



June 6, 2023

Honorable Michael S. Regan
Administrator
U.S. Environmental Protection Agency
EPA Docket Center, OECA
Mail Code 28221T
1200 Pennsylvania Avenue, NW
Washington, DC 20460

Attn: Docket No. EPA-HQ-OAR-2022-0920

Re: Comments on EPA's Review of Emission Standards for Clean Air Act Section 129
Pollutants from the Large Municipal Waste Combustor Source Category

Dear Administrator Regan:

The Pennsylvania Department of Environmental Protection (Department) appreciates the opportunity to submit comments in response to the United States Environmental Protection Agency's (EPA) December 8, 2022 solicitation of input regarding efforts to review and potentially revise emission standards for Clean Air Act (CAA) section 129 (42 U.S.C. § 7429) pollutants from the Large Municipal Waste Combustor (LMWC) source category. The Department recognizes and supports EPA's efforts to revise the emission standards for the LMWC source category. Emissions from LMWC facilities contribute significantly to the degradation of air quality in the United States.

EPA should evaluate the following Department analysis and recommendations when revising LMWC source category emission standards.

Nitrogen Oxide (NO_x) Emission Limits: The Department recommends that EPA evaluate the Ozone Transport Commission Stationary and Area Sources Committee (OTC SAS) "Municipal Waste Combustor Workgroup Report" (prepared June 2021) recommendations when establishing NO_x emission limits. This report concluded that a control level of 110 parts per million dry volume (ppmvd) is likely achievable for most LMWCs in the region.

The Department has analyzed actual Continuous Emission Monitoring System (CEMS) data for NO_x emissions from LMWC units in Pennsylvania and determined that units equipped with Selective Non-Catalytic Reduction (SNCR) controls can achieve 110 ppmvd NO_x corrected at 7% oxygen on a daily average basis.

The Department has also evaluated the cost-effectiveness of SNCR for uncontrolled LMWCs using an estimated 500 tons per day throughput and reference cost data from controlled LMWCs. The Department found that to retrofit LMWCs with SNCR controls with a 40% NO_x reduction efficiency for LMWCs, with a baseline NO_x emission of 180 ppmvd corrected at 7% oxygen,

Secretary

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yields a cost effectiveness of \$2,465 per ton of NO_x removed and is therefore an economically feasible option.

As per the June 2021 OTC SAS report, the workgroup performed a cost analysis for installation of a low NO_x burner (LNB) on a LMWC with a baseline emission rate of 180 ppmvd. The workgroup estimated the cost-effectiveness at \$3,204 per ton of NO_x removed with a post-control emission rate of 110 ppmvd. The OTC SAS workgroup concluded that based on its cost analysis for LNB technology and review of engineering studies of similar MWCs in the OTR, a control level 110 ppmvd on a 24-hour daily averaging period is likely achievable for most LMWCs in the region.

On November 12, 2022, Pennsylvania's final rulemaking entitled "Additional RACT Requirements for Major Sources of NO_x and VOCs for the 2015 Ozone NAAQS" (RACT 3 Rule), established a presumptive RACT emission limit of 110 ppmvd NO_x corrected at 7% oxygen on a daily average basis for major NO_x emitting municipal waste combustors in 25 Pa. Code § 129.112(f). See 52 Pa.B. 6980-6981 and 6991. The Department submitted these final RACT 3 regulations to EPA as a revision to the Commonwealth's State Implementation Plan.

Based on the review of actual NO_x emission data from LMWCs in Pennsylvania, the Department's independent cost-effectiveness analysis, and information reviewed in OTC SAS workgroup's June 2021 report, the Department is recommending that EPA establish a revised emission limitation for LMWCs of 110 ppmvd NO_x corrected at 7% oxygen. LMWC units equipped with CEMS should comply with the NO_x limit on a daily average basis.


Particulate Matter (PM) Emission Limits: The Department recommends that EPA include condensable PM emissions with existing filterable PM emission limits and compliance demonstrations. CAA section 129(a)(4) requires that performance standards promulgated under CAA section 111 (42 U.S.C. § 7411) and CAA section 129 applicable to solid waste incineration units specify numerical emission limitations for PM (total and fine). The Department considers condensable PM to be a subset of both total and fine PM.

Emissions Test Methods and Procedures: The Department recommends using an EPA Reference Method or Performance Specification for any performance evaluation requirement, when available, as opposed to the inclusion of ASTM test methods. Current ASTM test methods are not always freely available to state and local agencies. In addition, Pennsylvania's Air Quality Technical Advisory Committee has noted that certain EPA regulations cite specific ASTM methods, which are obsolete. These specific references prevent the use of updated ASTM methods without regulatory changes by EPA.

Premise of Comments: Although not specifically stated in EPA's announcement, the Department anticipates that any revision to the standards for LMWCs would not relax any existing requirements specified in 40 CFR Part 60, Subpart Eb.

Thank you for the opportunity to comment. If you have any questions or comments, please contact Mr. Mark Hammond, Director of the Bureau of Air Quality, by e-mail at mahammond@pa.gov or by telephone at 717.787.9702.

Sincerely,

A handwritten signature in blue ink that reads "Richard Negrin". The signature is written in a cursive style with a long horizontal stroke at the end.

Richard Negrin
Acting Secretary