

**APPENDIX E**

**Rule Consistency Analysis for  
Proposed Amendments to  
Rule 4354 (Glass Melting Furnaces)**

**December 16, 2021**

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**Rule Consistency Analysis for Proposed Amendments to Rule 4354  
(Glass Melting Furnaces)**

**I. REQUIREMENTS OF ANALYSIS**

Pursuant to Section 40727.2 of the California Health and Safety Code, prior to adopting, amending, or repealing a rule or regulation, the District is required to perform a written analysis that identifies and compares the air pollution control elements of the rule or regulation with corresponding elements of existing or proposed District and United States Environmental Protection Agency (EPA) rules, regulations, and guidelines that apply to the same source category. The rule elements analyzed are emission limits or control efficiency, operating parameters and work practices, monitoring and testing, and recordkeeping and reporting requirements.

**II. RULE CONSISTENCY ANALYSIS**

**A. District Rules**

Glass melting furnaces could be subject to other District rules including:

- Rule 2010 (Permits Required),
- Rule 2201 (New and Modified Stationary Source Review Rule),
- Rule 4101 (Visible Emissions),
- Rule 4102 (Nuisance),
- Rule 4201 (Particulate Matter Concentration),
- Rule 4202 (Particulate Matter Emission Rate),
- Rule 4301 (Fuel Burning Equipment), and
- Rule 4801 (Sulfur Compounds)

The above-listed rules are not in conflict nor are they inconsistent with the requirements of Proposed Rule 4354.

**B. Federal EPA Rules and Regulations**

*1. Federal Control Techniques Guideline (CTG)*

Beginning in 1975, EPA staff has issued more than 35 CTGs covering a variety of VOC sources. None of the CTGs cover glass melting furnaces, therefore, the proposed rule is not in conflict with nor inconsistent with a federal CTG for this source category.

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## 2. *EPA Alternative Control Techniques (ACT) Document*

EPA-453/R-94-037 (ACT Document – NO<sub>x</sub> Emissions from Glass Manufacturing)

This document outlines the available control techniques for three types of glass melting furnaces – container glass, flat glass and pressed-and-blown glass. The document does not contain specific NO<sub>x</sub> emission limit requirements. However, it does discuss various control technologies that are feasible for glass furnaces and their estimated percent NO<sub>x</sub> reductions from uncontrolled emission levels. Upon review of control technologies discussed in this document, none were found that would bring the NO<sub>x</sub> emissions from the glass furnaces operating within the District to levels lower than what is already being proposed with this rule amendment.

## 3. *Federal New Source Performance Standards (NSPS)*

40 CFR 60 Subpart CC (Standard of Performance for Glass Manufacturing Plants)  
40 CFR 60 Subpart PPP (Standards of Performance for Wool Fiberglass Insulation Plants)

These NSPSs establish requirements and emission limits for the control of particulate matter. As such, they do not prescribe standards for NO<sub>x</sub>, SO<sub>x</sub>, CO, or VOC for this source category. Therefore, the District rule provisions for NO<sub>x</sub>, SO<sub>x</sub>, CO, and VOC emissions are more stringent than the federal NSPS requirements of these subparts.

The District evaluated both NSPSs with respect to PM for emission limits, monitoring and testing, and recordkeeping and reporting requirements. No requirements were found in either of the subparts that were more stringent than those already in the proposed amended version of Rule 4354.

## 4. *National Emission Standards for Hazardous Air Pollutants (NESHAPs) and Maximum Achievable Control Technologies (MACTs)*

40 CFR 61 Subpart N (National Emission Standard for Inorganic Arsenic Emissions from Glass Manufacturing Plants)

This NESHAP specifically targets inorganic arsenic emissions. As such, it does not prescribe any standards for NO<sub>x</sub>, SO<sub>x</sub>, PM<sub>10</sub>, CO, or VOC for this source category. Therefore, the proposed Rule 4354 provisions for NO<sub>x</sub>, SO<sub>x</sub>, PM<sub>10</sub>, CO, and VOC emissions are more stringent than the federal NESHAP requirements of this subpart.

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40 CFR 63 Subpart NN (National Emission Standards for Hazardous Air Pollutants for Wool Fiberglass Manufacturing at Area Sources)

This MACTs only regulates chromium compound emissions. As such, it does not regulate NO<sub>x</sub>, SO<sub>x</sub>, PM<sub>10</sub>, CO, or VOC for this source category. Therefore, the proposed Rule 4354 requirements for NO<sub>x</sub>, SO<sub>x</sub>, PM<sub>10</sub>, CO, and VOC emissions are more stringent than the federal NESHAP requirements of this subpart.

40 CFR 63 Subpart NNN (National Emission Standards for Hazardous Air Pollutants for Wool Fiberglass Manufacturing Plants)

40 CFR 63 Subpart SSSSSS (National Emission Standards for Hazardous Air Pollutants for Glass Manufacturing Area Sources).

The portions of these MACTs that apply to the glass melting furnaces are particulate emission limits and subsequent recordkeeping. As such, they do not regulate NO<sub>x</sub>, SO<sub>x</sub>, CO, or VOC for this source category. Therefore, the proposed Rule 4354 requirements for NO<sub>x</sub>, SO<sub>x</sub>, CO, and VOC emissions are more stringent than the federal MACT requirements of these subparts.

The District evaluated both NSPSs with respect to PM for emission limits, monitoring and testing, and recordkeeping and reporting requirements. No requirements were found in either of these subparts that were more stringent than those already in the proposed amended version of Rule 4354.

### III. CONCLUSION

Based on the above analysis, District staff concludes that the proposed amendments to Rule 4354 would not conflict with any District or federal rules, regulations, or policies covering similar stationary sources.

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