



**Via Regulations.gov**

14 January 2019

Andrew Wheeler  
Acting Administrator  
Environmental Protection Agency  
1200 Pennsylvania Avenue, N.W.  
Mail Code 1101A  
Washington, DC 20460  
Docket ID No. EPA-HQ-OAR-2018-0195

**Re: *Connecticut DEEP on Standards of Performance for New Residential Wood Heaters, New Residential Hydronic Heaters and Forced Air Furnaces***

Dear Administrator Wheeler:

EPA's proposed amendments to the 2015 new source performance standards (NSPS) for hydronic heaters and new forced air furnaces are a concern to the Connecticut Department of Energy and Environmental Protection (DEEP). In order to provide manufacturers and sellers of the wood burning devices regulated by the NSPS to prepare for compliance with strict air emissions limits, the NSPS takes a phased approach to implementation. The sale of wood burning devices meeting the Step 1 limits is set to end in May 2020, at which time only devices meeting the stricter emission limits of Step 2 may be sold. EPA is proposing to add a two-year sell-through period for all regulated hydronic heaters and forced air furnaces. This sell-through will allow retail sellers to sell higher-emitting Step 1 compliant devices through May 2022. DEEP opposes such a sell-through or any other delays in full implementation as the proposed amendments will harm public health and the environment and are unnecessary.

Residential wood heating in the United States produces five times more direct fine particulate matter (PM<sub>2.5</sub>) emissions than all U.S. petroleum refineries, cement manufacturers and pulp and paper plants combined.<sup>1</sup> Wood smoke contains a mixture of harmful substances, including PM<sub>2.5</sub>, volatile organic compounds and toxic air pollutants, which penetrate deep into the lungs, exacerbating cardiac and respiratory problems.

Hydronic heaters may be a small percent of the residential wood heating market nationally but the nuisance problem caused by these devices is significant in Connecticut. As a densely populated state that still has some rural areas and many suburban or exurban residential settings,

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<sup>1</sup> Introduction to Hearth Appliances, Nature and Magnitude of Residential Wood Smoke, Presentation of Larry Brockman, US EPA, March 6, 2018, p. 5. <https://www.nescaum.org/documents/march-2018-residential-wood-heating-workshop/>

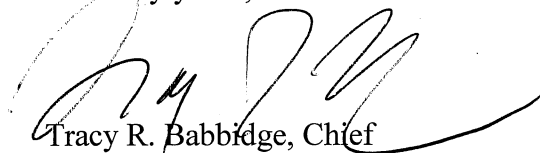
a hydronic heater that is improperly located or used improperly is a problem. In recent years, DEEP has had many complaints about wood smoke, mainly from neighbors of people operating hydronic heaters. While the state has statutory provisions concerning siting and stack height, Connecticut has no emission standards in place for such units making the timely implementation of the federal Step 2 standards even more important.

The implementation of the proposed two-year sell-through for forced air furnaces and hydronic heaters is estimated to result in 257 tons of PM<sub>2.5</sub>, 271 tons of VOC and 1444 tons of CO being released compared to implementation of the 2015 NSPS as adopted.<sup>2</sup> The annual average cost of these emissions for years 2019 to 2022 in terms of the forgone health benefits is estimated at a range of \$70 to \$210 million dollars (2016\$). The annual average cost savings to industry for 2019-2022 is \$8.3 million (2016\$).<sup>3</sup> So, the estimated short-term savings for a single industry are achieved at a societal cost that is at least an order of magnitude higher. Given that the estimates are only for a fraction of the lifetime of the furnaces and heaters, the actual costs are likely higher.

In addition to the significant public health cost, the additional compliance window appears unnecessary given that the proposed final standards are now met by a number of devices. The full benefit of this rule absent the proposed revisions will not be realized for many years, perhaps decades, because of the long life-span and slow turnover of these devices. Installation of devices meeting less stringent standards has long-term air quality and health impacts. Furthermore, manufacturers and sellers had five years notice of the 2020 compliance date for the Step 2 standards and should have been planning appropriately to reduce the inventory of Step 1 compliant devices and increase production of Step 2 compliant devices, of which there are many models. A delay would also punish manufacturers who have made investments to produce devices that meet the Step 2 standards. Thus, manufacturers and sellers should not be given more time to address a legal requirement imposed on them five years ago.

DEEP encourages EPA to abandon the proposed amendments and implement the NSPS as adopted and achieve the anticipated benefits in air quality and public health. Thank you for the opportunity to submit these comments.

Sincerely yours,



Tracy R. Babbidge, Chief  
Bureau of Air Management

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<sup>2</sup> Annual average of forgone emissions reductions under EPA's scenario 2 for years 2019 -2022. Supplemental Regulatory Impact Analysis for "Standards of Performance for New Residential Wood Heaters, New Residential Hydronic Heaters and Forced Air Furnaces (EPA-HQ-OAR-2018-0195)." EPA (November 20, 2018.)

<sup>3</sup> Supplemental Regulatory Impact Analysis for "Standards of Performance for New Residential Wood Heaters, New Residential Hydronic Heaters and Forced Air Furnaces (EPA-HQ-OAR-2018-0195)." EPA (November 20, 2018.) The forgone benefits estimates are calculated at two discount rates and the calculated values for both 3 and 7% discount rates are included in the range presented here. Costs and forgone benefits are both based on EPA's scenario 2.