



El Dorado County

Air Quality Management District

Public Hearing

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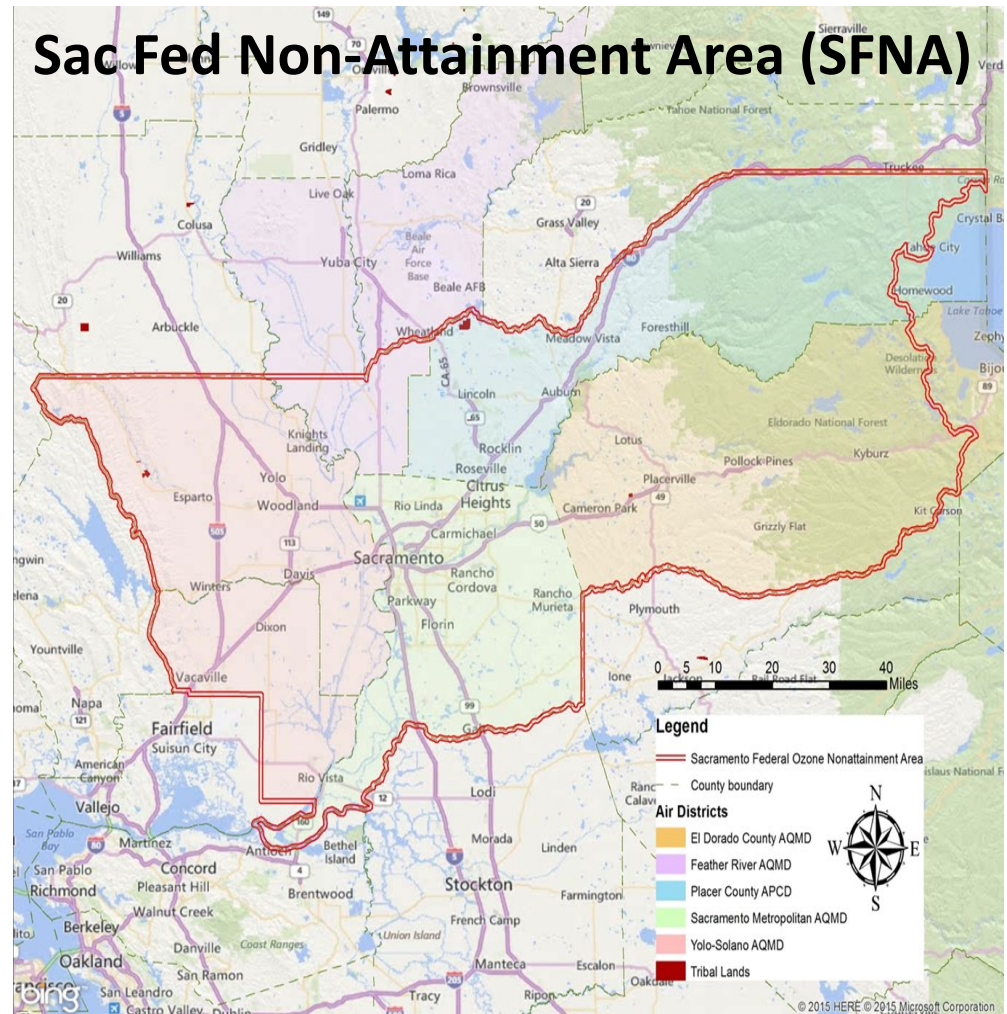
Rule 239

Natural Gas-Fired Water Heaters Less than
1,000,000 Btu per Hour

October 21, 2025

Background

- The National Ambient Air Quality Standards (NAAQS) for ozone are set by the federal government.
- VOC + NO_x + sunlight = Ozone
- US EPA requires plan to reach attainment
- Air Districts review CARB emissions inventory & their existing rules to find ways to reduce emissions.



Regional Ozone NAAQS Plans

- **State Implementation Plan (SIP)**
 - ✓ The CARB combines the collection of ozone attainment plans throughout the state to create the State Implementation Plan or SIP

- **SFNA Severe Nonattainment**
 - ✓ Designated Severe Nonattainment under the 1997, 2008, and 2015 8-hour Ozone NAAQS Plans.
 - ✓ SFNA attained 2008 Ozone NAAQS by the December 31, 2024 attainment date

- 1997 Sacramento Regional 8-hour Ozone Attainment Plan was approved by AQMD Board and other SFNA air districts Boards in 2009, with revisions adopted in 2011 and 2013.

SFNA 1997 Ozone NAAQS Plan (80 ppb)

- Demonstrates how existing + new strategies achieve required emission reductions for CAA attainment.
- Included new SIP commitments with additional control measures
- All SFNA air districts (including El Dorado) committed to a water heater NO_x control measure for units 75,000–1,000,000 Btu/hr.

SFNA 1997 Ozone NAAQS Plan (80 ppb)

- Revoked March 6, 2015
- SFNA (including El Dorado) is preparing a **Maintenance Plan & Redesignation Request** for the revoked standard
- SFNA must fulfill all CAA/SIP requirements and complete obligations before EPA can formally redesignated the area to attainment

Rule 239 Proposed Revisions

Heat Input Range and Type	Existing NOx Limit Nanograms per Joule of Heat Output (parts per million by volume(ppmv) @ 3% O2)*	Proposed NOx Limit Nanograms per Joule of Heat Output (ppmv @ 3% O2)*
< 75,000 Btu/hr	50 (66)	50 (66)
Mobile Home All others	40 (55)	40 (55)
75,000 to < 400,000 Btu/hr	No existing emission limit	
Pool/Spa		40 (55)
All others		14 (20)
400,000 to < 1,000,000 Btu/hr All Types	No existing emission limit	14 (20)

Market Survey – El Dorado County

AQMD Retailers Survey (2023 & 2025)

- Survey confirms Low NOx (40 ng/J, 55 ppmv) and Ultra Low NOx (14 ng/J, 20 ppmv) water heaters <1,000,000 Btu/hr are widely available and feasible
- Low NOx and Ultra Low NOx water heaters combine low-emission burners with modern high-efficiency designs, giving both air quality benefits and fuel cost savings

SIP and CAA Requirements for Redesignation

- Amending Rule 239 is the only outstanding SIP commitment for El Dorado County under the 1997 Ozone Plan. It must be implemented before EPA can approve a Maintenance Plan and Redesignation to Attainment
- Under CAA §107(d)(3)(E)(iii), an area may only be redesignated to attainment if it demonstrates that air quality improvements are due to **permanent and enforceable emission reductions from SIP implementation.**
- All other SFNA air districts have adopted this measure starting around 2014; AQMD is the last district pending adoption

Recommendations

- Board adopt Resolution revising Rule 239
- Direct staff to submit to CARB

CARB will transmit to EPA for inclusion in State Implementation Plan (SIP)

Thank you! Questions?