.org/research/sota/key-findings
[25] Health Effects Institute, State of Global Air, *available at* https://www.healtheffects.org/announcements/new-state-global-air-report-finds-air-pollution-second-leading-risk-factor-death.

$PM_{2.5}$ emissions reductions in order to attain the strengthened annual standard of 9 $\mu g/m^3$ by 2032. This was the date that EPA reasonably assumed would be the earliest deadline for attaining the standard, for Moderate nonattainment areas (the lowest classification), based on then-expected nonattainment "designations" in late 2025.[26] The agency adopted this approach in early 2024 precisely because it did not expect to make designations until late 2025. EPA further adopted the reasonable assumption that states and counties, and their regulated mobile sources and stationary sources, would continue to implement existing and forthcoming measures (as the law requires) to meet the 24-hour $PM_{2.5}$ standard (35 $\mu g/m^3$) and the *prior*, just-replaced annual $PM_{2.5}$ standard of 12 $\mu g/m^3$.

Based on this information and assessments, EPA projected that only *52 counties* out of the 3,000 counties would need to undertake additional pollution reduction efforts to meet the standard by 2032, the majority of them in the West and California.[27] EPA then projected how many countries would remain in nonattainment in 2032, after applying currently anticipated, reasonably costly emission control measures; the agency projected that *only 25 counties* would need additional reductions beyond 2032 to meet the standard. *Id.*, at 191-193 & Table 3-9. Of these, two counties are in the northeast, two in the southeast, four in the west, and 17 in California. *Id.*, at 191-193 & Table 3-9. Out of the 25 counties, 20 needed to reduce annual $PM_{2.5}$ emissions by less than 1,000 tons per year to meet the standard; the remaining five counties all were in California and none needed to reduce emissions more than 2,600 tons per year. *Id.*, at 191-193 & Table 3-9.

In 2012, when EPA last strengthened the health standards for $PM_{2.5}$, the National Association of Manufacturers claimed that there would be massive job losses and economic costs from the standard EPA ultimately finalized.[28] They were badly wrong. A report by the American Lung Association noted that the NAM report

> came up with a wildly inflated number of economic activity "exposed" to impacts from stronger standards. The report looked at places that would have to clean up under a more protective standard of 8 μg/m3,[29] then simply tallied up *all the manufacturing economic activity* in those places. These numbers have nothing to do with the actual cost of reducing particulate matter pollution nor will all these manufacturers be required to install and operate new pollution controls. The report explicitly states multiple times, "This is not a projection of the likely impact of a tighter $PM_{2.5}$ standard." But that

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[26] EPA, Final Regulatory Impact Analysis for the Reconsideration of the National Ambient Air Quality Standards for Particulate Matter, at 3 (EPA-452/R-24-006, Jan. 2024), https://www.epa.gov/system/files/documents/2024-02/naaqs_pm_reconsideration_ria_final.pdf ("$PM_{2.5}$ RIA").

[27] *Id.*, $PM_{2.5}$ RIA, at 10 ("This includes 12 counties in the northeast, 7 counties in the southeast, 10 counties in the west, and 23 counties in California.")

[28] Environomics, Briefing Paper on the Costs and Benefits of EPA's Proposed Reduction in the PM2.5 National Ambient Air Quality Standards (NAAQS) 6-8 (Dec. 10, 2012), https://obamawhitehouse.archives.gov/sites/default/files/omb/assets/oira_2060/2060_12122012b-1.pdf.

[29] EPA adopted an annual health standard for $PM_{2.5}$ of 12 $\mu g/m^3$ in 2012, not 8 $\mu g/m^3$. 78 Fed. Reg. 3086 *et seq.* Jan 15, 2013).

> qualifier did not appear in the TV ads, media releases or many other publicly available documents using the report.[30]

The same holds true for NAM's lobbying against the safer annual $PM_{2.5}$ health standard. Implicit in the 2024 NAM report is the "'strong implied assumption' in its model that the manufacturing sector cannot improve its processes to be cleaner and more efficient before 2031."[31] In contrast, industry witnesses at the hearing and elsewhere rightly tout industry's ability to innovate.

Though industry will highlight the progress we've made to date to clean up air pollution as a reason to halt continued progress, missing from that acknowledgement is the fact that progress has been made precisely *because of* the National Ambient Air Quality Standards and the bipartisan solutions carefully crafted in the Clean Air Act, not in spite of those tools.

In sharp contrast to the false and misleading map presented at the hearing, this official EPA map published at the time of the strengthened annual $PM_{2.5}$ health standard presents a very different picture of U.S. counties with $PM_{2.5}$ levels above the 9 $\mu g/m^3$ standard, based on the latest ambient monitoring data available to EPA at the time.[32] Notably, half of these counties already are in nonattainment with the previous standard of 12 $\mu g/m^3$ standard, meaning only the other half of the counties below could face new nonattainment designations.

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[30] American Lung Association, Clearing the Air: Particle Pollution at an Inflection Point, pg. 3 (emphasis added), *available at* https://www.lung.org/getmedia/ea09c277-01b6-4eba-97d4-399f98b88ece/Clearing-the-Air-PM-Brief-12-7-23.pdf.

[31] https://earthjustice.org/experts/robyn-winz/putting-industry-claims-to-rest-data-reveals-economic-success-amidst-clean-air-rules.

[32] https://www.epa.gov/system/files/documents/2024-02/2024-pm-naaqs-final-2020-22-dv-map.pdf.

Most Counties with Monitors Already Meet the Strengthened Particle Pollution Standard
(Based on 2020-2022 Air Monitoring Data)

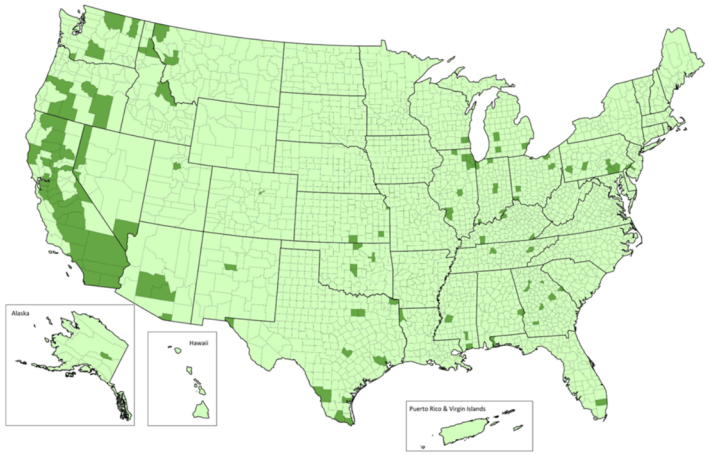

Figure 1: Based on 2020-2022 air monitoring data, the dark green areas on the map indicate counties that do not meet the annual PM2.5 standard of 9 ug/m3. View the data (pdf). (courtesy U.S. EPA)

Note: The map above reflects monitored counties with complete monitoring data. Future final designations of attainment/nonattainment will not be based on these data, but likely on monitoring data collected between 2022 and 2024. Of the 119 counties with 2020-2022 design values above 9 ug/m3, 59 counties are totally or partially contained in nonattainment areas for current PM2.5 standards. In years 2021 and 2022, EPA is aware that some states have already identified possible exceptional events that may have impacted air quality in the U.S. and may be relevant to designations decisions. (This information is provided for illustrative purposes only and is not intended to predict the outcome of any forthcoming designations process.)

This is unsurprising. The red map presented at the hearing as one based on NAM data first appeared, as far as I can tell, in a November 2023 report by the U.S. Chamber of Commerce.[33] The essential flaw with that map is that it projects $PM_{2.5}$ nonattainment designations based upon a series of practices that EPA does not use, EPA never has used, and EPA is never expected to use. That counterfactual decision on the Chamber's part resulted in more projected red nonattainment areas on the NAM map shown at the hearing than the projected green nonattainment areas on the EPA map.

One abuse that will be familiar to members at the hearing is that the Chamber report included higher $PM_{2.5}$ concentrations resulting from *wildfires* in the report's nonattainment projections for the flawed map: "The 2023 wildfire emissions significantly raised the ambient concentrations of $PM_{2.5}$, by as much as 2-3 $\mu g/m^3$ throughout most of the country. Looking at just the counties that have ambient monitors, the increase in the number of counties that would be designated as

[33] *See* U.S. Chamber of Commerce, "EPA's Proposed Air Quality Standards Will Cause Permitting Gridlock Across Our Economy," at 5 (Nov. 2023), https://www.uschamber.com/assets/documents/AChamber-PM2.5-Report-_-11.8.23-Final-Draft.pdf ("Chamber Report").

nonattainment can be seen in Figure 2 below." Chamber Report, at 3. The report did this, despite the Clean Air Act and EPA regulations treating wildfires as "exceptional events" for purposes of nonattainment designations and other regulatory actions.[34] EPA and states have every incentive, and act accordingly, to exclude elevated $PM_{2.5}$ pollution levels resulting from wildfires.

Seth Johnson, a Clean Air Act attorney at Earthjustice, first identified and analyzed numerous additional abuses with the Chamber report and the now-notorious red map. First, Johnson notes that "[t]he Chamber suggests that the EPA would universally designate as nonattainment those counties 'adjacent to' counties with monitors that report air quality violated the new standards (perhaps only in urbanized areas)."[35] But Johnson notes that:

> The EPA has never applied such a robotic approach to designations, but instead has applied a nuanced, 5-factor analysis that looks at much more than what county is next to what. Relevant factors include the sources, amounts, and types of emissions in a county or part of a county, wind and weather patterns, and the geography and topography of the area.[36]

The location of industrial activities in the United States makes clear that huge swaths of "adjacent" counties on the Chamber's red map will not be designated nonattainment—and have not been for prior designations for the $PM_{2.5}$ and ozone health standards. As noted earlier, EPA never has used the Chamber's approach: "[p]ast experience makes clear that EPA has not designated areas as the Chamber suggests it does, but instead makes careful judgments about what counties and parts of counties to include in a nonattainment area, with most soot nonattainment areas consisting of 1-2 counties or partial counties." *Id.*

The Chamber's invented approach differs from EPA's designation approach in still more ways:

> the Chamber's methodology for "calculating" design values diverges far from the official methodology. The Chamber does not base its calculations on actual data for 2023, which is still incomplete, but apparently fills in unknown data with 2022 data. This is not normal. EPA's rules specify precisely how to calculate design values and how to address missing data. Those rules in no way suggest the Chamber's methodology has any validity.

Id. Individually, any one of these abuses would over-estimate future nonattainment areas. Compounding the abuses, as the Chamber report and red map do, misrepresents EPA's past, present and future approaches to nonattainment designations, while misleading viewers about the safer $PM_{2.5}$ health standard with an easily misunderstood map.

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[34] *See* 81 Fed. Reg. 68,216, 68,217, 68,278 (Oct. 3, 2016) ("we apply the provisions in CAA section 319(b) to a specific set of regulatory actions (*e.g.*, designations").
[35] *See* Chamber Report, at 4.
[36] Johnson, Seth, Earthjustice, "Chamber of Commerce's Dubious Analysis of Clean Air Rules Is Wrong," Dec. 4, 2023, *available at* https://earthjustice.org/experts/seth-johnson/chamber-of-commerces-dubious-analysis-of-clean-air-rules-is-wrong (original hyperlinks omitted) ("Earthjustice Analysis").

And what about the Chamber map's light red color, which covers the *rest of the United States* in a misleading attempt to argue that economic activity will be jeopardized … everywhere? The data relied on by the Chamber lack merit since they are based on overstated projections of design values and include air quality data that will not matter for regulatory purposes.

The Chamber's report also assumes that no wildfire data would be excluded as an "exceptional event," contrary to history and past practice. In fact, permitting for large sources in attainment areas will be eased as a result of wildfire data. The Chamber acknowledges, as it must, that permitting for large sources in attainment areas relies on air dispersion modeling, which largely depends on the data fed into the model. EPA's guidelines for these models explicitly account for fire-affected monitoring data and highlight that it may be removed from the data set.

Question 3. Witnesses at the hearing expressed frustration with the new source review (NSR) permitting program, stating that the program discourages deployment of more efficient emission control technology at industrial facilities.

a. Do you agree with this characterization? Why or why not?

Answer 3a. I disagree with this characterization. The Clean Air Act's New Source Review (NSR) pre-construction permitting program—with requirements for modern air pollution controls, offsets of any remaining emissions increases, air-quality impact analyses, and public participation—imposes those requirements only when industrial facilities ***significantly increase*** total, annual emissions of regulated air pollutants like $PM_{2.5}$ pollution, sulfur dioxide, or precursors to smog, such as nitrogen oxides or volatile organic compounds. If industrial facilities deploy more efficient emissions control technologies that decrease total, annual emissions, maintain emissions levels, or even increase emissions up to but not beyond regulatory "significance" thresholds (*e.g.*, 40 tons per year), then facility operators are *not* required to obtain NSR permits. They are not required to meet regulatory requirements for modern pollution controls, offsets of any remaining emissions increases, air-quality impact analyses, and public participation.

When NSR critics allege that the program discourages deployment of more efficient emission control technology at industrial facilities, they mean activities that ***significantly increase*** total, actual, annual emissions of dangerous air pollutants—*beyond* regulatory "significance" thresholds—then complain that these significant increases in total, annual air pollution cannot evade preconstruction review but instead require permits. Industrial activities that significantly increase total, annual emissions of dangerous air pollution do not deserve the label, 'more efficient,' in my view. But even if they did, the Clean Air Act for good reason always has required and should continue to require those significant increases in dangerous air pollution to

be mitigated, and subjected to air quality impact analysis and offsets in nonattainment areas prior to construction—in order to protect Americans' health, air quality, national parks and environment.

Americans care about increases in total, actual air pollution that worsens air quality and harms their health, not failures to increase theoretical 'capacity'—a facility's maximum hourly emissions rate from the past—the metric historically used by NSR's industry critics to characterize supposedly 'more efficient' operations. Adopting the wildly deregulatory 'maximum hourly emissions rate' test to measure pollution increases would weaken the Clean Air Act drastically and sanction enormous increases in total, actual amounts of dangerous air pollutants. Such a severe rollback would ensure that dangerous air pollution increases escape air pollution controls and regulatory review in the real world. For the parents of a child being rushed to the emergency room due to an asthma attack caused by massive soot pollution increases from a nearby power plant, it is no solace to tell them that the higher pollution levels that choked their daughter's breathing did not result from the plant exceeding its thereotical "maximum hourly emissions rate." Asthma attacks, heart attacks and strokes are brought on by higher levels of actual, harmful air pollution in the real world, regardless of whether those higher amounts are caused by increases above the artificial concept of a plant's maximum hourly emissions rate compared to some point in the plant's past.

Moreover, it is the case in my experience (encompassing over 30 years with the NSR program) that these allegations and complaints usually are cloaked in generalities and assertions, without evidence or actual factual examples held up to objective scrutiny. For example, in a well-known 2017 article, the authors asserted that "it has arguably been more economic in some cases to continue to operate relatively old, inefficient, and high-polluting plants than to install new facilities or upgrade existing facilities with better pollution control technology."[37] Notably, the authors did not identify any real-world example, much less "some cases," where this was true and substantiated. Rather, the authors cited "evidence" backing this claim in an EPA 2001 NSR report prompted by then-Vice President Cheney's energy task force. But that EPA report itself lacked evidence to support the repeated claim; it was itself an example of a government report simply repeating self-serving industry assertions as evidence assertions made, again, without evidence or actual factual examples held up to objective scrutiny.

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[37] Fraas, *et al.*, "EPA's New Source Review Program: Time for Reform?", 47 ELR 10026, n.27. This article cited "evidence" backing this claim in an EPA 2001 NSR report prompted by then-Vice President Cheney's energy task force. But that EPA report itself lacked evidence to support the claim, and was itself an example of a government report simply repeating self-serving industry assertions as evidence. *See* U.S. EPA, New Source Review Report to the President (2002)*; see also* 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) (asserting that "[i]n some circumstances, the NSR process discourages the construction of new facilities or modifications of existing ones that could result in greater environmental improvements"—but backing the 'discouragement' claim and the 'greater environmental improvements' claim with no proof and no verifiable facts).

Such scrutiny would have revealed that each assertion that the program discourages deployment of more efficient emission control technology at industrial facilities in fact involved (1) activities that ***significantly increase*** total, annual emissions of regulated air pollutants—*beyond* regulatory "significance" thresholds; and (2) that critics wished that these significant increases in total, annual amounts of dangerous air pollution could evade preconstruction review, and evade modern air pollution controls, air quality impact analyses, and pollution offsets in nonattainment areas.

Finally, none of the witnesses at the June 2025 hearing identified an actual project where the NSR program allegedly discouraged deployment of more efficient emissions control technology that would *reduce* overall emissions, despite having raised generalized complaints about "thwarted" "energy efficiency and modernization projects that could reduce actual emissions."[38] This is unsurprising. To the contrary, as noted earlier, projects that *reduce* total, actual emissions of dangerous air pollution do not require NSR permits, as a matter of law.

b. H.R. 161, the New Source Review Permitting Improvement Act, was identified as a solution to these concerns. This bill would amend the definition of "modification" under section 111 of the Clean Air Act. What would be the impact of this legislation, if enacted? How would communities be impacted by such legislation?

Answer 3b. I testified in 2018 before this Subcommittee opposing two bills substantially similar to H.R. 161 that also would drastically weaken the Clean Air Act's New Source Review safeguards.[39] Like those bills, H.R. 161 would let industry pollute more, by significantly higher amounts, and in the process, evade air pollution controls, air quality impact analyses, pollution offsets in nonattainment areas, and public participation and accountability.

H.R. 161 would overturn four decades of Clean Air Act safeguards concerned with increases in actual, total emissions of harmful air pollution such as ozone, $PM_{2.5}$ and sulfur dioxide. It would replace those greater protections with a test for air pollution controls, offsets and air quality impact analysis that would apply only if a polluter ever managed to exceed, implausibly, its vastly higher *capacity* to emit air pollution, measured from some point in the plant's past. By doing so, the bill would allow increases in actual emissions totaling hundreds or even thousands

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[38] *See* Testimony of Paul Noe, American Forest & Paper Association and American Wood Council , at 13, https://democrats-energycommerce.house.gov/sites/evo-subsites/democrats-energycommerce.house.gov/files/evo-media-document/witness-testimony_noe_env_naaqs-leg_06.11.2025.pdf.

[39] *See* Testimony of John Walke, Natural Resources Defense Council, before the Subcommittee on Environment, Committee of Environment and Commerce, U.S. House of Representatives (Feb. 14, 2018), https://www.congress.gov/115/meeting/house/106852/witnesses/HHRG-115-IF18-Wstate-WalkeJ-20180214.pdf.

of tons per year from individual facilities to evade pollution controls, offsets, air quality analyses and regulatory/public oversight.

The Clean Air Act—and Americans—are rightly concerned with total increases in actual emissions of harmful air pollutants. Significant increases in actual emissions must be controlled either with Best Available Control Technology (BACT) in areas meeting national health standards, or Lowest Achievable Emissions Rate (LAER) control technology—as well as the offset of remaining emissions increases—in areas failing to meet those health standards. H.R. 161 would overturn and render meaningless the Clean Air Act's 40-year concern with significant increases of actual, dangerous emissions, and also overturn the leading NSR federal court opinion upholding the law's critical emissions increase requirement.[40]

If the Clean Air Act always had reflected this bill's lax and starkly deregulatory approach, then EPA, state regulators and the public would have been unable to uphold and enforce the Act against *millions of tons* of widespread, dangerous and illegal air pollution increases from coal-burning power plants, oil refineries, glass manufacturers, cement manufacturing plants, and plants that manufacture sulfuric and nitric acid that were the subject of EPA enforcement initiatives begun in the late 1990s.[41] The extreme approach in H.R. 161 would have allowed air pollution *increases* of this magnitude, mind you, not simply continuing pollution levels in amounts already making air quality polluted and unsafe for Americans.

H.R. 161 would allow massive increases in actual emissions of harmful air pollution, so long as a polluting facility does not exceed its maximum capacity to pollute, measured by its "maximum hourly emissions rate," or "maximum achievable hourly emissions rate."[42] Further, the bill would allow massive increases in actual emissions of harmful air pollution resulting from industrial changes "*designed to* reduce the amount of any air pollutant emitted by the source *per unit of*

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[40] *New York v. EPA*, 413 F.3d 3, 39 (D.C. Cir. 2005).

[41] *See generally* EPA Air Enforcement initiatives, New Source Review and Prevention of Significant Deterioration, https://www.epa.gov/enforcement/air-enforcement#nsr. EPA has said that settlements in NSR enforcement cases against acid, glass, and cement manufacturing facilities resulted in cumulative estimated emissions reductions of 190,000 tons of sulfur dioxide and 50,000 tons of nitrogen oxides from FY2008-FY2016. *See* https://19january2017snapshot.epa.gov/enforcement/national-enforcement-initiative-reducing-air-pollution-largest-sources_.html#:~:text=Goal,pollution%20reduction%20targets%20are%20met. The agency said in 2019 that pursuant to the successful NSR enforcement initiative for these three industrial sectors, the agency "[had] required controls or commenced investigations at 91 percent, 96 percent, and 90 percent of facilities in the glass, cement, and acid manufacturing sectors, respectively." 84 Fed. Reg. 2,848, 2,850 (Feb. 8, 2019). In that same 2019 notice, EPA said that "[t]he EPA and state regulatory approaches and [NSR] enforcement efforts in [the electric power sector] have resulted in a 90 percent reduction in sulfur dioxide emissions and an 83 percent reduction in nitrogen oxide emissions since 1997, while gross generation has increased by 10 percent." *Id.* Finally, EPA estimated that as of 2011, the NSR enforcement initiative launched against oil refineries in 2000 had resulted in *annual* emissions reductions of more than 95,000 tons of nitrogen oxides and 260,000 tons of sulfur dioxide. *See* https://www.epa.gov/enforcement/petroleum-refinery-national-case-results#:~:text=EPA's%20national%20Petroleum%20Refinery%20Initiative,the%20Nation's%20petroleum%20refining%20capacity.

[42] *See* H.R. 161, "New Source Review 5 Permitting Improvement Act," https://www.congress.gov/119/bills/hr161/BILLS-119hr161ih.pdf.

production"—thereby, allowing pollution increases of hundreds, thousands or even tens of thousands of *tons* from *individual* facilities if the change led to the industrial facility increasing its hours of operation.[43] *Id.* (emphasis added). Indeed, the "designed to" language in this provision of H.R. 161 would allow these massive pollution increases even if a change did *not* reduce the amount of air pollution emitted per unit of production, negating the contention that the bill is about efficiency improvements.

As I testified in 2018 critiquing earlier legislative versions of H.R. 161:

> Americans care about increases in actual air pollution that worsens air quality and harms their health, not failures to increase theoretical 'capacity'—a facility's maximum hourly emissions rate from the past. Both bills would sanction enormous increases in dangerous air pollutants, ensuring such increases escape control and review in the real world. For the parents of a child being rushed to the emergency room due to an asthma attack caused by massive soot pollution increases from a nearby power plant, it is no solace to tell them that the higher pollution levels that choked their daughter's breathing did not result from the plant exceeding its "maximum hourly emissions rate." Asthma attacks, heart attacks and strokes are brought on by higher levels of actual, harmful air pollution in the real world, regardless of whether those higher amounts are caused by increases above the artificial concept of a plant's maximum hourly emissions rate from some point in the plant's past.

See supra n.39, Testimony of John Walke, at 6.

EPA and federal courts have recognized again and again that basing NSR only on emissions increases that exceed a facility's higher maximum hourly emissions rate would allow changes that cause actual, significant emissions increases to evade review, pollution controls and offsets: this "could sanction greater actual emissions increases to the environment, often from older facilities, without any preconstruction review."[44] EPA has explained how these actual emissions increases would result, taking the example of a widget factory: a physical change at a facility could "allow the owner to use [a] machine at much higher levels (*e.g.*, more hours per day or week) than it had in the past. As a result, *actual emissions (measured in [tons per year]) could*

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[43] *Id. See also* U.S. EPA, Technical Support Document, at 3-1; 5-3 ("We believe it is unlikely that an [electric generating unit] would increase its efficiency without also increasing its operating and physical capacity," including availability.), in docket for EPA's Proposed "Supplemental Notice of Proposed Rulemaking for Prevention of Significant Deterioration and Nonattainment New Source Review: Emissions Increases for Electric Generating Units," 72 Fed. Reg. 26,202 (May 7, 2007).

[44] 67 Fed. Reg. 80,186, 80,205 (Dec. 31, 2002). *See also, id.* ("actual emissions increases resulting from unreviewed projects could go largely undocumented until a [NSR] review is performed by a new or modified facility that ultimately must undergo review. By that time, however, a violation of an increment could have unknowingly occurred."), *id.* ("We agree that a potential-to-potential test for major NSR applicability could lead to unreviewed increases in emissions that would be detrimental to air quality.").

more than double due to the increase in utilization even though hourly potential emissions remain the same."[45]

It is important to realize that the highest hourly emissions rate that a source could have achieved, or has achieved, does not reflect the source's actual hourly emissions, on a day-to-day basis. Indeed, in a case study undertaken by EPA's enforcement office, "the achievable hourly emission rate was calculated to be *more than ten times higher* than the average hourly emission rate in the five-year period prior to the change."[46] This provides some idea of the reckless magnitude of actual emissions increases that could occur by adopting the "maximum (achievable) hourly emissions rate" approach in H.R. 161.

To illustrate the magnitude of harm that the bill would unleash, one can look to prior steps by EPA's enforcement office to examine the weakening effect of a "maximum achievable hourly emissions rate test" on NSR, and the enormous emissions increases that would result. Examining actual emissions data for coal-burning electric generating units ("EGUs") from the EPA Clean Air Markets Division, the agency's enforcement office concluded that a maximum hourly achievable emissions rate test would fail to control actual annual emissions increases of 50 tons per year of SO_2 and 978 tons per year of NO_x in one case study (EPA Enforcement Memo, at 10); increases of 13,096 tons per year of SO_2 in another case study (*id.*, at 2); increases of 939 tons per year of SO_2 and 1,405 tons per year of NO_x in another (*id.*, at 20); and increases of 1,700 tons per year of SO_2 and 507 tons per year of NO_x in a fourth case study (*id.*, at 27). Realize that there are many EGUs today whose *total* emissions of SO_2 and NO_x are lower than the amount of pollution *increases* that H.R. 161 would facilitate from individual EGUs and potentially thousands of other emissions units across the economy.

In one especially startling example in the EPA analysis, the annual SO_2 emissions *increase* that evaded pollution control was *over 327 times* the level that EPA considers *de minimis* and therefore exempt from controls.[47] These emissions increase levels that H.R. 161 would exempt are significantly higher than even the major stationary source threshold for *brand new power plants* (100 tons per year) that the Clean Air Act make subject to modern air pollution control equipment (reflecting BACT and LAER) and pollution offsets in nonattainment areas. And in many cases, again, these uncontrolled emissions increases are well above the total SO_2 and NO_x emissions from *entire individual power plant units*. H.R. 161 would relieve power plants and thousands of other industrial facilities from the obligation to control and offset just these types of enormous increases in dangerous air pollution.

It is critically important to emphasize that H.R. 161 does not eviscerate the clean air safeguards and obligations described above just for power plants. The bill's extreme approaches apply to

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[45] 61 Fed. Reg. 38,250, 38,269 (July 23, 1996) (emphasis added).
[46] Memorandum from Adam M. Kushner, Director of EPA's Air Enforcement Division, Office of Enforcement and Compliance Assurance, to William Harnett, dated August 25, 2005, at 3 (emphasis added) ("EPA Enforcement Memo").
[47] *Id.*, EPA Enforcement Memo, at 27.

any "stationary source," meaning the entire universe of industrial pollution facilities regulated under the Clean Air Act: hazardous waste incinerators, oil refineries, chemical manufacturing plants, lead smelters, cement and acid manufacturing plants, and many hundreds of other industrial sectors and types of polluting equipment. All would be allowed to increase emissions of harmful air pollutants like nitrogen oxides, sulfur dioxide, particulate matter and lead, while evading air pollution controls, offset of remaining emissions in areas with currently unhealthy air, analysis of violations of health standards and regulatory/public oversight.

BRETT GUTHRIE, KENTUCKY
CHAIRMAN

FRANK PALLONE, JR., NEW JERSEY
RANKING MEMBER

ONE HUNDRED NINETEENTH CONGRESS

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July 18, 2025

Mr. Paul Noe
Vice President, Public Policy
American Forest & Paper Association
601 Thirteenth Street NW
Suite 1000N
Washington, DC 20005

Dear Mr. Noe:

Thank you for appearing before the Subcommittee on Environment on Wednesday, June 11, 2025, to testify at the hearing entitled "Short-Circuiting Progress: How the Clean Air Act Impacts Building Necessary Infrastructure and Onshoring American Innovation."

Pursuant to the Rules of the Committee on Energy and Commerce, the hearing record remains open for ten business days to permit Members to submit additional questions for the record, which are attached. The format of your responses to these questions should be as follows: (1) the name of the Member whose question you are addressing, (2) the complete text of the question you are addressing in bold, and (3) your answer to that question in plain text.

To facilitate the printing of the hearing record, please respond to these questions with a transmittal letter by the close of business on Friday, August 1, 2025. Your responses should be mailed to Calvin Huggins Legislative Clerk, Committee on Energy and Commerce, 2125 Rayburn House Office Building, Washington, DC 20515 and e-mailed to Calvin.Huggins1@mail.house.gov.

Thank you again for your time and effort preparing and delivering testimony before the Subcommittee.

Sincerely,

Gary Palmer
Chairman
Subcommittee on Environment

cc: Paul Tonko, Ranking Member, Subcommittee on Environment

Attachment

Responses of the American Forest & Paper Association and American Wood Counsel to Post-Hearing Questions for the Record from the House Committee on Energy and Commerce's Subcommittee on Environment Regarding the Hearing Entitled: "Short-Circuiting Progress: How the Clean Air Act Impacts Building Necessary Infrastructure and Onshoring American Innovation"

The Honorable Morgan Griffith (R-VA)

1. To what extent did the Canadian Wildfires from 2023-2024 impact national PM2.5 levels? The chart used by the minority does not include data from those years. To what extent where the wildfires a determinative event and why is it important to use current data when modeling the effect of the Biden-Harris PM2.5 rule?

The issue of wildfires impacting background levels of air quality is a very important issue for both designations and the permitting program. While we have not conducted any analysis of the 2023-24 Canadian Wildfires for PM ourselves, we are aware of other studies showing significant impacts for ozone.

Figure 3 from the paper shows the calculated enhancement in concentration (ozone on top, PM second from top) across the U.S. regions. In 2023, second from top, it indicates that wildfire smoke enhanced (increased) PM2.5 concentrations on average by 13.8 ug/m3 in the east, 11.7 ug/m3 in the central US, and 9.6 ug/m3 in the west on days when smoke was present.

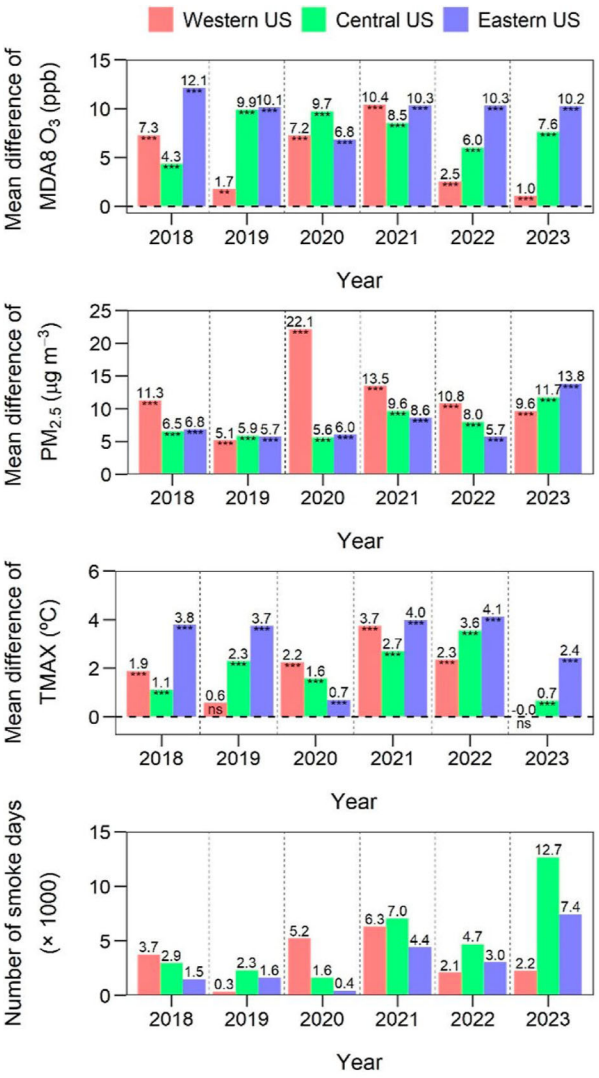
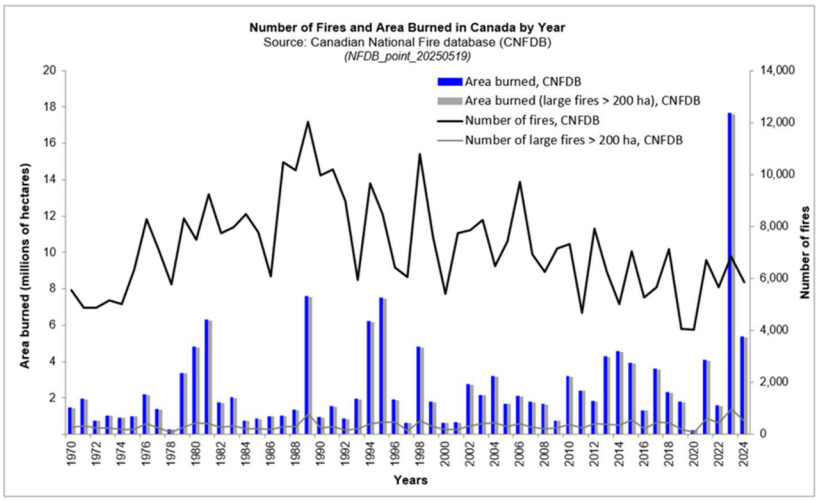


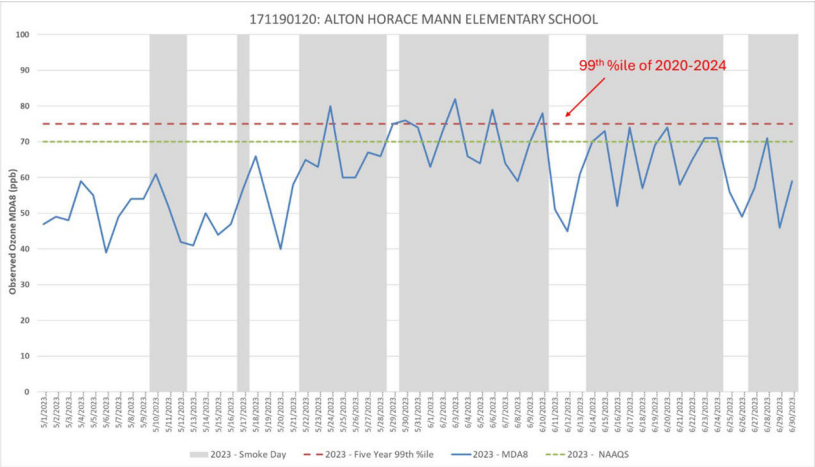
Figure 3. Mean difference between smoke and nonsmoke days (i.e., mean of smoke days − mean of nonsmoke days) for MDA8 O3 (ppb), PM2.5 (µgm−3), and TMAX (°C), as well as the number of smoke days across the Central, Eastern, and Western US over the years 2018 to 2023.

From work done by the Midwest Ozone Group, 2023 was an historic year for acres burned by wildfires in Canada; in fact, more than twice the number of annual acres burned in 2023 than in any year within the past 50 years.

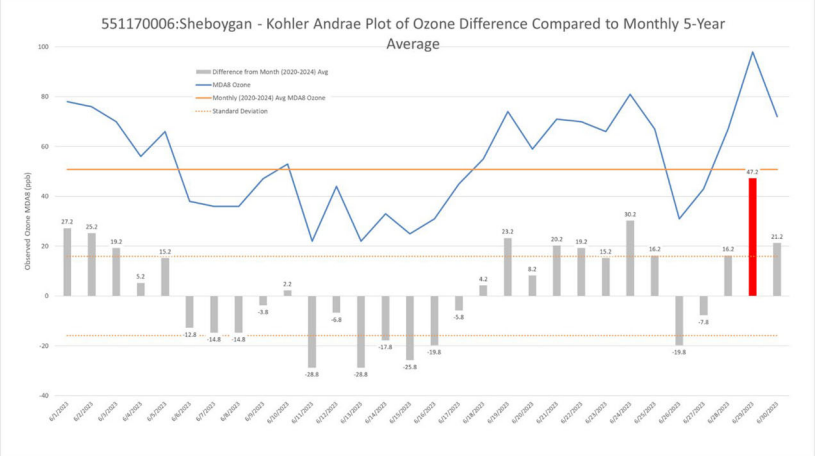


The impact of those fires on air quality in the United States, especially in the Midwest, was unprecedented during the episode. During the months of May and June, these events resulted in the highest regional scale surface level ozone levels ever recorded across the Northern U.S.

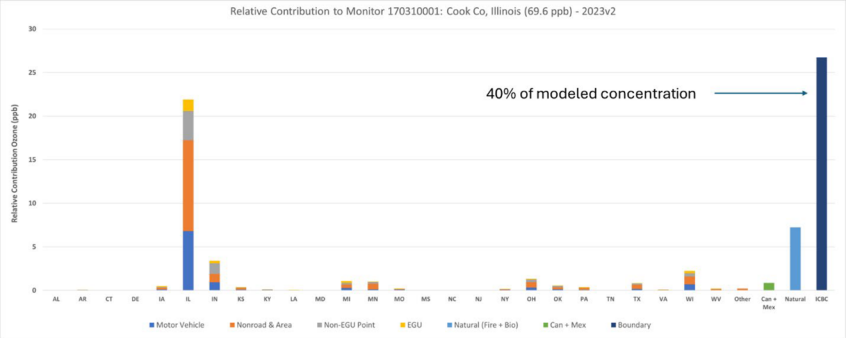
Investigation of monitor level MDA8 concentrations indicates that at many Region 5 monitors, as far north as Sheboygan and as far south as St. Louis, 40-50% or more of the 99th percentile dates of the past five years were observed.



Monitors have ozone observations in late May or June with values 35-50 ppb higher than monthly five-year averages at those locations.



When these dates are considered, and their ozone and PM2.5 wildfire smoke enhanced concentrations relevant to design values, nonattainment designations, background levels for PSD permitting, Good Neighbor SIP planning, and bump up considerations, it is hard to ignore their influence on regulatory actions in the region, regardless of state decisions to submit exceptional event demonstrations.



In sum, each year the role of wildfires varies and impacts different parts of the country depending on whether the fires in the West, Canada, eastern Canada as we say with the Quebec fires a few years ago, or even within eastern forested areas. Given how close the current PM NAAQS is to background, failing to exclude wildfire or even prescribed burn emissions elevates the background levels and restricts headroom. However, as discussed below, several other factors could be determinant in preventing a project from modeling below the NAAQS and getting the green light.

2. Some have criticized the headroom models as over predictive, do you agree with that assessment? Explain why or why not.

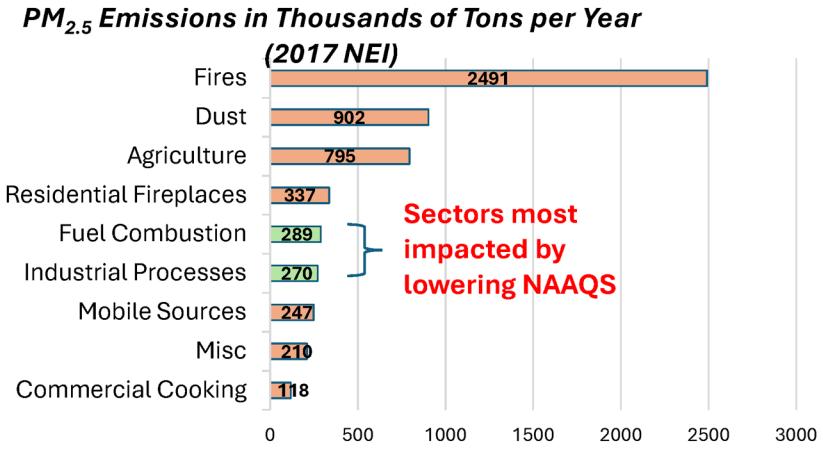
Yes, the modeling and assumptions that go into air permitting as part of the Prevention of Serious Deterioration (PSD) program are unnecessarily conservative and overstate the impacts of a new project or significant modification to an existing piece of equipment and do not provide any public health benefits.

It is important to note that there are two inextricably linked programs that are particularly relevant when a NAAQS is changed, and that both impact permitting but in different ways. The first is setting the standard "requisite to protect the public health" with an adequate margin of safety considering the quality of the studies and scientific uncertainties. The second program implicated when a NAAQS is lowered is permitting of new projects under EPA's air permit program, both for new "green field" facilities and for modifications to existing facilities. The PSD program is extraordinarily complex, requires installation of best available control technology, and especially relevant here, requires sources to conduct extensive assessments according to EPA policies and guidelines to determine if the project itself and the site's emissions combined with background concentrations exceed the NAAQS.

Without the type of improvements in the Committee' draft bill (such as matching the release of implementation guidance concurrently with any NAAQS change, and clearly excluding prescribed burns from designations and background calculations for permitting)-- some of which we believe EPA can currently do under their existing Clean Air Act authority -- overly conservative modeling analysis can lead to unverifiable and nonexistent concentration estimates that cause costly changes or cancellations of beneficial projects, even though real-world exposure of the general public at these locations is minimal, improbable, or practically impossible. Public health is still protected with these reforms and improvements while allowing beneficial projects and economic growth to continue.

In addition, the new PM2.5 NAAQS continues to place the preponderance of the burden on a small portion (see chart below, 16%) of overall emissions by focusing on traditional stationary sources, which have been regulated by the NAAQS program for decades (see chart below). The program will not achieve its goals to protect public health unless efforts are made to look at all sources and come up with innovative and cost-effective ways to achieve the standards. For example, wildfires are more than 40% of the total PM emissions nationwide. The forest products industry already manages its private forestlands in a way that mitigates wildfire risks and avoids emissions of PM2.5 that might otherwise occur, but Federal land management could do better at mitigating wildfires. Thus, simply issuing any new NAAQS without a workable, comprehensive

implementation plan/strategy creates a false sense of progress when far larger sources remain unaddressed.



Furthermore, the potential economic impacts of an inefficient permitting program are very real and potentially staggering. The lost opportunity costs from cancelled projects are hard to measure because those projects do not see the light of day and end up on the cutting room floor when a company tries to model compliance with the new standard and fails. The ultimate reality is that energy efficiency and modernization projects that could reduce actual emissions, including greenhouse gases, are thwarted by how PSD is implemented.

Another important factor in lack of permitting headroom is how background levels are overestimated, stealing valuable headroom that might otherwise allow a project to get approved.

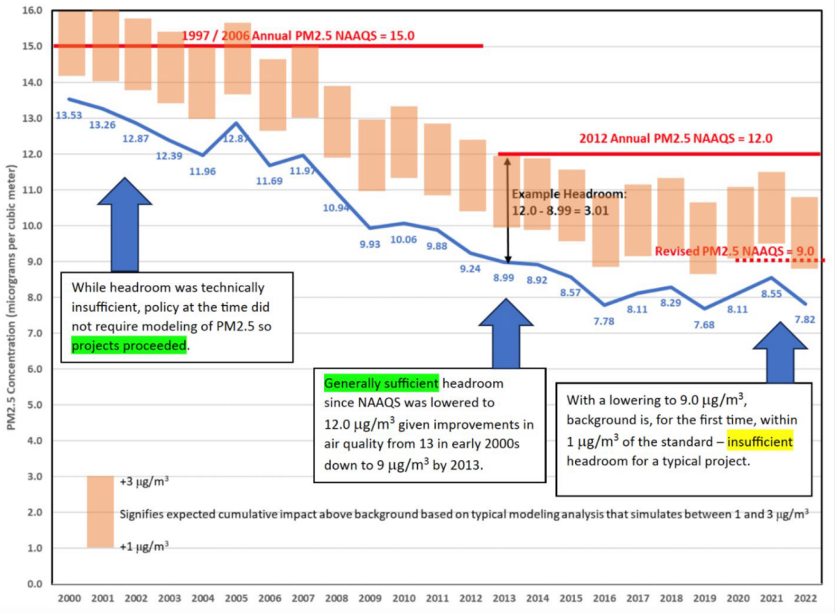
Let's look at how the PM NAAQS evolved over time. First, looking back to when the original 15.0 mg/m^3 PM2.5 NAAQS was established in 1997, headroom constraints were not an issue because EPA implemented the PM10 Surrogacy Policy in recognition of insufficient techniques for source testing and permit modeling, so applicants were not required to model relative to the PM2.5 NAAQS to get permits. And back then, and most of the time since then until recently, no one had to add secondary PM2.5 from precursor NOx and SO_2 emissions (which adds to a project's total) or model minor sources or modifications of direct PM2.5 emissions when NOx and/or SO2 emissions were major or increased significantly. Finally, at the urging of stakeholders, EPA improved the scientific basis of certain elements of the regulatory air

dispersion model to be more realistic (e.g., the LOWWIND/ADJ_U* changes and the horizontal/obstructed point source plume rise algorithms). In a sense, that expanded the headroom since projects modeled with lower impacts.

Second, in 2012-2013, when the PM standard was last lowered from 15.0 mg/m^3 to 12.0 ug/m^3, the mean U.S. background concentrations (based on EPA trends data) was above 9 ug/m^3, so the headroom shrank from greater than 5 mg/m^3 to about 3 mg/m^3. The lowering presented permitting challenges depending on location and size and type of project. The typical modeled impact of a facility with a well-controlled project that triggers PSD review and a NAAQS analysis comes out between 1 and 3 mg/m^3, which is verified by a review of three dozen recent PSD projects that needed an average of 2.6 ug/m^3 of headroom (See circle chart below). Since the PM2.5 NAAQS was last lowered, the headroom has improved only slightly (roughly 1 mg/m^3) as air quality improvements have leveled off (see figure 1 below); or even risen slightly, which coincides with the time more biased FEMs were deployed. While the 12.0 $\mu g/m^3$ standard posed challenges for permitting projects, it pales in comparison to what U.S. manufacturers face now.

When EPA lowered the PM NAAQS from 12.0 mg/m^3 to 9.0 mg/m^3 average U.S. ambient background remains close to 8 mg/m^3. Thus, the average headroom is just 1 mg/m^3, which is far less than the 3 mg/m^3 needed for a typical facility with a PSD project. ***Headroom of 1 $\mu g/m^3$ is far less than ever before, and threatens many beneficial modernization projects of U.S. manufacturers***.

Figure 1. Depiction of U.S. nationwide annual average mean PM2.5 concentration as measured at 361 trends sites relative to effective annual NAAQS. EPA, Particulate Matter (PM2.5) Trends (https://www.epa.gov/air-trends/particulate-matter-pm25-trends).

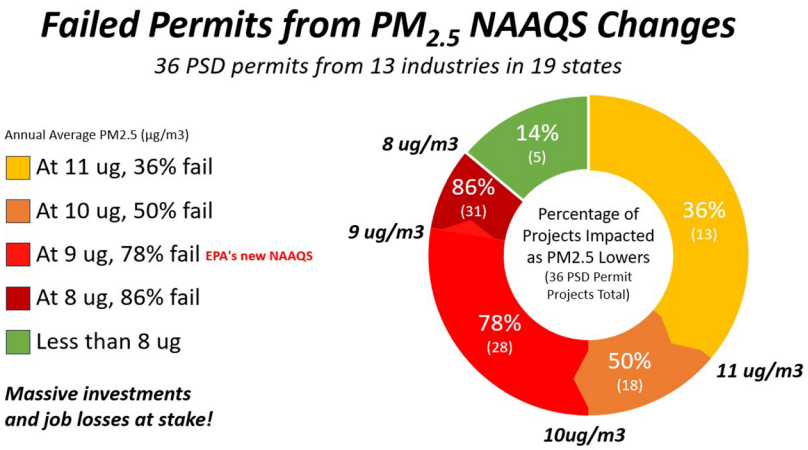


Since there is a general tendency to focus on non-attainment areas when a new NAAQS is set, it is important to focus instead on the cleaner areas that meet the NAAQS but still face significant permitting challenges. To understand the potential impacts of a tighter PM NAAQS, in 2023 we hired Alpine Geophysics, experts in air quality modeling and very familiar with EPA's emissions databases, to analyze data from EPA's and state regulatory agencies' ambient monitoring networks to develop the maps on behalf of AF&PA, AWC and others (the maps shown in the hearing room. Alpine calculated background PM2.5 concentrations in non-monitored counties using geospatial statistical interpolation ("geospatial statistical interpolation ("kriging") that "fills-in" PM2.5 estimates for locations between monitors.[1] Kriging is a spatial interpolation

[1] Kriging is a method of statistical analysis that uses a limited set of sampled data points to estimate the value of a variable over a continuous spatial field.

method that is intended to take a series of points and create a continuous surface (i.e., interpolate the space between the points so that the user can obtain a value at any location).

More importantly, we analyzed three dozen recent PSD projects across a dozen manufacturing industries in nineteen states that were approved under the past standard of 12.0 ug/m3. ***Shockingly, we found that 78% of those manufacturing modernization projects would have failed at the new PM NAAQS standard of 9.0 µg/m^3*** (see circle chart below). In addition, we found that the average annual modeled design concentration (MDC) to be 2.6 mg/m^3. Half of the projects' MDCs reviewed fell between 1.5 and 3.6 ug/m^3. MDC is computed by AERMOD (i.e., the average 5-year annual mean concentration) to simulate cumulative impacts from the applicant facility and nearby sources. It includes secondary PM2.5 screening concentrations from PM precursor emissions of NOx and SO_2 estimated using EPA's Modelled Emission Rates for Precursors (MERPs) and related guidance. This supports the premise that an average PSD project would need about 3 mg/m^3 of headroom to get permitted using existing permitting techniques.



Given the consistent results of modeling analyses used for permitting new projects, it is evident that the lower PM2.5 NAAQS would stifle growth because well-controlled projects would not be able to demonstrate cumulative PM2.5 impacts using current permitting policies and modeling techniques. Despite EPA's claims that it was able to "ensure a smooth transition to the new permitting requirements and to enable NSR permitting to continue without significant

disruption"[2] when the PM2.5 NAAQS was last lowered to 12.0 µg/m^3 in 2012, there remain deficiencies with key analytical tools (i.e., source testing methods) and opportunities to improve prescriptions for regulatory modeling that are amplified by the recent NAAQS revision.

3. To what extent is reformation needed in the NAAQS modeling process? Are current models overconservative?

As described above, there are many modeling challenges, but fortunately, there are also readily available solutions that could modernize the approaches to be more realistic and still be protective of public health.

AF&PA, AWC and other industries have been presenting our ideas for modernizing EPA's permitting program for over a decade to EPA. The approaches recommended highlight where the permitting program has diverged from reflecting real world conditions by ignoring true air quality impacts. We recommend that the bill language be amended to direct EPA to solve these key problems and ensure these solutions become part of any future NAAQS implementation plan.

A. Using Modern, Statistical Tools

First, for almost a decade, EPA has recognized that modern, statistical tools known as probabilistic risk assessment (or PRA)[3] are widely available to robustly account for variability and uncertainty in modeling and decision-making. This paradigm is used for other EPA programs, but not PSD permitting. Currently, projects must assume multiple worst-case scenarios that unrealistically estimate impacts beyond what would happen in the environment. For example, maximum emissions rates from multiple emission units operating simultaneously are assumed to occur continuously and added together. Our colleagues at the National Council for Air and Stream Improvement (Zach Emerson and Tanvir Khan) have been exploring how emissions variability can be used as part of the air modeling process and offer a framework for improvements (see article in Air and Waste Management Associations' July 2025 issue).

In addition, the public's likelihood and duration of exposure is not assessed, but rather, points near facility fence lines, where people do not reside or spend significant time, are simulated as

[2] EPA Fact Sheet: "Implementing the Final Rule to Strengthen the National Air Quality Health Standard for Particulate Matter – Clean Air Act Permitting, Air Quality Designations, and State Planning Requirements," February 7, 2024. (https://www.epa.gov/system/files/documents/2024-02/pm-naaqs-implementation-fact-sheet.pdf)

[3] Risk Assessment Forum White Paper: Probabilistic Risk Assessment Methods and Case Studies, EPA/100/R-14/004 July 2014; https://www.epa.gov/osa/risk-assessment-forum-white-paper-probabilistic-risk-assessment-methods-and-case-studies

[6] https://www.regulations.gov/document/OMB-2025-0003-0001

receptors. These "receptors" for PSD modeling may be in a swamp or river, or on railroads or highways where exposures are very short, if they ever occur at all, and in the absence of other substantial risks to human health and welfare. We suggest this impact demonstration point not be tied to the current interpretation of "ambient air" near facility fence lines but consider where people live and work rather than arbitrary points on a map focused on hypothetical individual exposures that are not relevant to the purpose of the Clean Air Act's mandate to protect public health to the general population and subpopulations.

These two changes alone would allow more projects to get PSD permits, create manufacturing jobs in the U.S. while still protecting public health.

B. Improving Background Estimation and Monitors

Second, certain prevalent ambient air monitors using Federal Equivalent Methods (FEMs) measuring background concentrations, the starting point for assessing available "headroom," are known to over-estimate levels by as much as 3 mg/m^3 (Timothy Hunt's September 19, 2023 written testimony before this Committee has a sample bar chart with emissions relative to design value, see page 27)). EPA has acknowledged this FEM bias, and last year made some corrections by updating monitoring data[4] which helps states to make adjustments prior to non-attainment designations. However, there remains biases in this data due to the influence of temperature and humidity that should be accounted for. Until this correction is implemented, facilities need to determine background when doing PSD modeling for the new NAAQS using a case-by-case analysis subject to additional, longer review. In addition, more monitors could be deployed in more areas to better measure background levels, especially in the rural areas where forest product mills are located.

C. Adjustments to Background Due to High Concentration Events

Third, separate from the need to expeditiously exclude wildfires and prescribed burns as exceptional events during nonattainment designations, states and permit applicants also should be able to exclude the added emissions from these events from background monitors used in PSD assessments. Some states are already doing this on a case-by-case basis, such as Georgia, and EPA certainly could promote it more, particularly with state permitting authorities. An explicit recognition in the bill would leave no doubt for states and permittees that this is a technically sound and encouraged practice.

In section 3(C) ("Regional Analysis"), the bill also gives more responsibility to EPA to conduct modeling and analysis to support the case for identifying exceptional events that should be excluded. We support this language too, but the bill should make clear that these "exceptional

[4] https://www.epa.gov/aqs/aqs-memos-monitoring-and-policy

events" or high concentration situations should also be excluded from background levels for PSD purposes. Allowing the use of better monitoring data that determines the all-important background starting point for PSD permitting could help reduce permitting gridlock.

D. More Realistic Emissions Estimates

Finally, there is strong evidence that current methods are over-predicting PM emissions from wet stacks and condensables from sources with sulfur dioxide and ammonia. Last year, EPA published new guidance making a partial correction to the method but it was insufficient and failed to account for new scientific information. When small amounts of modeled PM can determine if a project will "pass" or "fail," EPA needs to move forward with an additional correction.

Much of the PM2.5 emissions data for fugitive sources is suspect, either because there is little data, the test methods are challenging to implement, or available estimation techniques and/or emission factors are of limited applicability as they were developed for aggregate piles and are not directly applicable to many types of forest products industry sources. Until such time that EPA can complete AERMOD validation studies and emissions data are improved, EPA should issue guidance that indicates modeling analyses may exclude fugitive emission sources where PM2.5 emissions can reasonably be expected to be small based on available emission estimates and facilities have implemented best practices around road traffic and material handling and storage. Some states have this type of guidance already.

Turning back to the House bill which will facilitate the use of prescribed burns and help mitigate catastrophic wildfires that emit far more PM. Section 3 of the bill on "Exceptional Events" makes clear that emissions from prescribed burns to mitigate wildfire risks can be excluded from non-attainment designations like wildfires. The contribution from prescribed burns to background concentrations could be an impediment to permitting, including in attainment areas, so allowing their exclusion from background helps projects proceed while allowing and perhaps encouraging an important forest management tool. In addition, the bill streamlines the process for EPA to grant exceptional events which should help the permitting process by reducing the number of non-attainment areas.