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U.S. Environmental Protection Agency  
Docket ID No. EPA-HQ-OAR-2015-0072

To Whom It May Concern:

The National Association of Clean Air Agencies (NACAA) is pleased to provide comments on EPA's proposed rule on "Reconsideration of the National Ambient Air Quality Standards for Particulate Matter," published in the *Federal Register* on January 27, 2023.<sup>1</sup> NACAA is the national, non-partisan, non-profit association of air pollution control agencies in 40 states, including 117 local air agencies, the District of Columbia and five territories. The air quality professionals in our member agencies have vast experience dedicated to improving air quality in the U.S. These comments are based upon that experience. The views expressed in these comments do not represent the positions of every state and local air pollution control agency in the country.

In these comments, we address EPA's proposed decisions on the primary fine particulate matter (PM<sub>2.5</sub>) and PM<sub>10</sub> National Ambient Air Quality Standards (NAAQS) and provisions related to PM monitoring. In addition, although implementation may not, and must not, be considered in establishing NAAQS, NACAA also offers perspectives on implementing any final NAAQS revisions because it is critical that the agency be preparing for implementation now, through a separate process parallel to the NAAQS reconsideration.

### Background

NACAA commends EPA for issuing a proposed rule as part of its process to reconsider the December 18, 2020, EPA final decision to retain, without revision, the 2012 PM NAAQS. In NACAA's June 29, 2020, comments on the proposal that preceded the final decision, we wrote that "after closely tracking EPA's PM NAAQS Review since it was initiated in December 2014, NACAA concludes that this review process was flawed; that it resulted in a flawed proposed decision by the EPA Administrator, particularly with respect to the primary PM<sub>2.5</sub> standards; that the Administrator's proposed action should be withdrawn; and that a revised review process should be undertaken."<sup>2</sup>

Among the specific reasons we cited for these conclusions were that 1) a May 8, 2018, EPA memorandum, "Back-to-Basics Process for Reviewing NAAQS," set the stage for a rush to judgment; 2) CASAC lacked the expertise needed to conduct the PM NAAQS review and the former EPA Administrator's dismissal of the PM Panel seriously exacerbated that deficit; 3) EPA and CASAC did not consider the latest science; 4) in proposing to retain the current NAAQS without revision (and ultimately finalizing that decision) the former Administrator ignored the advice of his own staff as provided in the final Policy Assessment (PA) and, instead, stoked doubt about the preponderance of clear evidence in the final Integrated Science Assessment (ISA) and final PA that supported strengthening the primary PM<sub>2.5</sub> standards and left completely unaddressed at-risk populations and issues of environmental justice; and 5) highly

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<sup>1</sup> 88 Fed. Reg. 5558 (Jan. 27, 2023).

<sup>2</sup> [https://www.4cleanair.org/wp-content/uploads/Documents/NACAA\\_Comments-PM\\_NAAQS\\_Proposal-06292020-lh.pdf](https://www.4cleanair.org/wp-content/uploads/Documents/NACAA_Comments-PM_NAAQS_Proposal-06292020-lh.pdf)

credible parties – including EPA staff, some members of CASAC and 20 members of the disbanded CASAC PM Panel reconvened as the Independent PM Review Panel – found that the scientific evidence supported strengthening the primary PM<sub>2.5</sub> standards.

When EPA Administrator Michael S. Regan announced, on June 10, 2021, that the agency was undertaking the reconsideration, he committed to conducting the effort “in a manner that adheres to rigorous standards of scientific integrity and provides ample opportunity for public input and engagement.”<sup>3</sup> The Administrator then reconstituted the membership of the chartered Clean Air Scientific Advisory Committee (CASAC) and reinstated the CASAC PM Panel to support the Committee in providing advice to EPA as the agency reconsidered the PM NAAQS.

NACAA supported those actions, which not only addressed concerns raised in the association’s June 2020 comments on the prior proposal but were also consistent with the positions articulated in NACAA’s January 15, 2021, transition paper, “Improving Our Nation’s Clean Air Program: Recommendations from the National Association of Clean Air Agencies to President-Elect Biden’s and Vice President-Elect Harris’ Administration,” in which the association stated, “Scientific and technical integrity must be the core principle underpinning all federal, state and local air and climate rules and programs. It is imperative that EPA restore its commitment to this principle within the agency and revoke or repair policies that are contrary to it.”<sup>4</sup> Among NACAA’s related recommendations in the transition paper are the following:

- 1) EPA should rely on a science-based process that prioritizes public health for establishing, reviewing and revising NAAQS; final decisions should be guided by a complete and robust process and a thorough review of the latest available science by, and with sound advice from, highly qualified experts from a wide array of disciplines and with a diversity of perspectives;
- 2) The recent review of the PM NAAQS was deeply flawed and, as a result, the process and the final decision – to retain the current standards without revisions – were degraded; EPA should review this decision immediately and when it does so, it is imperative that, rather than a review process that prioritizes efficiency over the protection of public health, EPA return to a thorough, credible NAAQS review process;
- 3) EPA’s seven-member CASAC lacked the expertise to conduct the recent PM reviews, particularly without the support of its advisory PM Panel; the incoming EPA Administrator should return to making relevant expertise and knowledge the central criteria for CASAC appointments, with an emphasis on criteria that consider breadth and depth of expertise and experience, a balance of scientific perspectives, continuity of knowledge and an understanding of EPA’s mission and environmental programs; the Administrator should also reinstate the PM Panel to support the work of CASAC; and
- 4) EPA should reengage the scientific, technical and policy expertise of the career staff that has been the hallmark of the agency’s program and regulatory development since the Clean Air Act’s (CAA) inception.

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<sup>3</sup> <https://www.epa.gov/newsreleases/epa-reexamine-health-standards-harmful-soot-previous-administration-left-unchanged>

<sup>4</sup> <https://www.4cleanair.org/wp-content/uploads/NACAA2021PresidentialTransitionDocument-01152021.pdf>

## Proposed Decisions on the Primary PM<sub>2.5</sub> and PM<sub>10</sub> Standards

NACAA believes firmly that when EPA establishes or revises any NAAQS the agency should follow the best available science.

With respect to the primary annual PM<sub>2.5</sub> NAAQS EPA proposes to lower the standard from the current level of 12 micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ ) to a level within the range of 9 to 10  $\mu\text{g}/\text{m}^3$ . The agency seeks comment on alternative annual standard levels down to 8  $\mu\text{g}/\text{m}^3$  and up to 11  $\mu\text{g}/\text{m}^3$ . In its March 18, 2022, letter to Administrator Regan reporting the results of its review of the EPA staff *Policy Assessment for the Reconsideration of the National Ambient Air Quality Standards for Particulate Matter (External Review Draft – October 2021)* CASAC wrote, regarding the primary annual PM<sub>2.5</sub> standard, that “all CASAC members agree that the current level of the annual standard is not sufficiently protective of public health and should be lowered.”<sup>5</sup> EPA’s proposal to make the primary annual PM<sub>2.5</sub> standard more protective is consistent with the EPA staff recommendation and consensus response of CASAC. CASAC members did not reach consensus on a numeric level for the annual PM<sub>2.5</sub> standard.

Consistent with the EPA staff recommendation, the agency proposes to retain, without revision, the current 35- $\mu\text{g}/\text{m}^3$  primary 24-hour PM<sub>2.5</sub> NAAQS but seeks comments on a level down to 25- $\mu\text{g}/\text{m}^3$ . CASAC members did not reach consensus on whether or not the available evidence calls into question the adequacy of the current 24-hour standard.

EPA also proposes to retain, without revision, the current 150- $\mu\text{g}/\text{m}^3$  primary PM<sub>10</sub> standard. CASAC wrote in its March 18, 2022, letter that it “supports this decision, but recognizes that the Draft PA did not consider any new evidence beyond that included in the 2019 ISA. The CASAC concurs that, at this time, PM<sub>10</sub> is an appropriate choice as the indicator for PM<sub>10-2.5</sub>, but that additional discussion and justification regarding the use of PM<sub>10</sub> as the indicator should be provided, and that it is important to retain the level of protection afforded by the current PM<sub>10</sub> standard.”<sup>6</sup>

## Monitoring Provisions

### *Proposed Changes to PM<sub>2.5</sub> Monitoring Network Design*

EPA is proposing to modify the PM<sub>2.5</sub> monitoring network design requirements to add an “environmental justice factor” intended to enhance the protection of air quality in communities subject to disproportionate risk of adverse health effects from PM<sub>2.5</sub> exposure due to specific factors, including their proximity to local emission sources. Specifically, the agency proposes that in areas required to install a minimum of three monitors (*i.e.*, metropolitan statistical areas with a population of more than 1 million, and with a most recent three-year design value greater than or equal to 85% of the PM<sub>2.5</sub> NAAQS), the third monitor must be sited in an “at-risk community,” preferably near a source or sources of concern.<sup>7</sup>

NACAA embraces equity in its mission, values and strategic goals and, like EPA, believes that the protection of overburdened communities from the impacts of pollution should be a central focus across our rules, policies and programs. EPA correctly observes that the national PM<sub>2.5</sub> monitoring network is already

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<sup>5</sup> <https://www.4cleanair.org/wp-content/uploads/PM-NAAQS-CASAC-Responses-to-EPA-PM-Draft-PA-031822.pdf> at 2.

<sup>6</sup> *Id.* at 4.

<sup>7</sup> 88 Fed. Reg. at 5673.

robust. Many state and local agencies operate PM<sub>2.5</sub> monitors already located in areas that are considered high-risk or environmental justice areas under state or federal definitions of that term.

We caution, however, that the localized impacts of PM<sub>2.5</sub> emissions in at-risk areas cannot be fully captured by the conventional time scales of NAAQS monitors, because the annual and 24-hour data integration periods associated with NAAQS measurements may have the effect of “averaging out” source impacts that occur on a much shorter timeframe or in smaller-sized areas. There needs to be clear communication about what the monitoring data can and cannot tell us. The information collected by additional neighborhood-scale monitors sited in at-risk areas will be useful for many purposes, but it will not be sufficient to fully understand the disproportionate burdens experienced by some communities. If the proposed changes to the network design are adopted, EPA should provide more clarification in the final rule about the purpose of the “at risk” monitors and the limitations inherent in the data they produce.

To implement its proposed change to the network design, EPA proposes to amend the language of 40 C.F.R. part 58, app. D, § 4.7.1(b)(3) to read as follows:

For areas with additional required SLAMS, a monitoring station is to be sited in an at-risk community, particularly where there are anticipated effects from sources in the area (e.g., a major port, rail yard, airport, industrial area, or major transportation corridor).<sup>8</sup>

The proposed rule language does *not* include a definition of the term “at-risk community,” nor does it specify how to prioritize sources of concern.

As a general matter, NACAA supports affording state and local agencies maximum flexibility in identifying where to site the monitors for “at-risk” areas. Many states and localities have their own rules and definitions of “at-risk” or environmental justice areas and it is important that these can be reconciled with the federal requirements. That said, it would be helpful if EPA could provide some criteria or parameters on how to identify “at-risk” communities through guidance. One definition used in EPA’s discussion of proposed monitoring network changes is “children, lower socioeconomic status (SES) populations, minority populations (particularly Black populations), and people with certain preexisting diseases (particularly cardiovascular disease and asthma).”<sup>9</sup> This language is in accordance with the findings of the 2019 ISA and ISA supplement, and it may be appropriate to expound upon in a guidance or technical support document.

It would also be helpful for EPA to provide guidance on various tools that states and local agencies may use for prioritizing at-risk communities to consider for monitor siting. The agency has identified EJSCREEN as one such tool and solicits comment on other tools or datasets that could be utilized for this purpose.<sup>10</sup> EPA should distill the information it receives into guidance materials for state and local agencies, so that there is better understanding of tools and strategies that are available to them. EPA should allow state and local agencies the flexibility to employ the tools they deem appropriate to identify at-risk communities and defer to their expertise on siting determinations.

Finally, implementation of any additional requirements to expand monitoring identification of and meaningful engagement with at-risk communities will require additional resources. EPA must pair any

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<sup>8</sup> *Id.* at 5709.

<sup>9</sup> *Id.* at 5673.

<sup>10</sup> *Id.* at 5675.

increase in engagement and monitoring requirements with an increase in state and local agency funding through additional section 103 funds.

Timing. Should EPA adopt the proposed changes to the PM<sub>2.5</sub> network design, the agency proposes that state and local agencies implement these measures on the following timeline.<sup>11</sup>

1. Annual monitoring network plans due to EPA Regional offices by July 1, 2024: Agencies address their initial approach to whether new or moved sites are needed and identify (a) new communities in which they are considering adding monitoring, if applicable, and (b) how they intend to meet the proposed revised criteria for PM<sub>2.5</sub> network design.
2. Annual monitoring network plans due to EPA Regional offices by July 1, 2025: Agencies provide detailed information on proposed new or moved sites for PM<sub>2.5</sub> network design to address at-risk communities.
3. 24 months from the approval of the plan, or January 1, 2027, whichever comes first: Any new or moved site is required to be implemented and fully operational.

EPA requests comment on whether less time (*e.g.*, 12 months from plan approval) should be provided for step three above.<sup>12</sup> NACAA supports the 24-month/January 1, 2027 timeline proposed by EPA. A shorter timeframe may not be sufficient for all affected state and local agencies to procure the necessary equipment, address siting requirements and deploy the staff and other resources necessary to ensure that the new and moved monitors are fully operational and collecting valid data. Of course, agencies that are able to do so would have the option of operating the new and moved equipment on a shorter timeframe.

#### *“Next Generation” Technologies*

EPA requests comment on the use of “next generation” monitoring tools such as air sensors and satellite tools for use in meeting non-regulatory air quality goals.<sup>13</sup> NACAA strongly agrees with EPA that data used for attainment designations and other regulatory purposes *must* come from instruments designated as federal reference or equivalent methods (FRMs or FEMs), which have met robust quality assurance and precision requirements. At the same time, we also recognize that air sensors and other “next generation” technologies offer tremendous opportunities for purposes such as community-level investigations, personal monitoring, mobile monitoring and many others. We support EPA’s continued efforts in research, development, evaluation and training with respect to next generation technologies. As you know, many NACAA members are leaders in the development and deployment of air quality sensors and we expect this work will continue to expand rapidly. As a general matter, we ascribe to the principle that a next-generation tool should be “fit for purpose,” meaning that the quality of its data should be known and determined appropriate to meet the needs of the project for which it is deployed.

#### *Calibration of PM Federal Equivalent Methods*

EPA recognizes that some approved PM FEMs require updates to their factory calibrations to better meet measurement quality objectives (MQOs). EPA proposes to allow instrument manufacturers to initiate

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<sup>11</sup> *Id.* at 5676.

<sup>12</sup> *Id.*

<sup>13</sup> *Id.* at 5678.

re-calibrations, ideally through firmware updates.<sup>14</sup> NACAA recommends that state, local and tribal air agencies should also have the ability to petition the EPA Administrator to initiate factory calibrations of FEMs to better meet MQOs when collected data indicate disparities. NACAA further recommends that instrument manufacturers be required to evaluate and if necessary, adjust PM FEMs factory calibrations on an ongoing basis at regular intervals.

### Implementation Issues

NACAA firmly believes EPA must maintain a strong firewall between setting or revising NAAQS and addressing issues related to implementing those NAAQS. However, we acknowledge that any decisions EPA makes to revise the PM NAAQS will have a profound impact on the work of state and local air pollution control agencies. EPA must also recognize this fact and take timely action on several fronts.

First, EPA states in its NPRM that when it issued its August 24, 2016, SIP Requirements Rule for implementing the PM<sub>2.5</sub> NAAQS it intended that rule to apply to nonattainment areas designated pursuant to any future revisions of the PM<sub>2.5</sub> NAAQS.<sup>15</sup> With that in mind, NACAA recommends that EPA, in close collaboration with NACAA, carefully review the August 2016 SIP Requirements Rule and determine whether updates are necessary and, if so, to propose and finalize such updates so that they are in place when any final NAAQS revisions are promulgated. At this time, NACAA urges that at least two issues in that rule must be addressed: 1) contingency measures, in light of EPA's recently proposed draft contingency measures guidance and the agency's review and response to public comments, including those of NACAA and 2) environmental justice, particularly with respect to specific *federal* commitments and actions that will result in progress on improving air quality in disadvantaged communities with high particulate pollution (the current SIP Requirements Rule addresses only state and local actions).<sup>16</sup>

Second, EPA should take timely action to adopt, or further strengthen, federal measures to control a range of PM and PM precursor emission sources and, moreover, ensure that state and local air agencies are able to take credit for federal measures that achieve real emission reductions. The mobile source sector is especially ripe for such action. As NACAA states in its 2021 transition paper, "Despite the technological and regulatory progress made over the past nearly 60 years, mobile sources continue to dominate emission inventories across the U.S. and are the largest contributing sector to GHG emissions. Our nation needs a strong sustainable transportation strategy. Top priority must be placed on new federal programs to continue to reduce emissions from the mobile source sector – both from new and rebuilt engines and vehicles. As efforts to reduce GHGs and tackle climate change move forward, the need for further reductions in criteria pollutant emissions, especially nitrogen oxides (NO<sub>x</sub>) and PM from the mobile source sector, should not be overlooked."<sup>17</sup> Under EPA's forthcoming proposed light-duty vehicle rule and Phase 3 truck rule increased deployment of zero-emission vehicles can reduce precursor emissions thereby resulting in reduced PM levels across the nation. NACAA looks forward to reviewing EPA's proposals in this regard. Other important source categories within the mobile source sector for which EPA should commence further rulemaking to establish more stringent public health and environmental protections include locomotives, oceangoing vessels, aircraft and nonroad heavy-duty engines and equipment.

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<sup>14</sup> *Id.* at 5670.

<sup>15</sup> *Id.* at 5683.

<sup>16</sup> See NACAA Transition Letter, *supra* note 4, at 3: "EPA should make the consideration of racial justice and protection of overburdened communities from the impacts of pollution and climate change a central focus across all its activities."

<sup>17</sup> *Id.* at 6.

Third, in order to fulfill our responsibilities to attain more protective PM<sub>2.5</sub> standards by prescribed deadlines, state and local air agencies will need more financial resources than we currently have. Undertaking the permitting, compliance, planning, administration and monitoring activities necessary to implement a revised NAAQS will further strain already resource-constrained air agencies. EPA must assist states and localities in this regard and request additional, adequate federal funding to enable us to successfully fulfill our statutory responsibilities and our obligation to provide our citizens with clean, healthful air as expeditiously as practicable, regarding PM as well as all other aspects of our programs.

Fourth, many state and local air agencies face difficult challenges with PM<sub>2.5</sub> exceedances caused by wildfires, which are ever-increasing in frequency and intensity. Prescribed fire, which is being used more frequently with the aim of preventing or curbing more dangerous fires, also poses PM<sub>2.5</sub> problems in some areas. It is important that EPA's exceptional events rule and guidance be viewed through the lens of state and local air agencies' struggles and that a concerted collaborative initiative be undertaken right away by EPA and state and local air agencies to identify and discuss issues of concern and approaches for addressing them in a way that facilitates reasonable exceptional events demonstrations and EPA approval of them and, at the same time, ensures protection of public health. In addition, EPA should ensure that adequate resources are available to allow the agency to review and take action on exceptional event submittals, particularly from state and local air agencies in the western U.S., before making attainment determinations under any revised PM<sub>2.5</sub> standards.

Fifth, residential wood heaters (RWH) also contribute significantly to PM<sub>2.5</sub> levels in many areas. NACAA has long been concerned about EPA's highly problematic enforcement of the RWH New Source Performance Standards at the time of certification and at the time of sale. For years, state and local air agencies have raised enforcement lapses with EPA's Office of Enforcement and Compliance Assurance (OECA), but to no avail. In March 2021, the Northeast States for Coordinated Air Use Management (NESCAUM) released a report on a comprehensive assessment of EPA's RWH certification program, in which the organization wrote that the "report finds a systemic failure of the entire certification process" and that the "unavoidable conclusion of this report is that EPA's certification program to ensure new wood heaters meet clean air requirements is dysfunctional. It is easily manipulated by manufacturers and testing laboratories. EPA has done little to no oversight and enforcement. Starting in 1988 when EPA first adopted air pollution standards for new wood stoves, it has never conducted a single audit to verify that a wood heater actually performs consistent with its certification test results, a span of over 30 years."<sup>18</sup> On February 28, 2023, EPA's Office of Inspector General (OIG) corroborated NESCAUM's conclusions in a report titled, *The EPA's Residential Wood Heater Program Does Not Provide Reasonable Assurance that Heaters Are Properly Tested and Certified Before Reaching Consumers*. OIG summarizes the key takeaway of its report as follows: "The EPA's ineffective residential wood heater program puts human health and the environment at risk for exposure to dangerous fine-particulate-matter pollution by allowing sales of wood heaters that may not meet emission standards."<sup>19</sup> NACAA urges EPA's Office of Air and Radiation, under which the RWH NSPS were developed, to work with OECA, EPA's leadership and state and local air agencies to ensure that this federal program is rigorously enforced so that the intended emission reductions are fully realized in practice.

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<sup>18</sup> <https://www.nescaum.org/documents/nescaum-review-of-epa-rwh-nsps-certification-program-rev-3-30-21.pdf>

<sup>19</sup> [https://www.epa.gov/system/files/documents/2023-02/epaoig\\_20230228-23-E-0012\\_2.pdf](https://www.epa.gov/system/files/documents/2023-02/epaoig_20230228-23-E-0012_2.pdf)

Finally, although we have explicitly mentioned it with respect to several of the issues identified above, we cannot overstate the critical overall need for EPA to collaborate closely with NACAA on all of these implementation issues and any others that may arise, as well as attainment issues in general for all criteria pollutants. State and local air agencies are not simply interested stakeholders, we are EPA's co-regulators. Our agencies have tremendous experience and expertise and have unparalleled knowledge about nonattainment, attainment, maintenance and implementation of NAAQS. Moreover, in the CAA, Congress makes this specific finding: "air pollution prevention (that is, the reduction or elimination, through any measures, of the amount of pollutants produced or created at the source) and air pollution control at its source is the primary responsibility of States and local governments."<sup>20</sup> As stated in NACAA's January 2021 transition paper, "As EPA directs more attention to...cross-cutting issues, it must also strengthen its commitment to and fulfillment of its Clean Air Act obligations to address criteria and toxic pollutants, which continue to endanger millions of people across the country. We are ready to address these challenges together. EPA and NACAA have a shared mission and working in close collaboration will increase our successes exponentially."<sup>21</sup>

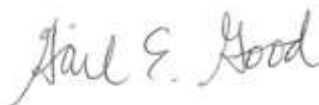
### Conclusion

On behalf of NACAA, we thank you for the opportunity to provide comments on this proposal. We look forward to working with EPA as this important rulemaking continues and to successfully implement the final standards. If you have any questions, please contact us or Nancy Kruger, NACAA's Deputy Director, or Karen Mongoven, NACAA Senior Staff Associate.

Sincerely



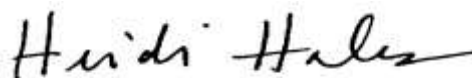
Wayne Natri  
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<sup>20</sup> 42 U.S.C. § 7401(a)(3).

<sup>21</sup> NACAA, *supra* note 4, at 2.