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U.S. Environmental Protection Agency  
EPA Docket Center  
Air and Radiation Docket  
Mail Code 28221T  
Docket ID. No. EPA-HQ-OAR-2018-0196  
1200 Pennsylvania Avenue, NW  
Washington, DC 20460

To Whom It May Concern:

The National Association of Clean Air Agencies (NACAA) offers the following comments on the U.S. Environmental Protection Agency's (EPA) Advance Notice of Proposed Rulemaking (ANPRM), *Standards of Performance for New Residential Wood Heaters, New Residential Hydronic Heaters and Forced-Air Furnaces*, as published in the *Federal Register* on November 30, 2018.<sup>1</sup> NACAA is the national, non-partisan, non-profit association of air pollution control agencies in 40 states, including 114 local air agencies, the District of Columbia and four 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 this action, EPA seeks comment on various aspects of the final rule, entitled *Standards of Performance for New Residential Wood Heaters, New Residential Hydronic Heaters and Forced-Air Furnaces* (2015 NSPS Rule), that was published by EPA on March 16, 2015 and took effect on May 15, 2015.<sup>2</sup> The agency states that the purpose of this ANPRM is "to inform future rulemaking to improve these standards and related test methods." Below, NACAA provides perspectives and recommendations on each of the aspects outlined by EPA.

#### Feasibility of Step 2 Compliance Date of May 15, 2020 and Step 2 Emission Limits for Forced-Air Furnaces, Hydronic Heaters and Wood Heaters

EPA seeks comment on the level and timing of the Step 2 New Source Performance Standards (NSPS) for forced-air furnaces (FAF), hydronic heaters (HH) and wood heaters included in the 2015 NSPS Rule. In January 14, 2019 comments to EPA<sup>3</sup> on the agency's November 30, 2018 Notice of Proposed Rulemaking (NPRM), entitled *Standards of Performance for New Residential Wood Heaters, New Residential Hydronic Heaters and Forced-Air Furnaces*,<sup>4</sup> NACAA expresses support for the feasibility of the

<sup>1</sup> 83 Fed. Reg. 61,585 (November 30, 2018) – <https://www.govinfo.gov/content/pkg/FR-2018-11-30/pdf/2018-26082.pdf>

<sup>2</sup> 80 Fed. Reg. 13,672 (March 16, 2015) – <https://www.govinfo.gov/content/pkg/FR-2015-03-16/pdf/2015-03733.pdf>

<sup>3</sup> NACAA Comments to EPA on November 30, 2018 NPRM, *Standards of Performance for New Residential Wood Heaters, New Residential Hydronic Heaters and Forced-Air Furnaces* (January 14, 2019) – <http://4cleanair.org/sites/default/files/Documents/NACAAComments-EPA-RWH-NPRM-01142019.pdf>

<sup>4</sup> 83 Fed. Reg. 61,574 (November 30, 2018) – <https://www.govinfo.gov/content/pkg/FR-2018-11-30/pdf/2018-26083.pdf>

Step 2 emission limits established by EPA in its final 2015 NSPS Rule for wood heaters, FAFs and HHs as well as the May 15, 2020 compliance date. The level and timing of the Step 2 emission limits promulgated in the 2015 NSPS Rule are well-supported by the record. In comments submitted to the docket on the February 3, 2014 proposed rule<sup>5</sup> that preceded EPA's final 2015 NSPS Rule, NACAA highlighted that Step 2 emission limits more rigorous than those proposed were feasible and that the pace of compliance could be accelerated. As EPA now contemplates the feasibility of the level of the Step 2 standards and the May 15, 2020 compliance date NACAA cites to its January 14, 2019 comments on EPA's NPRM:

Manufacturers had five years notice of the 2020 compliance date for the Step 2 standards and were aware years earlier that EPA was preparing to revise the decades-old standards for wood heaters and set new standards for other devices that were never regulated at all. EPA worked closely with these stakeholders as the March 2015 rule was developed and incorporated a number of provisions – including an accommodating two-step phase in of standards with a five-year lag before Step 2 compliance was required. Numerous manufacturers have now made investments enabling them to produce over 200 different models (in all categories – boilers, furnaces and stoves) of the cleaner devices necessary to meet the Step 2 standards in order to be ready for on-time compliance with the May 2020 regulatory deadline.”<sup>6</sup>

The feasible Step 2 standards and compliance date that EPA established in its 2015 NSPS Rule are critical to state and local clean air efforts across the nation. NACAA explained the benefits and importance of maintaining the level and timing of these standards in our January 14, 2019 comments to EPA on the NPRM:

The Step 2 NSPS set to take effect in 2020 will put in place consistent health-protective residential wood heater emission standards nationwide and help to ensure the cleanest and most efficient wood heaters are available for purchase, providing significant long-term benefits to reduce fine particulate emissions regionally and locally. A few states have enacted legislation barring their jurisdictions from enforcing the March 2015 federal NSPS for residential wood-burning heating devices. However, emissions from residential wood combustion cause many counties across America to either exceed, or come precariously close to exceeding, the health-based National Ambient Air Quality Standards (NAAQS) for PM<sub>2.5</sub>.

Many state and local air quality agencies are relying on the emission reductions that will result from the Step 2 NSPS to attain and maintain the NAAQS and/or meet other clean air goals, and have included these reductions in their State Implementation Plans. If EPA allows the continued sale of Step 1 HHs, FAFs and/or wood heaters after the Step 2 compliance date these states and localities will be left with a shortfall in emission reductions that could impede their attainment efforts and put nonattainment areas at risk of missing statutory deadlines and attainment areas at risk of violating the NAAQS. Furthermore, such an outcome would be directly counter to EPA's first Priority Goal for FY 2018-2019 – “Improve air quality by implementing pollution control measures to reduce the number of nonattainment areas” – as stated in *Working Together: FY 2018-2022 U.S. EPA Strategic Plan*.<sup>7</sup>

There are complexities around regulating emissions from residential woodstoves at the state or local level because the devices are installed and operated in private homes. Nonetheless, in the face of a sell-through, some states and localities that depend on the emission reductions to occur from implementation of the Step 2 standards in May 2020 – as an alternative to regulating other

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<sup>5</sup> 79 Fed. Reg. 6330 (February 3, 2014) – <https://www.govinfo.gov/content/pkg/FR-2014-02-03/pdf/2014-00409.pdf>

<sup>6</sup> Supra note 3, at 2

<sup>7</sup> *Working Together: FY 2018-2022 U.S. EPA Strategic Plan*, U.S. Environmental Protection Agency (February 2018), p. 5 – <https://www.epa.gov/sites/production/files/2018-08/documents/fy-2018-2022-epa-strategic-plan-print.pdf>

industries or source categories to offset the emission reduction shortfall, if such other industries or source categories are even available – may have no choice but to pursue or build upon their own residential wood heating device regulatory programs in order to ensure the anticipated reductions are realized.<sup>8</sup>

EPA is required, under Section 111(b)(1)(B) of the Clean Air Act (CAA), to review federal NSPS every eight years unless the agency determines a review is not appropriate in light of readily available information on the efficacy of a particular standard. Therefore, EPA must undertake a review of the 2015 NSPS in 2023 and, based on its review, must revise the standards, if needed, to reflect improvements in methods for reducing emissions. EPA should reserve any review of or amendment to the level of or compliance dates for the 2015 NSPS until the statutorily required NSPS review, to begin in 2023.

### Test Methods – Transition to Cord Wood

EPA notes in the ANPRM that, at the time the agency promulgated the 2015 NSPS Rule, it had determined that requiring cord wood test methods for the Step 2 standards was premature. EPA further indicates in the ANPRM that it has received “many informal comments” and taken part in several discussions related to the differences between the existing compliance test methods and cord wood compliance testing, which more accurately represents in-field performance. EPA seeks comment on the direction and extent to which the agency should evaluate existing test methods.

NACAA supports testing that more closely represents in-field operating conditions and performance. EPA should undertake efforts to develop test methods that accomplish this. However, transitioning to cord wood, alone, will not be sufficient for more accurate testing. As EPA acknowledges in its discussion paper, *Process for Developing Improved Cordwood Test Methods for Wood Heaters*,<sup>9</sup> there are a number of additional factors that would contribute to testing that better predicts in-home use. Along with the use of cord wood, such factors – including, among others, load size and size of fuel pieces – should be incorporated into the parameters of any future test methods. NACAA does not, however, support any changes in this regard at this time. Rather, the agency should begin now to develop new test methods as described in these comments, above. With a rigorous schedule these methods could be completed and available for the statutorily required NSPS review in 2023. We urge that EPA work closely with state and local air agencies, as well as other stakeholders, throughout this test-method-development initiative.

Also related to testing, EPA should adopt a requirement now, to take immediate effect, for the concurrent use of a tapered element oscillating microbalance (TEOM) test method to measure real-time particulate matter (PM), using the NESCAUM Standard Operating Procedures, along with standard filter measurements for all EPA residential wood heating device NSPS certification testing, including pre-burn activities. For all testing, a complete real-time emission profile should be submitted as part of the non-confidential business information (CBI) portion of the test report.

Implementation of this TEOM requirement would benefit federal, state and local agencies in several important ways. First, the requirement would result in the immediate availability of emission profiles of residential wood heating devices to state and local air agencies so they can ascertain the performance of each device with respect to controlling PM emissions. Second, the requirement would yield data to inform

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<sup>8</sup> Supra note 3, at 5

<sup>9</sup> *Process for Developing Improved Cordwood Test Methods for Wood Heaters, Discussion Paper*, U.S. Environmental Protection Agency (March 2016) – [https://www.epa.gov/sites/production/files/2016-03/documents/discussion\\_paper\\_-\\_process\\_for\\_dev\\_imp\\_cwtm\\_030916.pdf](https://www.epa.gov/sites/production/files/2016-03/documents/discussion_paper_-_process_for_dev_imp_cwtm_030916.pdf)

EPA's efforts to improve the precision of EPA Method 5G or ASTM 2515. This TEOM requirement can be added without any change to the existing Step 2 emission limits or compliance deadline.

### Step 2 Emission Limit Based on Weighted Averages Versus Individual Burn Rates for Hydronic Heaters and Forced-Air Furnaces

In the final 2015 NSPS Rule EPA did not include a weighted-average approach for HH and FAF Step 2 compliance and, instead, called for these devices to meet the standards at each individual burn rate to prevent large emission discharges. EPA now seeks comment on determining compliance with weighted averages rather than individual burn rates for HHs and FAFs.

NACAA opposes the use of a weighted-average approach, which minimizes peak emissions, thereby presenting a less accurate reflection of in-field performance, and would have the effect of weakening the Step 2 standards. The best system of emission reduction (BSER) analysis conducted by EPA for the 2015 NSPS Rule, and which underlies the Step 2 standards, did not include use of a weighted average. If EPA believes compliance should be determined with a weighted average instead of an individual burn rate the agency should conduct another BSER analysis to make this case and also demonstrate why its analysis for the 2015 NSPS Rule resulted in a different conclusion.

### EPA Compliance Audit Testing

EPA seeks comment on whether the compliance audit test provisions in the 2015 NSPS Rule are necessary to ensure compliance. In particular, the agency solicits comment on the selection of the laboratory to perform the audit test and whether EPA should consider the variability of emissions testing when assessing the results of an audit test.

With respect to the selection of the lab to perform audit testing, one independent, third-party lab should be selected to conduct all compliance audit testing so that there is consistency across the program and that a lab that conducts certification testing is not permitted to conduct audit testing.

With respect to variability in the compliance audit testing program, wood stoves that certify at less than 1 gram per hour (g/hr) should be allowed a variability of  $\pm 1$  g/hr. For units that certify at more than 1 g/hr, the current variability provision is adequate.

### ISO-Accredited Third-Party Review

EPA included in the 2015 NSPS Rule a provision for ISO-accredited third-party review to "streamline and speed up" the process by which manufacturers of wood heating devices apply for certification. The current process allows an EPA-approved certifying test lab to also serve as the third-party reviewer for a given certification test. A majority of devices are currently certified by the same lab that conducts the testing. EPA seeks comment on whether this practice should be allowed. NACAA does not support allowing the EPA-approved lab that conducted the certification testing to also act as the third-party reviewer of the test results and recommends that EPA amend the 2015 NSPS Rule to prohibit this from occurring.

## Electronic Reporting Tool

EPA seeks comment on the establishment of electronic reporting for the submittal of non-CBI certification applications rather than submittal via hard copy and identifies the Electronic Reporting Tool (ERT) as a possible mechanism for such submittals. NACAA supports electronic reporting through the ERT for non-CBI certification applications, including all data obtained during the compliance test. Such reporting will not only “relieve manufacturer burden and enhance efficiencies,” as EPA notes, but will also ensure consistency and transparency in reporting and allow states and localities immediate access to important data.

## Warranty Requirements for Certified Appliances

EPA seeks comment on retention, revision or elimination of the warranty requirements included in the 2015 NSPS Rule. NACAA supports the retention of the warranty requirements for catalytic devices. For non-catalytic devices, EPA should add warranty requirements, particularly ones for key components related to controlling emissions from the device (including, among others, tubes).

Thank you for considering our perspectives on these important issues. On behalf of NACAA, we look forward to working in close partnership with EPA and other stakeholders as the agency pursues any actions regarding residential wood heating devices. If you have questions or would like further information please do not hesitate to contact either of us or Nancy Kruger, Deputy Director of NACAA.

Sincerely,



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