SJVAPCD RULES 4306 & 4320
CLEAR THE AIR
Meet the new **2021 Boiler Emissions Rules** set by San Joaquin Valley Air Pollution Control District (SJVAPCD) and create a **Compliance Plan** with R.F. MacDonald Co. to meet the 2023-29 deadlines!

**SJVAPCD RULES 4306 & 4320**

### Rule 4306:

- **Boilers:** 5-75MMBTU must retrofit to 7 PPM NOx by 12/31/2029*
- **Boilers:** >75MMBTU/hr must retrofit to 5 PPM NOx by 12/31/2029*

*ATC and compliance deadlines vary based on emission-permitted level

### Rule 4320:

- **Boilers:** 5-20MMBTU must retrofit to 5 PPM NOx by 12/31/2023*
- **Boilers:** >20MMBTU must retrofit to 2.5 PPM NOx by 12/31/2023*

*Emissions Control Plan and ATC to be submitted by May 1, 2022

CONTACT YOUR LOCAL R.F. MACDONALD CO. REPRESENTATIVE TO DISCUSS OPTIONS FOR YOUR FACILITY

**Training based on rules set by San Joaquin Valley Air Pollution Control District**

**Sign Up for Training!**

**Read the New Rules!**
WHAT ARE YOUR OPTIONS?

**BURNER RETROFIT & CONTROLS UPGRADE**

**SELECTIVE CATALYTIC REDUCTION**

**REPLACE YOUR EQUIPMENT**

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**BURNER RETROFIT & CONTROLS UPGRADE**

**NEW** CLEAVER-BROOKS SBR-5 ULTRA LOW NOx BURNER

**ULTRA LOW-NOx EMISSIONS** - SUB 5 PPM

**DUAL FUEL** - NATURAL GAS WITH NO. 2 OIL OPTION; FUEL SWITTOVER WITHOUT MECHANICAL ADJUSTMENTS

**3-4% O2** - ACROSS A WIDE LOAD RANGE

**MAXIMUM EFFICIENCY** - PROVIDED BY STANDARDIZED PARALLEL POSITIONING

**OPERATIONAL RANGE** - 6:1 TURNDOWN WHEN FIRING NATURAL GAS

**UNIFORM FLAME** - FOR EQUAL HEAT TRANSFER ALLOWED BY PREMIX FUEL

**EASY ACCESS** - AIR HOUSING FOR INTERNAL COMPONENTS

**INTEGRATED CONTROLS** - WITH REMOTE IOT MONITORING CAPABILITIES

**SUPPORT** - LOCALLY TRAINED REPS & CERTIFIED TECHNICIANS

**SILENT OPERATION** - WITH AN ADVANCED COMBUSTION AIR FAN WHEEL; LESS HORSEPOWER AND LESS NOISE

**ULTRA LOW-NOx/CO** - ACHIEVED WITHOUT A FRAGILE SURFACE COMBUSTION BURNER HEAD, MAKING IT SAFER AND MORE RELIABLE

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**TOTAL INTEGRATION DOESN’T STOP WITH THE BURNER**
SCR is a post-flue gas treatment that reduces NOx emissions, using ammonia as a reducing agent. The mixture comes into contact with a catalyst, selectively transforming the NOx into harmless nitrogen and water. Options are available for reducing CO emissions as well and can be integrated into a single packaged solution.

**ANHYDROUS** or **AQUEOUS AMMONIA**

- Custom Ammonia Flow Control Unit
- Custom Ammonia Injection Grid
- Integrated Controls
- Requires Risk Management Planning
- Storage & Handling Oversight per OSHA 1910.111

**UREA**

- **R.F. MacDonald Co. Patented** Design does not require vaporizer
- Does not require risk management planning
- Eliminates hazards of storing ammonia
- Reduces electrical load costs
- Lower operational cost
- Reduces footprint

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**R.F. MacDonald Co. Engineering Services**

- Cold Flow Modeling (CFM) or Computational Fluid Dynamics (CFD)
- Utilizes Multizone Injection Grid
- 3D Modeling Design — Integration with 3D Scans
- Custom Controls Integration
- Emissions Control for various fuels
- Inlet and outlet sampling grids available

Your boiler & pump solutions team ~ since 1956
SCHEDULE A WEBINAR

R.F. MacDonalD Co.
LOCATIONS IN THE
SAN JOAQUIN VALLEY
AIR POLLUTION CONTROL DISTRICT

R.F. MacDonalD Co.
1549 C ummins Drive
MODESTO, CA 95358
P: 209-576-0726

R.F. MacDonalD Co.
4912 West J acquelyn Ave.
FRESNO, CA 93722
P: 559-498-6949

E: info@rfmacdonald.com
W: rfmacdonald.com

SITE VISITS OR VIRTUAL/ZOOM MEETINGS AVAILABLE TO PROVIDE SITE-SPECIFIC INDIVIDUAL NEEDS

CONTACT YOUR LOCAL R.F. MACDONALD CO. REPRESENTATIVE TO DISCUSS OPTIONS FOR YOUR FACILITY

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