

# Adopt Proposed Amendments to Rule 4905 (Natural Gas-Fired, Fan-Type Central Furnaces)

San Joaquin Valley Air Pollution Control District  
Governing Board Meeting

December 16, 2021

# Rule 4905 Requirements

- Rule 4905 first adopted in 2005
- Establishes NO<sub>x</sub> emissions “point-of-sale” standards for wide-range of natural gas-fired furnaces
- Applies to central natural-gas furnaces with heat input less than 150,000 Btu/hr, and combination heating/cooling furnaces less than 65,000 Btu/hr



# Additional Time Needed for Technology Development

- Through past regulatory efforts, manufacturers successful in meeting deadlines and developing furnace technologies that meet 14 ng/J NO<sub>x</sub> limit for all unit types, except manufactured home furnaces
  - Manufactured home units represent approximately 1% of total units sold
- COVID-19 impacts have delayed ability of manufacturers to develop compliant manufactured home units by September 30, 2021 deadline
  - Supply chains affected; labor shortage
- New manufactured home furnaces also subject to standards set by U.S. Department of Housing and Urban Development and U.S. Department of Energy
- Manufacturers have requested additional time to develop compliant manufactured home units

# Proposed Rule 4905 Amendments

- District worked closely with SCAQMD to address concerns raised by furnace manufacturers regarding development of compliant manufactured home furnaces
- Proposed amendments would extend compliance period for all manufactured home furnaces by 2 years to September 30, 2023
  - Parallels extensions by SCAQMD in Oct. 2021 Rule 1111 amendment
- Continue sell-through period of 6-months
- Proposed amendments provides for continued availability of furnaces for affordable housing market

# Rule Development Public Process

- District worked closely with affected manufacturers earlier in 2021 as technology timeline challenges began to arise due to the COVID-19 pandemic
- Public workshop held on November 18, 2021 with subsequent public comment period
  - Comments have assisted in developing proposed amendments
  - Comments included support of proposed amendments and questions regarding potential new technologies (e.g. electric heat pumps)
- Proposed amendments to Rule 4905 publicly noticed and made available on November 16, 2021

# Looking Ahead

- Additional opportunities for continuing to reduce emissions from residential fuel combustion increasingly feasible
  - Residential space heating ~1.5% of total Valley NOx emissions in 2024
  - Electric heat pumps and residential solar more widely available
  - Recent local ordinances/new building standards requiring electrified space heating and appliances (none in San Joaquin Valley)
- Equity considerations critical as strategies are evaluated by local agencies, CARB, PUC, and other agencies – lowest income families most impacted by high transition capital and energy costs if not adequately studied, considered, and addressed
- Continue work with other air districts, local agencies, state agencies, utilities, and Valley stakeholders to evaluate opportunities for promoting zero-emissions technologies

# Recommendations

- Adopt proposed amendments to Rule 4905 (Natural Gas-Fired, Fan-Type Central Furnaces)
- Authorize the Chair to sign the attached Resolution