

# COMPLIANCE ASSISTANCE BULLETIN January 2009

## RULE 4320 - Advanced Emission Reduction Options for Boilers, Steam Generators, and Process Heaters with a Total Rated Heat Input greater than 5.0 MMBTU/HR

Rule 4320 was adopted on October 16, 2008. The rule contains provisions to lower  $NO_X$  emissions or pay an annual emissions fee, and to reduce  $SO_X$  emissions from boilers, steam generators, and process heaters. Compliance schedules are staggered according to the criteria stated below. Key provisions of the rule are as follows:

#### **NOx Emission Reduction Options**

Operators of units subject to this rule are required to comply with **ONE** of the following options:

- 1. Meet the  $NO_X$  emission limits specified in Section 5.2 (Table 1).  $NO_X$  emission limits range from 5 to 12 ppmv at 3% O2 depending on unit type, heat input, fuel type, and the chosen option of Standard, Enhanced, or Staged Enhanced Schedule. Accordingly, compliance deadlines are specified from July 1, 2010 to January 1, 2014.
- 2. Pay an annual emissions fee to the District beginning in 2010 as specified in Section 5.3 for units that will not comply with the applicable  $NO_X$  limits. The annual emissions fee calculated as required in the rule is based on the actual emissions from the units during the previous calendar year, not the difference between the actual emissions and the rule limits.
- 3. Limit heat input to comply with the Low-Use Unit requirements specified in Section 5.5. For units that were installed prior to January 1, 2009, facilities can apply to modify the Permit to Operate (PTO) to limit the heat input to  $\leq$  1.8 billion Btu per calendar year. New units must meet the applicable NO $_X$  limits at the time of installation.

### SOx Emission Reduction Requirements

**Except** for Low-Use Units, operators are required to limit and monitor  $SO_X$  emissions by complying with **ONE** of the following options:

1. Fire exclusively on PUC-quality natural gas, commercial propane, butane, or liquefied petroleum gas, or a combination of such gases. Operators shall provide a fuel sulfur analysis annually or as specified in the PTO.

- 2. Limit fuel sulfur content to no more than 5 grains of total sulfur per 100 standard cubic feet. Operators shall provide a fuel sulfur analysis annually or as specified in the PTO.
- Install and properly operate an emission control system that reduces SO<sub>2</sub> emissions by at least 95% by weight; or limit exhaust SO<sub>2</sub> to ≤ 9 ppmv at 3% O<sub>2</sub>. Operators shall conduct District-approved monitoring and a source test annually or as specified in the PTO.

#### INITIAL COMPLIANCE DATES AND RULE REQUIREMENTS

Below is a listing of upcoming compliance dates for Rule 4320. For additional compliance dates please see Rule 4320.

- **July 1, 2009** For units listed in Table 1 categories B and C.2, for which the standard schedule option is chosen, an Authority to Construct (ATC) application must be submitted by July 1, 2009, and final compliance must be achieved by July 1, 2010.
- **January 1, 2010** An Emission Control Plan must be submitted according to Section 6.4.
- July 1, 2010- For units that are under the option of Annual Emissions Fee, the
  first payment is due to the District on July 1, 2010 based on the 2009 calendar
  year emissions. An annual emissions fee is due on July 1 of each year
  thereafter.
- ATC applications for subsequent compliance deadlines are due 1 year prior to the "NO<sub>x</sub> Compliance Deadline" listed in Section 5.2 (Table 1).
- Source tests shall be performed by the applicable "NO<sub>X</sub> Compliance Deadline" to demonstrate full compliance.
- SO<sub>X</sub> control requirements shall be met by the applicable "NO<sub>X</sub> Compliance
  Deadline" (including those units that are under the option of Annual Emissions
  Fee). If a Staged Enhanced Schedule is chosen, the "NO<sub>X</sub> Compliance
  Deadline" is the deadline for the Initial Limit (not the Final Limit). Refinery units,
  which require equipment modification, shall be in compliance with SO<sub>X</sub> reduction
  requirements by July 1, 2013.

This rule may affect your operation in other ways not mentioned in this bulletin as there are further requirements and exemptions. Please consult a copy of the rule at <a href="https://www.valleyair.org">www.valleyair.org</a>. If you have any questions or need assistance on submitting an ATC application, please contact the District's Small Business Assistance at the following telephone numbers:

Modesto Office 209-557-6446

Fresno Office 559-230-5888

Bakersfield Office 661-392-5665