



April 12, 2024

Kaitlyn Peterson
Legislative Clerk
Committee on Energy and Commerce
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Washington, DC 20515
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BY EMAIL

Re: Questions for the Record of Subcommittee on Environment, Manufacturing, and Critical Materials' February 15, 2024, Hearing

Dear Ms. Peterson:

Attached please find responses to the questions for the record you sent me on March 27, 2024. I appreciate the opportunity to have testified in person and to submit these responses.

Sincerely,

Seth L. Johnson
Attorney

Attachment

ATTACHMENT
RESPONSES TO QUESTIONS FOR THE RECORD

The Honorable Frank Pallone, Jr.

1. During the hearing, we heard concerns about attaining the new PM_{2.5} NAAQS standard as well as issues with permitting due to a lack of “headroom” above the “background” level.

a. What is “background” pollution?

“Background” particulate matter (PM) is best understood as particulate matter pollution whose emissions this country cannot control via its own actions. As EPA uses the term when it reviews and revises NAAQS, “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.” 89 FR 16,202, 16,218 (Mar. 6, 2024). Thus, when measured at a particular location, “background” PM consists of PM arising in the United States from natural sources, like pollen from trees, plus any PM pollution coming from beyond the borders of the United States, both naturally occurring and from human-caused air pollution. *Id.* This “background” PM is uncontrollable by domestic authorities or individuals and is thus conceptually distinct from pollution that is created from human activities in the United States, which could be controlled.

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 µg/m³ or 1-3 µg/m³. *Id.* EPA’s report aligns well with the lowest PM_{2.5} levels reported at air quality monitors in the United States. The most current lowest design values, which are the official measure of compliance with the new PM_{2.5} NAAQS and represent 3-year averages, are as low as 2 µg/m³. 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; *see also* Earthjustice, Mapping Soot and Smog Pollution in the United States (Feb. 7, 2024), <https://earthjustice.org/feature/soot-smog-air-map-united-states-county> (providing maps of PM_{2.5} pollution, based on EPA’s official data). Single-year mean levels are as low as 1.15 µg/m³. *Id.*

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, pernicious, and curiously passive. Human-caused pollution is pervasive, touching all parts of our nation. *See, e.g., EPA v. EME Homer City*, 572 U.S. 489, 496-97 (2014). Nothing naturally or inevitably makes so many Americans—especially in communities of color and low-income communities—experience dangerously elevated PM_{2.5} levels. Because we cause that pollution, we also can address it. As I mentioned in my testimony, many past and present opponents of stronger clean air protections have claimed it is impossible to reduce air pollution to levels EPA identifies as safe. Yet, time after time, we have done what opponents claim was impossible. For example, over 40 years ago, people insisted that it would be impossible for Houston to attain the 1979

ozone NAAQS. *See Am. Petroleum Inst. v. Costle*, 667 F.2d 1176, 1184-85 (D.C. Cir. 1981). But in 2013, Houston did exactly that: attained that standard. 80 FR 63,429, 63,430/1 (Oct. 20, 2015); 80 FR 49,970, 49,972/1-3 (Aug. 18, 2015). It has continued to register attainment of that standard ever since.

Opponents of clean air protections should know by now: When we as a nation set our minds to it, we can achieve great things.

b. Do you expect air quality permitting to halt as a result of the lower standard?

No. There are several reasons why such an expectation is unfounded. Opponents of stronger clean air protections focus on one preconstruction permitting program, called the “prevention of significant deterioration” (“PSD”) program, and they grossly overstate the size and effect of this program. To be subject to the PSD program, the facility for which a permit is sought must have the potential to emit very large amounts of pollution—it must be a “major” source. *See* 42 U.S.C. §§ 7475(a), 7479(1). Some sources may be able to alter their operations to avoid being subject to the permitting program. Accordingly, the PSD program covers only about 127 permit applications per year. *See* EPA, Supporting Statement for Prevention of Significant Deterioration and Nonattainment New Source Review 15, 18 (EPA Tracking No. 1230.34, OMB Control No. 2060-0003, Nov. 2022), <https://www.reginfo.gov/public/do/DownloadDocument?objectID=128226400> (estimating “127 part C (PSD) permit applications” annually). Not all these permits will necessarily implicate PM_{2.5}, either, for the PSD program covers many other air pollutants. The overwhelming majority of preconstruction permits are not for “major” sources, but instead for “minor” sources—30,000 permits. *See id.* at 15. As a result, these minor source permit applications are exempt from the PSD program and not subject to the complaints raised by opponents to clean air.

Even the permits that are subject to the PSD program have pathways to issuance. The core statutory requirement at issue is that the facility “demonstrate” that its emissions “will not cause, or contribute to, air pollution in excess of any” NAAQS, including the new PM_{2.5} NAAQS, once it goes into effect. 42 U.S.C. § 7475(a)(3); *see Murray Energy Corp. v. EPA*, 936 F.3d 597, 625-26 (D.C. Cir. 2019). EPA’s most recent official air quality data shows that the vast majority of the country—including many major urban areas of the United States—likely meets the standard. *See* Earthjustice, Mapping Soot and Smog Pollution in the United States (Feb. 7, 2024), <https://earthjustice.org/feature/soot-smog-air-map-united-states-county>. Under the Clean Air Act’s clear language, any new major source in these areas can receive a permit where that source can demonstrate that its new emissions will not tip an area into nonattainment.

Further, though opponents of stronger clean air protections pretend that what matters for this demonstration is the difference between the maximum existing pollution levels in the area and the standard, a different they refer to as “headroom,” making a demonstration does not involve just identifying the maximum predicted ambient impact from the new emissions and adding it to the maximum predicted existing pollution levels in the area. To the contrary, EPA expressly says the opposite: “The PM_{2.5} design value that is representative for the area, rather than the overall maximum monitored background concentration, should generally be used as the monitored component of the cumulative analysis.” EPA, Guidance for Ozone and Fine

Particulate Matter Permit Modeling 50 (EPA-454/R-22-005, July 2022), <https://www.epa.gov/system/files/documents/2022-08/2022%20Guidance%20O3%20and%20Fine%20PM%20Modeling.pdf>. Indeed, air pollution levels vary spatially—the pollution in one place is not the same as in another place, even within the same city.

And EPA and many states make a number of tools available to help polluters obtain permits. For example, as EPA has repeatedly said, if a PSD permit applicant “compensates for the adverse impact that would otherwise cause or contribute to a violation of the NAAQS,” such as by obtaining offsetting air pollution emission reductions, it can receive a PSD permit. 89 FR at 16,371 & n.227. Put simply, applicants for PSD permits have numerous pathways and tools available to them to obtain permits.

Ultimately, it is important to remember, too, that when a permit must be denied, it is because the applicant could not demonstrate that its major source of air pollution can operate without harming public health—hence, the “prevention” in the title of the PSD permitting program. A permitting approach that knowingly allowed dangerous air pollution and only afterward required pollution reductions would harm human health—not a desirable result, to say the least.

c. Do NAAQS cover only emissions from industrial sources?

No. NAAQS are “ambient air quality standards,” meaning they cover the air pollution that is in the ambient air—regardless of its source. PM_{2.5} results from diverse sources, not just industrial sources. *E.g.*, EPA, Integrated Science Assessment for Particulate Matter 2-12 to -13 (EPA/600/R-19/188, Dec. 2019).

Thus, for example, to attain and maintain standards, polluted areas have options to—and even must—limit mobile source emissions. *See, e.g.*, 42 U.S.C. § 7408(e)-(f), 7504(a)-(b), 7506(c), 7507. Under the Act’s innovative cooperative federalism approach, all areas have authority to select a mix of controls that work best for them to control pollution levels and comply with the Act’s requirements. They are in no way limited just to controlling emissions from industrial sources. That said, industrial emissions may in many circumstances play significant or leading roles in creating dangerous air pollution conditions, and areas thus may choose in many instances to focus on controlling those emissions.

d. Should we expect a vast majority of counties to be in nonattainment by the first compliance deadline in 2032, as indicated at the hearing?

No. Though we have more work to do to attain the new standard by 2032, the scope of that work is expected to be geographically limited. There are over 3,000 counties in the nation. *E.g.*, 82 FR 54,232, 54,232 n.2 (Nov. 16, 2017). EPA projects that based on current and expected control measures, only 52 counties would need to undertake additional pollution reduction efforts to meet the standard by 2032, the majority of them in the West and California. EPA, Final Regulatory Impact Analysis for the Reconsideration of the National Ambient Air Quality Standards for Particulate Matter 10 (EPA-452/R-24-006, Jan. 2024) (“This includes 12 counties

in the northeast, 7 counties in the southeast, 10 counties in the west, and 23 counties in California.”); *see also id.* at 6-7. EPA then projects how many counties would remain nonattainment in 2032 after applying currently anticipated, reasonably costly emission control measures, projecting 25 counties need further reductions to attain the standard by 2032. *Id.* at 11, 191-93 & tbl.3-9. Of these, 2 counties are in the northeast, 2 in the southeast, 4 in the west, and 17 in California. *Id.* at 191-93 & tbl.3-9.

EPA’s projections may be conservative. Technology and efficiency can and have advanced over time, especially in view of our nation’s great capacity for innovation. *See* Final Brief of State Amici in Support of Respondent, by the States of Massachusetts, New York, Rhode Island, and Vermont; the California Air Resources Board; the Delaware Department of Natural Resources & Environmental Control; and the District of Columbia 9-13, *Murray Energy v. EPA*, 936 F.3d 597 (D.C. Cir. 2019) (No. 15-1385), 2016 WL 5390614. Accordingly, we may well make more progress—and more efficiently—than EPA currently projects.

2. Section 2(i) of the discussion draft revises the definition of “exceptional events”. As I read it, an area with regular hot or dry periods – such as what we experience during the summer across the country – would be able to claim that these occurrences as “exceptional events.” Since these conditions are often associated with higher air pollution levels, this would be a serious exemption.

a. How are exceptional events currently accounted for in air monitoring?

EPA’s regulation at 40 C.F.R. § 50.14 provides a detailed system for excluding air quality monitoring data for regulatory purposes when certain conditions are met. EPA’s website (<https://www.epa.gov/air-quality-analysis/treatment-air-quality-monitoring-data-influenced-exceptional-events>) further provides extensive guidance and other relevant material about that system, all of which I incorporate by reference into this answer. As those EPA materials reflect, among the events that can qualify as “exceptional events” are prescribed fires, wildfires, dust storms, and instances where ozone from the stratosphere dips to surface levels.

Accordingly, I will be summary here. Essentially, under EPA’s current exceptional events regulation:

- When air monitoring results have regulatory significance (*i.e.*, the monitoring data is high enough that it makes a difference for some regulatory decision),
- There is a clear causal relationship between the specific air quality monitoring results and a specific event (*i.e.*, some specific event clearly caused the monitoring data to be elevated), and
- The event was of a sort that is fairly described as exceptional (*i.e.*, not a run-of-the-mill, ordinary pollution release resulting from human activity),
- Then, after going through a public process, an air quality regulator can ask EPA to exclude the data from use when EPA undertakes relevant regulatory decisions.

For simplicity, I will refer to an event that meets those criteria as an “exceptional event.” EPA has codified that certain types of events, like prescribed fires, potentially qualify as exceptional events, provided certain conditions are met. 40 C.F.R. § 50.14(b)(3); *see also id.* § 50.14(b)(2)-(6). States that seek to avail themselves of the exceptional events exclusion must take various actions to nevertheless protect public health from harms resulting from elevated air pollution levels. *Id.* § 51.930.

b. What are some of the implications of the discussion draft’s expanded definition of exception events, and other Clean Air Act amendments included in Section 2(i)?

The Clean Air Act’s exceptional events provision is supposed to be a narrow exception, so areas won’t face regulatory consequences due to unusual circumstances. Section 2(i) of the discussion draft available at the time of the February 15, 2024, hearing would tremendously expand that exception. Under it, ordinary heatwaves, droughts, and unusually stagnant air could qualify as exceptional events for the first time. *Compare* 42 U.S.C. § 7619(b)(1)(B) (excluding such events from qualifying as exceptional events), *with* Feb. 15, 2024, Discussion Draft § 2(i)(2)(E) (altering exclusions). It would also relax the required demonstration from showing that a “clear causal relationship” exists between the increased air pollution and the event to a showing that a clear causal relationship “be reasonably expected to exist.” *Compare* 42 U.S.C. § 7619(b)(3)(B)(ii) (“a clear causal relationship must exist between the measured exceedances of a national ambient air quality standard and the exceptional event to demonstrate that the exceptional event caused a specific air pollution concentration at a particular air quality monitoring location”), *with* Feb. 15, 2024, Discussion Draft § 2(i)(4)(B) (“striking ‘a clear causal relationship must exist’ and inserting ‘a clear causal relationship must exist, or be reasonably expected to exist’”). The February 15 Discussion Draft has been replaced with a new bill that does not differ substantively in these regards from the February 15 Discussion Draft.

These edits in Section 2(i) could open the floodgates and allow everyday harmful pollution to be written off as somehow exceptional, even though there’s nothing exceptional about it. When pollution is written off for regulatory purposes, the polluted area gets off the time-tested, sensible track the Clean Air Act establishes for reducing harmful air pollution levels. But when the written-off data results from unexceptional events, as the Discussion Draft would allow, the air pollution in the area remains. Thus, there will be no requirement to improve air pollution protections, even though dangerous levels of air pollution persist in the real world. Erasing data does not erase reality: people will be exposed to more pollution, and their health and wellbeing will suffer.

c. Is it possible that downwind states could receive additional air pollution if the changes included in this provision are enacted?

Yes. As described above, in my answer to your question 2.b, the changes in Section 2(i) of the February 15 Discussion Draft make it quite likely that polluted areas will not be subject to improved clean air protections. Polluting sources in those areas thus will not have to limit their emissions of harmful air pollution as much, resulting in higher air pollution emissions and ambient levels. And, because air pollution does not stay neatly in the area where it was emitted,

the increased air pollution can—and, in at least some cases, will—travel to downwind states, resulting in more air pollution in those downwind states.

The Honorable Nanette Barragán

1. Section 2(f) of the discussion draft would exempt extreme nonattainment areas from having to establish contingency measures if they fail to make progress toward achieving a standard. I am concerned that this takes an important tool off the table for ensuring areas with dangerous levels of pollution are held accountable for their progress.

a. What would be the practical implications of taking contingency measures off the table?

The practical implications of taking contingency measures off the table will include increased air pollution, for longer periods of times, causing harm to people's health and wellbeing. Contingency measures play an important role in the Clean Air Act's design. The Clean Air Act requires states to develop implementation plans to bring them into compliance with healthy air standards. But Congress recognized that these plans might not succeed. Accordingly, it required states to develop contingency measures to kick in if polluted areas failed to make legally required pollution reductions.

These measures serve multiple functions, all aimed at reducing pollution and improving public health. First, because they presumably are tougher measures than the ones the state will already have implemented, they provide polluters an incentive to avoid having them be triggered. *See South Coast Air Quality Mgmt. Dist. v. EPA*, 472 F.3d 882, 903-04 (D.C. Cir. 2006), *amended in other part*, 489 F.3d 1245 (D.C. Cir. 2007). Second, when a plan falls to meet its goals, contingency measures are supposed to go into effect quickly and make up at least some of the gap.

Contingency measures are thus vital for ensuring pollution reductions—and health benefits—result. Were regulators not required to develop them, those pollution reductions and resulting health benefits would be lost. This outcome is precisely the opposite of what we need in the most polluted areas—extreme nonattainment areas.

Reality shows that even the most polluted areas do not always implement all the measures available to them to reduce pollution. For example, in the Los Angeles area, the local regulator long relied on a pollution trading system to comply with pollution control requirements, but finally is transitioning away from it because that system turned out not to be as effective at reducing pollution as other approaches. In other highly polluted areas, like the San Joaquin Valley, advocates have made many suggestions of ways to address pollution problems that regulators have not adopted. Thus, there remain many available contingency measures that have not been used, even in extreme nonattainment areas.

b. How will that impact public health?

As discussed in the immediately preceding answer, taking contingency measures off the table will mean more air pollution, for longer, and thus harm public health.

2. Section 3 of the discussion draft gives areas in extreme nonattainment a free pass on pollution that comes from outside the state, from exceptional events, and from pollution beyond their regulatory control.

a. Is this broad exemption even necessary?

No. Much of this broad exemption is redundant because other provisions of the Act already render them moot or moot-able or provide carefully targeted exemptions. For example, Section 3 of the Discussion Draft would give extreme nonattainment areas a free pass based on pollution that comes from outside the nonattainment area. But the Act already requires domestic jurisdictions outside the nonattainment area to, for example, eliminate pollution emissions that “significantly contribute” to downwind nonattainment, and states can compel enforcement of that requirement, thus rendering the proposed exclusion pointless. 42 U.S.C. § 7410(a)(2)(D)(i)(I), (k)(5); *see id.* §§ 7426(b), 7604(a), 7607(b)(1); 5 U.S.C. § 553(e). All ozone nonattainment areas can avoid any sanction for failures stemming from pollution originating outside U.S. borders. 42 U.S.C. § 7509a(a)-(b). Similarly, Section 3’s treatment of exceptional events is covered already by the Act’s exceptional events provision and EPA’s legally binding regulations implementing it. *Id.* § 7619(b); 40 C.F.R. § 50.14. Thus, Section 3 of the discussion draft needlessly and pointlessly targets issues that are already well (or identically) addressed.

b. Could this disincentivize areas from improving air quality?

Yes. Reducing harmful air pollution is vitally important work. It can also be hard work. When areas have ways to avoid that work and take alternative paths that may be easier in the short run, they have incentives to take those paths, rather than working harder to improve air quality to the fullest extent needed.

3. EPA is also considering regulations that will reduce particulate matter and ozone pollution from power plants and vehicles. They are also considering whether to allow California to move forward with its own stronger air quality standards. How important is it that EPA finalizes strong regulations on sources of pollution, so local jurisdictions can more easily meet the national air quality standards set by EPA?

It is extremely important that EPA finalize these strong regulations. The Act is often described as a landmark achievement in cooperative federalism, with both the federal government and states playing key roles. This means that both the federal government and states must work in tandem and meet all the Clean Air Act’s legal requirements for pollution reductions. When EPA does its work properly and sets strong regulations in a timely way, that means more pollution reductions. As a result, states will have an easier time coming into compliance with national ambient air quality standards.

4. Republicans claim that strong air quality standards can block new industrial facilities in areas where the level of pollution exceeds the air quality standard. Can you explain how the Clean Air Act carefully allows for economic development in polluted communities, but also provides protections to prevent the pollution from getting worse?

Via its preconstruction permitting programs, the Clean Air Act as it exists today strikes a sensible balance between development of polluting industrial facilities and public health protections. As an initial matter, it's important to be clear about what new industrial facilities the existing Clean Air Act applies most stringently to, and which it doesn't. Opponents of stronger clean air protections here focus on preconstruction permitting programs that apply only to "major" stationary sources—the sources with the potential to emit very large amounts of harmful air pollution. 42 U.S.C. §§ 7475(a), 7479(1), 7502(c)(5). Some sources may be able to alter their operations to avoid being subject to the permitting program. Because they apply only to the largest sources, the two major source permitting programs (which I will address below) cover only about 236 permits per year. *See* EPA, Supporting Statement for Prevention of Significant Deterioration and Nonattainment New Source Review 15, 18 (EPA Tracking No. 1230.34, OMB Control No. 2060-0003, Nov. 2022), <https://www.reginfo.gov/public/do/DownloadDocument?objectID=128226400> (estimating "127 part C (PSD) permit applications" and "109 part D (NNSR) permit applications" annually). The overwhelming majority of preconstruction permits are not for "major" sources, but instead for "minor" sources—30,000 permits—and as a result are not subject to the complaints raised by opponents to clean air. *See id.* at 15.

Within the realm of the major source permitting programs, there are two distinct broad scenarios for air quality permitting in areas where pollution levels exceed an air quality standard. One involves permitting before EPA promulgates area air quality designations. The other involves permitting after that promulgation.

In the first scenario, before EPA promulgates area air quality designations for a pollutant, the "prevention of significant deterioration" ("PSD") program applies. There are two core statutory requirements in play here. One is that the new facility be "subject to the best available control technology for each pollutant subject to regulation" that comes from it. 42 U.S.C. § 7475(a)(4). The other is that the facility "demonstrate" that its emissions "will not cause, or contribute to, air pollution in excess of any" NAAQS. *Id.* § 7475(a)(3).

Even in areas that register as violating a standard based on an air quality monitor, permitting is not necessarily as simple as identifying the maximum predicted ambient impact from the new emissions and just adding it to the maximum predicted existing pollution levels, as opponents of stronger clean air protections often essentially pretend. *See* EPA, Guidance for Ozone and Fine Particulate Matter Permit Modeling 49-56 (EPA-454/R-22-005, July 2022), <https://www.epa.gov/system/files/documents/2022-08/2022%20Guidance%20O3%20and%20Fine%20PM%20Modeling.pdf>. Air pollution levels vary spatially—the pollution in one place is not the same as in another place, even within the same city. Thus, for example, a proposed major source in an area that, overall, has unhealthy air, can be located in a different part of the same area where the air may be cleaner.

Further, EPA and many states also make a number of tools available that help polluters obtain permits. For example, as EPA has repeatedly said, if a PSD permit applicant “compensates for the adverse impact that would otherwise cause or contribute to a violation of the NAAQS,” such as by obtaining offsetting air pollution emission reductions, it can receive a PSD permit. 89 FR 16,202, 16,371 & n.227 (Mar. 6, 2024). Put simply, applicants for PSD permits have numerous pathways and tools available to them to obtain permits, while ensuring public health is protected.

In the second scenario, after EPA promulgates area air quality designations for a pollutant, in an area with pollution levels that violate a standard for that pollutant, the “nonattainment new source review” (“NNSR”) program applies to preconstruction permitting of “major” stationary sources. 42 U.S.C. §§ 7502(c)(5), 7503. As with the PSD program, there are two core statutory requirements at issue for NNSR, but they differ from the PSD program. One is that the proposed facility “comply with the lowest achievable emission rate” for the nonattainment pollutant. *Id.* § 7503(a)(2). The other is that the proposed facility must obtain “offsets”—reductions in actual emissions of the pollutant at issue, in relevant geographical areas—that are at least as great as the new emissions the proposed facility will create. *E.g., id.* § 7503(a)(1), (c). So long as the source meets these two requirements, it can receive a permit and be constructed.

Thus, both permitting programs take a commonsense approach to balancing public health and industrial development that causes large amounts of pollution. In ways tailored to their particular contexts, they require strong pollution controls on the new source, and they take a holistic look at overall pollution levels. Whereas sources subject to PSD permitting must apply, essentially, very good emissions control technology and show they won’t create or exacerbate violations of standards, sources subject to NNSR must apply even better emissions control technology and ensure that overall emissions in the area don’t go up.

Ultimately, it is important to remember that when a PSD permit must be denied, it is because the applicant could not demonstrate that it would have used a strong enough pollution control technology or that it could not operate without harming public health. Similarly, an NNSR permit must be denied if it does not use very effective pollution controls or fails to ensure that air pollution emissions in the area don’t increase, a goal consistent with bringing pollution levels into compliance with healthy air standards. Permitting approaches that knowingly allowed dangerous air pollution and only afterward required pollution reductions would harm human health—not a desirable result, to say the least.

The Honorable Lisa Blunt Rochester

- 1. Exposure to ambient fine particulate matter, also known as PM_{2.5} is a significant health concern in the United States. Data from a report published in 2021 shows how PM_{2.5} is responsible for 85,000 to 200,000 excessive deaths a year. Various sectors that emit particulate matter pollution, such as industry, light-duty vehicles, construction, and heavy-duty diesel vehicles, disproportionately impact the health of communities of color, fenceline communities, and low-income communities. This is**

why in February of 2023, I along with Rep. Nanette Barragán led a letter that received the support of 86 other Representatives and Senators to the EPA on the National Ambient Air Quality Standards (NAAQS), urging them to reduce their previous standard from 12 µg/m³ to 8 µg/m³. Though the EPA determined, based on recommendations from their scientific advisers, that 9 µg/m³ is the most appropriate level for PM_{2.5} given available evidence, this newly finalized standard is a significant shift and has the opportunity to save thousands of lives from issues such as infant mortality, cardiovascular and respiratory diseases, asthma attacks, diabetes, and premature deaths.

This is why bills such as the one brought before us today, the “Air Quality Standards Implementation Act,” deeply concern me. This legislation would delay the EPA’s review of air quality standards and require EPA to prioritize corporate costs instead of science and public health in crafting regulations that benefit our constituents and communities. I will continue to push for policies that save lives and provide communities with the resources they deserve so they can breathe healthy, clean air. I applaud the EPA for doing their part, but I also want to encourage our colleagues across the aisle to find bipartisan solutions that put the lives of our constituents first.

a. Can you provide more context for the subcommittee around the health impacts the Air Quality Standards Implementation Act could have on our frontline and communities of color if enacted?

National ambient air quality standards regulate air pollutants that cause serious human health harms, like death, heart attacks, hospitalizations, cancer, neurological harms, and asthma attacks. *See, e.g.*, 89 FR 16,202 (Mar. 6, 2024); 84 FR 9866 (Mar. 18, 2019); 83 FR 17,226 (Apr. 18, 2018); 81 FR 71,906 (Oct. 18, 2016); 80 FR 65,292 (Oct. 26, 2015). It is well established that communities of color and low-income communities are disproportionately exposed and vulnerable to many, if not all, of these harmful pollutants.¹

The health harms caused by PM_{2.5} are especially striking. EPA’s 2024 strengthening of the PM_{2.5} standard was not the strongest rule its outside science advisors determined was supported by the health science. Even so, EPA projects the 2024 standard will, once met, save 4,500 lives, keep thousands more out of the hospital or emergency room (for cardiovascular, respiratory, and Alzheimer’s Disease issues), avert 5,700 new cases of asthma and 800,000

¹ *See, e.g.*, American Lung Ass’n, *State of the Air: 2023 Report* 28 (2023), <https://www.lung.org/getmedia/338b0c3c-6bf8-480f-9e6e-b93868c6c476/SOTA-2023.pdf>; Gaige Hunter Kerr et al., *Increasing Racial and Ethnic Disparities in Ambient Air Pollution-Attributable Morbidity and Mortality in the United States*, 132 *Envtl. Health Perspectives* 037002 (2024), <https://doi.org/10.1289/EHP11900>; Michael J. Cheeseman et al., *Disparities in Air Pollutants Across Racial, Ethnic, and Poverty Groups at US Public Schools*, 6 *Geohealth* e2022GH000672 (2022), <https://doi.org/10.1029/2022GH000672>; Christopher W. Tessum et al., *PM_{2.5} Polluters Disproportionately and Systemically Affect People of Color in the United States*, 7 *Sci. Advances* eabf4491 (2021), <https://doi.org/10.1126/sciadv.abf4491>.

instances of asthma medication use, and prevent 290,000 missed work days—each year. EPA, Final Regulatory Impact Analysis for the Reconsideration of the National Ambient Air Quality Standards for Particulate Matter 17 tbl.ES-6 (EPA-452/R-24-006, Jan. 2024) (“RIA”). This will be a significant achievement.

But the burden of breathing PM_{2.5} pollution is not evenly distributed. For instance, the mortality rate from PM_{2.5} for Black populations is three times the rate for all other populations, and low-income populations also experience elevated mortality rates. Industrial Economics, *Analysis of PM_{2.5}-Related Health Burdens Under Current and Alternative NAAQS: Updated Final Report 2-8, 2-11* (2023), <https://globalcleanair.org/wp-content/blogs.dir/95/files/2023/03/Updated-IEc-PM-NAAQS-Analysis-March-2023.pdf>.

The stronger PM_{2.5} standard EPA issued in 2024 is likely to help narrow at least some of those gaps. According to EPA’s analysis, the new standard can be expected to narrow disparate exposure to PM_{2.5} for low-income and Latino populations. RIA 346 fig.6-5. It can also be expected to narrow the disparate mortality rates for Black and Latino populations. *Id.* at 362-63 & fig.6-15. An even more stringent standard would be expected to lower the disparity in PM_{2.5} exposure that Black populations experience. *Id.* at 345.

The Air Quality Standards Implementation Act would make future strengthening of the PM_{2.5} standard—and the other standards—more difficult and it would slow down the progress we have achieved in cleaning up our air for all Americans. It would hamper the review and revision process. It would inject extraneous, confusing considerations into that process so that standards wouldn’t be set based on what’s healthy, but perhaps on what someone thinks might be possible to achieve in one isolated part of the country. The result would be dirty, unhealthy air, for everyone.

Then, the proposed bill would increase delays in realizing the health benefits of strengthened standards, like EPA’s new PM_{2.5} standard. It would stop implementation of a strengthened standard in air quality permitting until EPA issued guidance that might be entirely unnecessary. H.R. No. 118-7650, sec.2(e) (2024). When states fail to carry out their responsibility of submitting legally adequate implementation plans, the proposed bill would delay issuance of gap-filling federal implementation plans. *Id.* sec.2(f). For ozone-polluted areas, the proposed bill would also weaken implementation requirements for contingency measures and other pollution control planning requirements. *Id.* sec.2(g)-(h). It would further weaken planning requirements for making progress toward PM_{2.5} compliance. *Id.* sec.2(i). And it would upset the balance Congress struck on exceptional events, allowing areas to write off for regulatory purposes more events with dangerous air pollution—which would still leave that pollution in the air people breathe. *Id.* sec.2(j). All told, it would allow more pollution to remain for longer, even after EPA strengthens a standard.

In sum, healthy air standards protect against serious human health threats that result from certain pollutants. Those pollutants are grave threats to human health, and the burdens of these pollutants often disproportionately fall on frontline communities and communities of color. Stronger standards can lessen those burdens, both for the population at large and especially for overburdened communities, like communities of color. But the proposed bill would make it more

difficult to strengthen standards and more difficult to fully implement them. The public health protections that could flow from stronger standards thus would be delayed. And, because of the disproportionate burden these pollutants have, delay in strengthening and implementing clean air standards could exacerbate and prolong those disparities. The communities that most need improved public health protections would be harmed because they would not get the pollution reductions that would improve their health and wellbeing.

- b. As part of your testimony, you mention constructive steps Congress can take to improve air quality. Specifically, you mention that Congress should advance legislation like the Public Health Air Quality Act and the Technology Assessment for Air Quality Monitoring Act– bills I championed. Can you expand on how legislation like these two bills would support efforts to ensure clean air for all Americans?**

Three key broad areas for ensuring clean air for everyone are (1) strong standards, (2) effective implementation, and (3) adequate air quality monitoring. Legislation like the bills you mention is vital for that third area.

Adequate air quality monitoring is incredibly important for ensuring clean air for all because if we don't know (for regulatory purposes) where dirty air is, we cannot be assured that it will be cleaned up. As proposed in 2022, the Public Health Air Quality Act would take important, concrete steps to improve air quality monitoring not just for pollutants subject to NAAQS, but also for air toxics like ethylene oxide, chloroprene, and formaldehyde.

The Public Health Air Quality Act would advance air quality monitoring by directing EPA to update and increase our air monitoring equipment, improve data collection and sharing, and implement fenceline monitoring for toxic air pollutants at facilities whose air emissions contribute to high local cancer rates and other health threats from dangerous pollutants. It would direct EPA to implement immediate fenceline monitoring for toxic air pollutants at especially dangerous facilities. Air monitoring data, monitor maintenance information and any actions taken using the data must be made publicly available and accessible in multiple languages. EPA must update emission test methods and emission factors if necessary, based on new air data.

Also for toxic air pollutants, the Public Health Air Quality Act would ensure that fenceline monitoring and continuous emission monitoring are core components of national emission standards for chemical, petrochemical, and other sources of fugitive toxic air pollution to assure compliance with pollution limits and so that communities never again have to wonder what is in their air. EPA must issue rules to implement the best available method of fenceline monitoring and corrective action in the highest threat source categories with fugitive emissions where needed to assure compliance or protect public health, using more protective monitoring methods.

For pollutants subject to NAAQS, the Public Health Air Quality Act would improve air quality monitoring by ensuring a rapid expansion of the NAAQS or national ambient air monitoring network through the addition of at least 80 new NCore multipollutant monitoring stations in communities where this is most needed to protect people with asthma and other health

conditions. It also ensures an additional 100 pollutant-specific monitors to be deployed in unmonitored or under-monitored areas. EPA must also assess and report on the status of the entire network and a plan to address all failing monitors and must perform repair and maintenance at broken or failing monitors where this is most needed.

The Public Health Air Quality Act would also capitalize on innovations in air quality monitoring by deploying at least 1,000 new air quality sensors in communities affected by air pollution. In this way, it would complement the NAAQS monitoring network and increase communities' access to information about air quality.

Finally, the Public Health Air Quality Act would direct EPA to integrate data collected through these programs into EJSCREEN, the agency's publicly available environmental justice screening and mapping tool. People should have the right to know what air pollution they are being exposed to.

In all these ways, the Public Health Air Quality Act would represent a significant advance for ensuring clean air for all. We encourage Congress to collaborate and focus on constructive legislation like that, which serves people's right to know what pollution they are exposed to—and helps make sure that pollution gets cleaned up so that their health and wellbeing benefits.