March 25, 2024

TO: U.S. ENVIRONMENTAL PROTECTION AGENCY
FR: THE INSTITUTE OF CLEAN AIR COMPANIES
RE: EPA–HQ–OAR–2017–0183

The Institute of Clean Air Companies (ICAC) appreciates the opportunity to offer comments in response to EPA's proposed Amendments to Large Municipal Waste Combustor Emission Standards (EPA–HQ–OAR–2017–0183). ICAC is a national trade association of companies that supply greenhouse gas management, air pollution control and monitoring systems, equipment, and services for stationary sources. For 60 years, ICAC member companies have helped to clean the air by developing and installing reliable, cost-effective control and monitoring systems.

We support technology-neutral and flexible policies that enable cost-competitiveness and a diverse set of technologies to compete in the market. ICAC's comments focus primarily on the need for more current data, consideration of additional technologies and removal products, and start-up, shut-down, and transitional operations.

Again, ICAC appreciates the opportunity to offer comments on this notice of proposed rulemaking, and we look forward to answering any further questions should EPA seek additional information.

Best regards,

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Introduction

The Institute of Clean Air Companies (ICAC) appreciates the opportunity to respond to the Environmental Protection Agency's (EPA) proposed amendments to the new source performance standards (NSPS) and emission guidelines (EG) for large municipal waste combustion (MWC) units.

ICAC is a trade association headquartered in Arlington, VA, and represents more than thirty companies in the air pollution control, greenhouse gas management, and emissions measurement industry. ICAC members have successfully developed and deployed solutions to address emissions challenges for more than 60 years and are uniquely positioned to provide their expertise on emerging clean technologies and advancing clean technology markets. ICAC members have successfully commercialized solutions for the industrial, power, oil and gas, and maritime sectors, and have worked to address challenges that emerge at the nexus of air and water pollution management. Pollutants managed by member technologies include mercury, acid gases, PM, NOx, SOx, VOCs, HAPs, GHGs, HCl, and coal ash. Our members have operations in all fifty states and range from multi-national corporations with thousands of employees to small businesses focused on local emission challenges.

Comments

1. ICAC commends EPA on the use of subcategorization based on combustor type. Fundamental differences in design approach and physical configuration for combustor type may have a dramatic impact on fuel utilization and combustion efficiencies across various operating states, including startup and shut down while employing transitional fuels. These differences are most notable when assessing carbon monoxide and nitrogen oxide emissions and therefore careful consideration should be given to the inherent differences exhibited by type.

2. Section 129 of the CAA requires review of sources at five-year intervals, but the data used for evaluation large MSW combustors in the current proposal are from between 1995-2009. It is understood that data accessed for review during the proposed rulemaking were from actual sources within the category. However, the methodology used to "adjust" emissions data from the collected set across multiple time frames to determine the "MACT Floor" for each pollutant seems unnecessarily confusing, complicated, and imprecise. In establishing this proposal, the EPA should consider collecting and compiling more current data from a representative selection of sources within the category.

3. Data and information collected during the 2023 Good Neighbor Plan (GNP) with regards to NOx controls should only be used for cost considerations in this current proposed rule. The 2023 GNP rulemaking was applicable to many sources in several states contributing to smog-forming pollution. In the 2023 GNP rulemaking, EPA considered solid waste combustors and incinerators in only twenty states. Given, that the subsequent application of any rule finalized from the current large MSW combustor proposed rulemaking will have a broader national scope than the 2023 GNP, the EPA should broaden its investigation into the applicability and availability of the Covanta's patented Low NOx Technology (LN^{tm}) and advanced SNCR NOx control to the numerous sources located outside of the twenty states consider in the 2023 GNP.

4. In the EPA's discussion of the "MACT Floor/5-year review," EPA concluded that incremental improvement in the hydrogen chloride, sulfur dioxide, and mercury emissions can be achieved with increased sorbent use. EPA should acknowledge and assess in its analysis the many advantages of using enhanced hydrated lime products and advanced engineered activated carbon products. It is about mass transfer efficiency. Enhanced hydrated lime products and advanced engineered activated carbon products have shown dramatic improvements in the effective removal of acid gases, mercury, and semi-volatile metals emissions. Higher level of pollutant removal may be realized at sorbent usage rates lower than initially contemplated by EPA in this rule making. Both enhanced carbon and lime come at an additional cost which EPA did not include in their analysis.

5. ICAC is supportive of the proposed NOx emissions limits for existing sources and new sources set forth in this rulemaking and the intention to parallel the NOx emissions limits for existing sources promulgated in the 2023 GNP. However, as expressed in the document prepared for EPA, entitled "NOx Emission Control Technology Installation Timing for Non-EGU Sources Final Report," only Covanta's patented Low NOx Technology (LN^{tm}) is explicitly defined to have achieved "a daily NOx emission limit of 110 ppm." Reliance on a single, proprietary technology for achieving a national standard may be unjustified. If it has not already, the EPA should provide documentation showing the NOx reduction performance achieved in practice at full-scale for advanced SNCR, as applied to large MSW combustors as well as any applicability with regard to SCR and catalytic filter bag technologies applied at new facilities. Furthermore, EPA may be required to consider subcategorizing refuse derived fuel (RDF) boilers, rotary kilns and other furnace designs. Based on available data reviewed and Covanta's known operating experience, these NOx control technologies will not necessarily work on RDF boilers. We recommend that EPA consider separate classification for RDF since their boiler designs are significantly different than mass burn designs. Similarly, rotary kilns and potentially mass burn systems designed by other suppliers may have challenges implementing these technologies.

6. ICAC agrees with EPA's action regarding the removal of the "alternate percent reduction" standard for compliance with hydrogen chloride, sulfur dioxide, and mercury emissions limitations. MSW is a heterogenous fuel with varying chloride, and sulfur levels that needs to be properly evaluated and considered before alternative removal standards could be eliminated. ICAC agrees that removal of the "alternate percent reduction" standard provides an equitable application of the desired emissions standards. Reliance solely on a numeric emissions limitation allows national consistency and reduces ambiguity. EPA failed to use data to determine impacts of removing alternative reduction standards.

7. The EPA's determination that the primary use of natural gas for start-up and shut-down operations will lead to lower emissions of metals and air toxics. While this may be accurate, the variation in nitrogen oxide and carbon monoxide emissions for start-up and shut-down operation by subcategory should be reviewed. During start-up, shut-down, and transitional operations, combustion is typically suboptimal and actual oxygen concentrations during such operations may be higher than those anticipated during normal operations. In such cases, use of EPA methodology to normalize emissions to

7% O_2 could lead to reporting of “non-representative” concentrations based solely on a calculated misrepresentation. During anticipated operating scenarios, such as startup and shut down, where elevated CO concentrations are recorded at corresponding non-representative high oxygen concentrations, EPA should consider establishing carbon monoxide limitations at “actual” levels and not “corrected” levels. EPA needs to conduct data analysis from actual operations. Data are available from plant operators. EPA determined that MWCs could meet emission limits during warm up periods without reviewing a single data point for which to make that conclusion for any pollutant but most specifically for the CO based limit and to NOx and SO_2 based limits.

8. In this proposed rulemaking, it appears that EPA relied on emissions information that is over 10 years removed from current operations of affected sources. The EPA applied, while arguably reasonable, a novel approach to establish the MACT Floor where the emissions data set was “adjusted” to account for supplemental controls installed between the applicable review period and the date the actual emissions data sets were recorded. Due to the inherent complexity of the approach taken by EPA, it would be prudent for the Agency to extend the public comment period for the proposed rule by 30 days or more to allow potentially affected sources to review and consider more fully the data and methods supplied in the docket.

Conclusion

ICAC remains committed to regulatory actions that support environmental stewardship and protect human health. ICAC member companies are proud of their role in helping to clean the air by developing and installing reliable, cost-effective control and monitoring systems that have enabled compliance with environmental requirements. In addition to mercury, ICAC has achieved reductions across a broad range of pollutants, including NOx, SOx and particulate matter, as well as VOCs, acid gases, dioxins/furans and a host of other toxic air pollutants. ICAC would welcome the opportunity to meet with EPA to address or clarify any issue raised in these comments. We stand ready to assist EPA in further cost-effective air pollution reduction efforts.