

# Public Workshop for Rule 4905 (Natural Gas-Fired, Fan-Type Central Furnaces)

August 25, 2020

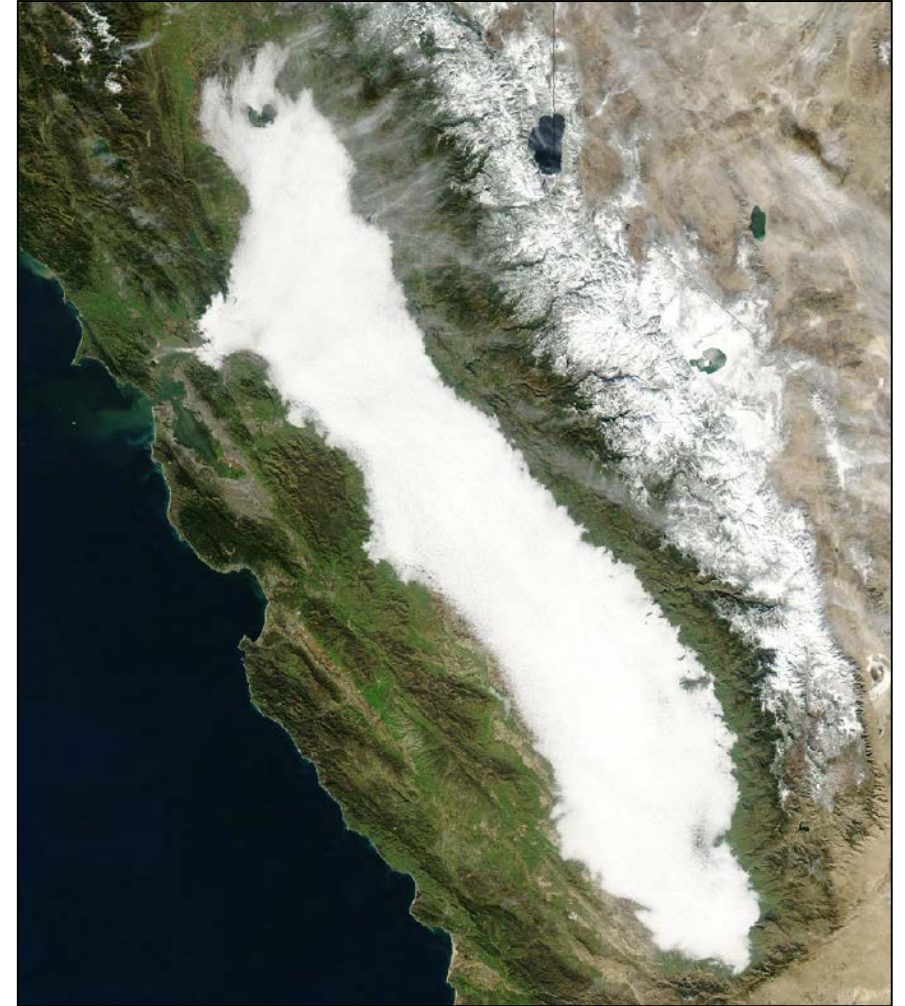
[webcast@valleyair.org](mailto:webcast@valleyair.org)

# San Joaquin Valley's Air Quality Challenges

- Valley's challenges in meeting federal air quality standards unmatched due to unique geography, meteorology, and topography

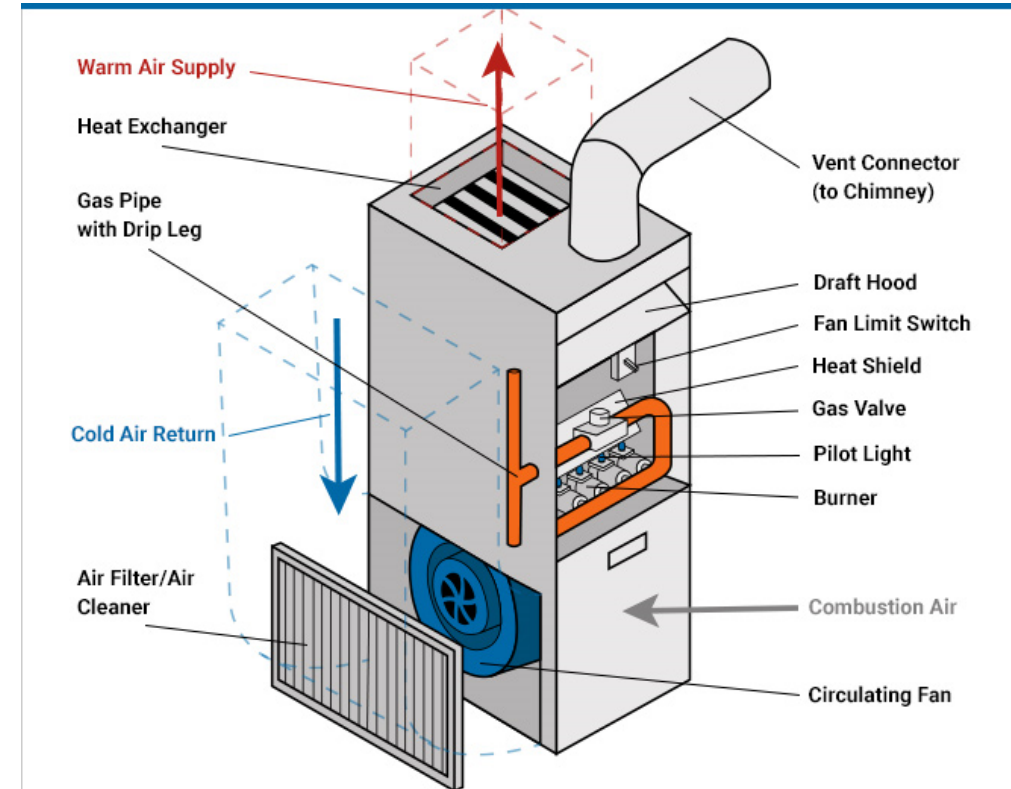
NAAQS	SJV Designation
8-hour Ozone	Extreme
Fine Particulate Matter (PM2.5)	Serious

- Combustion is a significant source of NO<sub>x</sub> emissions, primary precursor to ozone and PM<sub>2.5</sub> formation
  - Majority of NO<sub>x</sub> emissions from mobile sources
  - NO<sub>x</sub> reductions are a key part of District's ozone and PM<sub>2.5</sub> attainment strategies



# What are Natural Gas-Fired Fan-Type Central Furnaces?

- Natural-gas furnaces are used to provide heat to residential/commercial properties
- Natural-gas fuel is burned to create heat for distribution through the home or commercial building
  - Furnaces create NO<sub>x</sub> emissions, which can contribute to ozone and PM formation
- District Rule 4905 requires NO<sub>x</sub> emissions limits on furnace units



# Rule 4905 Requirements

- Adopted in 2005 and amended several times, Rule 4905 is a point-of-sale rule that limits NO<sub>x</sub> emissions from natural gas-fired, fan-type central furnaces
- Due to air quality challenges, in 2014/2015, the District and South Coast AQMD amended respective rules to require more stringent emissions limits of 14 ng/J of NO<sub>x</sub>
  - Some manufacturers raised concerns regarding whether technology would be ready by compliance deadlines
  - Due to concerns raised, amendments allowed the sale of non-compliant units during the initial implementation period (36 months) in exchange for the payment of an emissions fee for each non-compliant unit sold
    - Fee amount was set to disincentivize the sale of non-compliant units
    - Necessary to ensure adequate supply for expected demand for new units in Valley
    - Helped minimize unfair competitive disadvantage for manufacturers that provided compliant units in the Valley

# Rule 4905 Requirements (cont'd)

- 2018 amendments to Rule 4905
  - Manufacturers raised concerns about readiness of low-NOx technology for condensing and non-condensing units
  - Emissions fee period extended by 18 months (condensing furnaces) and 12 months (non-condensing and weatherized furnaces) to allow for technology development
  - Amended fee for non-compliant products
  - Closely paralleled South Coast AQMD amendments to their Rule 1111
- Added a sell-through period of 6-months for all units after emissions fee end date
  - Weatherized category set to expire September 30, 2020

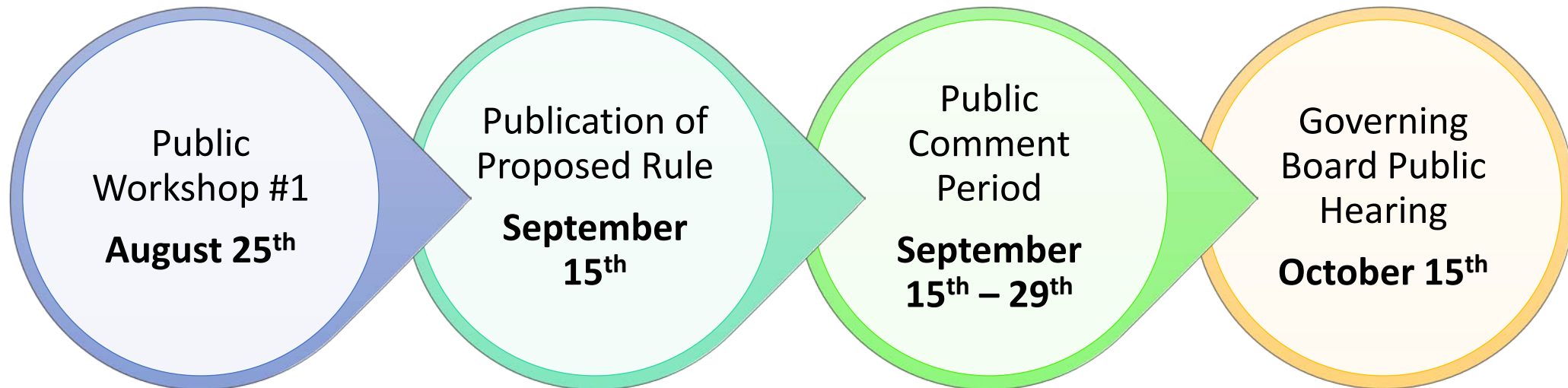
# COVID-19 Impacts to Furnace Manufacturers

- Manufacturers have been successful in developing furnace technologies that meet 14 ng/J NO<sub>x</sub> limit for non-weatherized condensing and non-condensing units, including dual-fuel units
- COVID-19 impacts have delayed ability of manufacturers to develop compliant weatherized units by September 30, 2020 deadline
  - Supply chains affected
  - Labor shortage
  - Travel restrictions have affected testing of new units
- Manufacturers have requested additional time to develop compliant units

# Rule 4905 Amendments Under Consideration

- District working closely with SCAQMD to address concerns raised by furnace manufacturers to develop weatherized furnaces that comply with 14 ng/J NO<sub>x</sub> limit
- Proposed amendments would extend mitigation fee period for all size range weatherized furnaces to September 30, 2021
  - No change to the mitigation fee amount
- No changes to non-weatherized furnaces

# Next Steps: Public Engagement Process for Rule 4905 Amendment



Public Participation and Comment Invited throughout Process



# Contact

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# Open Discussion

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