

APPENDIX A

**Summary of Significant Comments and Responses
For Proposed Amendments to Rule 4352
(Solid Fuel Fired Boilers, Steam Generators, and Process Heaters)**

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Appendix A: Comments and Responses

December 16, 2021

**SUMMARY OF SIGNIFICANT COMMENTS
DRAFT AMENDMENTS TO RULE 4352
(SOLID FUEL FIRED BOILERS, STEAM GENERATORS, AND PROCESS HEATERS)
November 16, 2021**

The District published the proposed rule November 16, 2021 for 30-day public review and comment.

No comments were received.

**SUMMARY OF SIGNIFICANT COMMENTS
DRAFT AMENDMENTS TO RULE 4352
(SOLID FUEL FIRED BOILERS, STEAM GENERATORS, AND PROCESS HEATERS)
November 4, 2021**

The District held a public workshop to present, discuss, and receive comments on the draft amendments to Rule 4352 on November 4, 2021. Summaries of significant comments received during the public workshop and associated comment period are summarized below.

Comments were received from the following:

Derek Furstenwerth, Consolidated Asset Management Services (CAMS)
Terry Coble, Covanta Holding Corporation (Covanta)

1. **COMMENT:** The SO_x limit of 0.02 lbs/MMBtu for biomass fueled units is not supported by emissions data. Historical emissions data shows a significant number of 30-day rolling averages in excess of 0.02 lbs/MMBtu. (CAMS)

RESPONSE: Based on the District's technical assessment and the feasible controls available, District staff found that the proposed emissions limits for SO_x are technologically feasible and achievable. The proposed requirements were also found to be cost-effective.

2. **COMMENT:** We request that the 65 ppm NO_x limit for biomass fueled units also be included as the equivalent limit in lbs/MMBtu. This would allow facilities to have certainty as to the applicable limits, regardless of whether they use O₂ or CO₂ diluent CEMS. (CAMS)

RESPONSE: EPA Test Method 19 (Determination of Sulfur Dioxide Removal Efficiency and Particulate Matter, Sulfur Dioxide, and Nitrogen Emission Rates) contains methodology for determining emission rates in ppm. O₂ or CO₂ concentrations and appropriate F factors (ratios of combustion gas volumes to heat inputs) are used to calculate pollutant emission rates from pollutant concentrations.

3. **COMMENT:** The draft rule proposes a new SO_x limit of 0.03 lbs/MMBtu or 12 ppmv @ 12% CO₂ for units fired on municipal solid waste. Municipal solid waste is well documented as having heating values that are highly variable, and the proposed emission limit does not provide sufficient margin to ensure continuous compliance. We request a SO_x emission limit of 0.04 lbs/MMBtu or 16 ppmv @ 12% CO₂. (Covanta)

RESPONSE: Based on the District's technical assessment and the feasible controls available, District staff found that the proposed emissions limits for SO_x

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are technologically feasible and achievable. The proposed requirements were also found to be cost-effective.

4. **COMMENT:** The draft rule proposes a PM10 limit of 0.04 lbs/MMBtu or 0.02 gr/dscf @ 12% CO₂. We request this limit be revised to 0.044 lbs/MMBtu or 0.022 gr/dscf. (Covanta)

RESPONSE: Based on the District's technical assessment and the feasible controls available, District staff found that the proposed emissions limits for PM10 are technologically feasible and achievable. The proposed requirements were also found to be cost-effective.

**SUMMARY OF SIGNIFICANT COMMENTS
DRAFT AMENDMENTS TO RULE 4352
(SOLID FUEL FIRED BOILERS, STEAM GENERATORS, AND PROCESS HEATERS)
September 30, 2021**

The District held a public workshop to present, discuss, and receive comments on the draft amendments to Rule 4352 on September 30, 2021. Summaries of significant comments received during the public workshop and associated comment period are summarized below.

Comments were received from the following:

Derek Furstenwerth, Consolidated Asset Management Services (CAMS)
Dr. Catherine Garoupa, Central Valley Air Quality Coalition (CVAQ)
Theresa Zamora, Mi Familia Vota (MFV)
Matt Holmes, Little Manila Rising (LMR)
Thomas Helme, Valley Projects (VP)

5. **COMMENT:** We support the District’s proposed emission limit for NO_x, and propose a 0.025 lb/MMBtu SO_x limit and a 0.04 lbs/MMBtu PM₁₀ emissions limit in Rule 4352. (CAMS)

RESPONSE: The District appreciates the recommendations for emission limits and have evaluated potential options for emission reductions. Proposed emissions limits have been established based on a comprehensive technical evaluation and cost-effectiveness evaluation.

6. **COMMENT:** While we support the proposed lower emissions limits for nitrogen oxides (NO_x), particulate matter 10 (PM₁₀), and sulfur oxides (SO_x), we continue to encourage direct PM_{2.5} emissions control limits, particularly for industrial biomass facilities. With the fast-approaching deadline to meet federal air quality standards, it is essential that emission reduction strategies be applied to all pollutants. (CVAQ, MFV, LMR, VP)

RESPONSE: The proposed Rule 4352 contains lower NO_x emissions limitations (precursor to PM_{2.5}), and establishes emissions limits for direct PM₁₀ and SO_x. The direct PM₁₀ from solid fuel fired boilers is primarily PM_{2.5} (~90%), and SO_x reductions also reduce the formation of secondary PM_{2.5}. Therefore, the rule amendments will achieve significant reductions in direct PM_{2.5}, as well as PM_{2.5} precursor emissions.

7. **COMMENT:** Rule 4352 currently contains an exemption in which the “rule does not apply to units at a Stationary Source that has a potential to emit less than 10 tons per year of NO_x or volatile organic compounds (VOCs).” This exception

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does not exist in other air districts and should no longer be included in this rule. (CVAQ, MFV, LMR, VP)

RESPONSE: The exemptions section is being removed. Therefore, units with the potential to emit less than 10 tons per year of NO_x or VOC are no longer exempt from the requirements of Rule 4352.

8. **COMMENT:** We encourage continued analysis and use of industrial technologies such as SNCR, SCR, baghouses and electrostatic precipitators (ESP) as control technologies for industrial biomass facilities, particularly for facilities near sensitive receptors. (CVAQ, MFV, LMR, VP)

RESPONSE: All facilities subject to Rule 4352 currently control NO_x, SO_x, and direct particulate matter emissions through the use of multiple industrial control technologies, including SNCR, SCR, electrostatic precipitators, multiclones, baghouses, and other technologies. In support of the proposed regulatory amendments, the District conducted a comprehensive technical analysis of all available controls, including a combination of controls as feasible, and has proposed more stringent emission limits that are technologically feasible and cost-effective.

9. **COMMENT:** Consideration should be provided to public health and other adverse economic impacts of air pollution when weighing the technological and economic feasibility of rules with a particular focus on environmental justice implications. (CVAQ, MFV, LMR, VP)

RESPONSE: The District appreciates the comment and is proposing the regulatory amendments consistent with established state and federal requirements and guidance, and as part of ongoing efforts to meet health-based state and federal ambient air quality standards to protect public health in communities across the Valley.

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