



June 23, 2023

VIA ELECTRONIC SUBMISSION

The Honorable Michael S. Regan  
Administrator  
Environmental Protection Agency  
Washington, DC 20460

**Re: National Emission Standards for Hazardous Air Pollutants: Coal- and Oil-Fired Electric Utility Steam Generating Units Review of the Residual Risk and Technology Review (Docket ID EPA-HQ-OAR-2018-0794)**

Dear Administrator Regan:

On April 24, 2023, the Environmental Protection Agency (EPA) published a proposed rule titled National Emission Standards for Hazardous Air Pollutants: Coal- and Oil-Fired Electric Utility Steam Generating Units (EGU) Review of the Residual Risk and Technology Review.<sup>1</sup> This letter constitutes the Office of Advocacy's (Advocacy) public comments on the proposed rule.

Advocacy is concerned about EPA's proposal to require Continuous Emissions Monitoring Systems (CEMS) for particulate matter (PM). EPA's past estimates that this technology is cost effective have not proven accurate, and the agency's proposed lowering of emission standards will make use of this technology even more difficult. EPA should not finalize this requirement and continue to allow quarterly stack testing to demonstrate compliance with PM standards.

## **I. Background**

### **A. The Office of Advocacy**

Congress established the Office of Advocacy under Pub. L. 94-305 to represent the views of small entities before Federal agencies and Congress. Advocacy is an independent office within the U.S. Small Business Administration (SBA). As such, the views expressed by Advocacy do not necessarily reflect the views of the SBA or the Administration. The Regulatory Flexibility

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<sup>1</sup> 88 *Fed. Reg.* 24854 (Apr. 24, 2023).

Act (RFA),<sup>2</sup> as amended by the Small Business Regulatory Enforcement Fairness Act (SBREFA),<sup>3</sup> gives small entities a voice in the rulemaking process. For all rules that are expected to have a significant economic impact on a substantial number of small entities, the RFA requires federal agencies to assess the impact of the proposed rule on small entities and to consider less burdensome alternatives.

The Small Business Jobs Act of 2010 requires agencies to give every appropriate consideration to comments provided by Advocacy.<sup>4</sup> The agency must include a response to these written comments in any explanation or discussion accompanying the final rule's publication in the *Federal Register*, unless the agency certifies that the public interest is not served by doing so.<sup>5</sup>

Advocacy's comments are consistent with Congressional intent underlying the RFA, that "[w]hen adopting regulations to protect the health, safety, and economic welfare of the nation, federal agencies should seek to achieve statutory goals as effectively and efficiently as possible without imposing unnecessary burdens on the public."<sup>6</sup>

## **B. The Proposed Rule**

On April 23, EPA published a proposed rule to amend the National Emission Standards for Hazardous Air Pollutants for coal- and oil-fired power plants, a.k.a. the Mercury and Air Toxics Standards. As part of this proposed rule, EPA would lower the emission standard for PM to one third of the current standard. EPA believes this is reasonable because 91 percent of facilities are already meeting this standard.

EPA also proposes changing the way EGUs would demonstrate compliance with the PM standard to require PM CEMS. Under the current rule, operators must perform quarterly stack tests. However, operators can instead use a PM CEMS to demonstrate compliance. When issuing the current rule, EPA projected the PM CEMS would be significantly less expensive than quarterly stack testing, but EPA estimates only about one-third of EGU operators have chosen to install PM CEMS.<sup>7</sup> In the proposed rule, operators would no longer have the option to perform quarterly stack tests to demonstrate compliance and would be required to install PM CEMS.

## **II. Advocacy's Small Business Concerns**

Advocacy has three chief concerns with this proposed rule.

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<sup>2</sup> 5 U.S.C. §601 et seq.

<sup>3</sup> Pub. L. 104-121, Title II, 110 Stat. 857 (1996) (codified in various sections of 5 U.S.C. §601 et seq.).

<sup>4</sup> Small Business Jobs Act of 2010 (PL. 111-240) §1601.

<sup>5</sup> *Id.*

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

<sup>7</sup> 88 *Fed. Reg.* at 24872.

**A. EPA should take seriously the revealed preferences of businesses in their decisions about compliance strategy.**

Small businesses are the experts in the conduct of their own business. This is especially true in industries that are capital intensive and highly regulated, like the power sector. Small businesses tend to be more sensitive to unreasonable costs because their margins are often lower than their large competitors.

It is therefore unreasonable for EPA to ignore a clear signal from small and large businesses. Two thirds of EGU operators chose to forgo what EPA insists is the most cost-effective means of demonstrating compliance with the PM emission limits. Through their choices and the allocation of their scarce resources, small EGU operators have demonstrated that EPA's estimates of the advantages of PM CEMS over stack testing were incorrect. This could have been a result of inaccurate cost estimates or the technical challenges of installing and operating PM CEMS.

EPA itself has recognized that PM CEMS can present technical challenges. For example, in 2012, while developing the first Mercury and Air Toxics Standards rule, EPA staff wrote that PM CEMS are relatively unique because their operation is site-specific and must be individually calibrated against an accepted reference test. Each PM CEMS must be tested multiple times against a wide range of PM emissions to develop the mathematical relationship between the CEMS output and the PM standard. “[EPA regulations] requires at least five test runs at each of three different operating conditions (i.e., PM concentrations) that are to range from 25 to 100 percent of the allowable emissions for a total of 15 or more test runs.”<sup>8</sup> The site-specific nature of this technology and the effort necessary to calibrate and maintain the equipment may impose costs significantly higher than EPA has projected.

In this rule, EPA relies on cost estimates “from representatives of the Institute of Clean Air Companies, a trade association consisting of air pollution control and measurement and monitoring system manufacturers and of environmental equipment and service providers, and from Envea/Altech, a PM CEMS manufacturer and vendor”<sup>9</sup> Advocacy suggests that the revealed preference of EGU operators should be considered more reliable than vendor estimates that do not account for the site-specific nature of this technology.

**B. EPA should reexamine its assumptions about the effectiveness of PM CEMS for the proposed emissions limit.**

As discussed above, PM CEMS installations are site-specific and must be calibrated separately at every location and with a range of PM emission rates that relate to the emission standards. This leads to two concerns with EPA's proposal.

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<sup>8</sup> Memorandum from Conniesue Oldham, Group Leader, OAQPS/AQAD, to Bob Schell, Group Leader, OAQPS/SPPD, *Particulate Matter Continuous Emissions Monitoring System (PM CEMS) Capabilities* (Jun. 13, 2023), regulations.gov Document ID EPA-HQ-OAR-2018-0794-5828, at 3 [hereinafter *PM CEMS Capability Memo*].

<sup>9</sup> 88 *Fed. Reg.* at 24872.

First, current PM CEMS use is based on current calibrations, using the current PM emission standard. The required lower bound of the PM range for testing (i.e., 25 percent of the current allowable emissions) is 75 percent of the proposed allowable emissions. Reaching 25 percent of the proposed allowable emissions will be challenging for most EGUs. EPA recognized this issue in 2012:

For the low PM emissions level range particularly, the stack concentration level would have to remain steady during each test run to capture the relevant correlation values. It is worth repeating that meeting [EPA requirements] becomes increasingly problematic with decreasing numerical emission limits given that confidence and tolerance intervals are expressed as a percent of the emissions limit.<sup>10</sup>

PM CEMS may be a demonstrated technology at the current emission levels, but neither EPA nor the vendors are clear whether PM CEMS have overcome these challenges at significantly lower emissions levels.

### **C. EPA relies on stack test data to establish the lower PM standard.**

EPA has asserted that lowering the PM standard is reasonable and technologically feasible, because 91 percent of EGUs already meet the standard. However, this represents mostly compliance using stack testing. PM CEMS is a different technology and has the potential to identify instances of noncompliance where none existed before. EPA cannot confidently assert that 91 percent of EGUs already meet the standard using PM CEMS because they do not use PM CEMS.

EPA should not be comparing numerical emission standards absent discussion of the context of the measurement technique. By requiring a change to from stack testing to using PM CEMS, EPA undermines its justification for tightening the PM standard.

### **III. Conclusion**

EPA should not move forward with its proposal to require PM CEMS for coal- and oil-fired power plants. EGU operators have demonstrated by their compliance choices that EPA has been overly optimistic about how cost-effective this technology is. The proposed lowering of emission standards will only make use of this technology even more difficult. EPA has proposed lowering PM standards based on the existing measurement requirements, and changing measurement requirements would undermine the justification for doing so. EPA should not finalize the requirement for PM CEMS and continue to allow quarterly stack testing to demonstrate compliance with PM standards.

If you have any questions or require additional information, please contact me or Assistant Chief Counsel Dave Rostker at (202) 205-6966 or by email at david.rostker@sba.gov.

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<sup>10</sup> *PM CEMS Capability Memo* at 4.

Sincerely,

/s/

Major L. Clark, III  
Deputy Chief Counsel  
Office of Advocacy  
U.S. Small Business Administration

/s/

Dave Rostker  
Assistant Chief Counsel  
Office of Advocacy  
U.S. Small Business Administration

Copy to: The Honorable Richard L. Revesz  
Administrator, Office of Information and Regulatory Affairs  
Office of Management and Budget