

Amendments to Rule 360: Boilers & Water Heaters

Board of Directors Santa Barbara County Air Pollution Control District

Our Mission: To protect the people and the environment of Santa Barbara County from the effects of air pollution.

Aeron Arlin Genet
Director / APCO

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Rule 360 Background

- Applicable to small boilers and large water heaters
- Estimated 1,885 units in the County
 - Located at restaurants, laundromats, office buildings, hotels, etc.
 - Most units are exempt from District permit requirements. [Rule 202.G.1]
- “Point of Sale” rule
 - Manufacturer certifies a boiler model to meet the NOx emission limit
 - Manufacturer can sell the boiler model within the County
- South Coast AQMD: 100+ manufacturers with certified units

2016 Ozone Plan: Nonattainment-Transitional Control Measure Implementation Schedule

Rule	Description	Adoption Schedule
360	Boilers, Water Heaters, and Process Heaters (0.075 - 2 MMBtu/hr) Revisions to reduce the NOx limits to 20 ppmv at 3% oxygen for newly installed natural gas fired units.	2018
361	Boilers, Steam Generators, and Process Heaters (2 - 5 MMBtu/hr) Revisions to reduce the NOx limits to 9 or 12 ppmv at 3% oxygen for newly installed natural gas fired units. Higher limits for other fuels.	2018
342	Boilers, Steam Generators, and Process Heaters (5+ MMBtu/hr) Revisions to reduce the NOx limits to 9 or 15 ppmv at 3% oxygen for newly installed natural gas fired units. Higher limits for other fuels.	2018
321	Solvent Cleaning Machines and Solvent Cleaning Revisions to lower the general cleaning ROC limit from 50 grams per liter to 25 g/L.	Contingency Measure
351	Surface Coating of Wood Products Revisions to include solvent cleaning provisions at 25 g/L.	Contingency Measure
354	Graphic Arts Revisions to include solvent cleaning provisions at 25 – 100 g/L and additional requirements for Rotogravure, Flexographic, Lithographic, Letterpress, and Screen Printing operations. Existing facilities may have to be permitted to increase the enforceability of the rule.	Contingency Measure

Proposed Changes

- Effective January 1, 2019, lower the NOx emission limit for newly installed natural gas units from 55 or 30 ppm → 20 ppm.
- Add definition for “Modification” or “Modify”
- Add exemptions for unique equipment units
- Clarify that the District accepts the South Coast AQMD certifications
- Clarify the Source Test Methods

Cost-Effectiveness

- **Rule 360 Cost-Effectiveness**

Unit Size	Capital Cost	Incremental Cost	New Cost: Post-Revision	Cost Effectiveness
0.075 MMBtu/hr	\$1,500	\$100	\$1,600	\$2,800/ton NO _x
2 MMBtu/hr	\$18,000	\$3,000	\$21,000	\$11,300/ton NO _x

Rulemaking Timeline

- **August 2017:** Board approved changes to the 2016 Ozone Plan control measure implementation schedule
- **October 2017:** Released draft rule and staff report to the public
- **November 2017:** Public Workshop
- **January 2018:** District Community Advisory Council (CAC) meeting
- **March 2018:** Board of Directors Hearing
- **January 2019:** New rule limits become effective

Key Issues and Findings

- **CARB comments:** No comments on the proposed rule.
- **EPA comments:** Requested minor clarifications in the staff report.
- **Workshop comments:** Requested minor clarifications and definitions in the rule language.
- **CAC Meeting:** Discussion focused on education, outreach, and enforcement of the new standards.

CAC recommended approval of the rule amendment.

Staff Recommendation

- Hold a public hearing and receive testimony on the proposed amendments to Rule 360 and the Addendum to the Final EIR for the 2010 Clean Air Plan
- Adopt the Board Resolution approving the amendments to Rule 360
 - Adopt the CEQA Findings
 - Adopt the Health & Safety Code General Rule Findings
 - Adopt the amendments to Rule 360

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