



South Coast Air Quality Management District

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REVISED COMPLIANCE ADVISORY

Date: March 15, 2012
To: Operators of RECLAIM Facilities
Subject: RECLAIM Recordkeeping and Emission Quantification Requirements for Equipment Not Requiring a Written Permit Pursuant to Rule 219 and Equipment that use Pilot Lights for Combustion

*This Compliance Advisory was originally distributed in early December 2011. AQMD has subsequently learned that the changes needed to CEMS configurations for some facilities to comply with the pilot light portion of the Compliance Advisory cannot be completed by the specified April 1, 2012 deadline. **The purpose of this Revised Compliance Advisory is to extend the compliance date to July 1, 2012 for the pilot light portion of the Compliance Advisory only, as well as to make the following clarifications:***

- *The Compliance Advisory applies to both NO_x and SO_x emissions, including SO_x emissions resulting from combustion of natural gas in units that burn or are permitted to burn natural gas and any other fuel;*
- *For the case of CEMS that calculate stack flow from heat input rate and oxygen concentration, it is acceptable for the CEMS software to add the maximum rated pilot light fuel use to the primary burner's/burners' metered fuel use and submit a single report for the total daily mass emissions rather than submitting multiple daily emission reports for the different fuels consumed, if applicable, provided the pilot light emissions are calculated using 100 percent up time at the pilot(s)' rated capacity; and*
- *The Compliance Advisory addresses two independent topics and does not imply in any way that pilot lights are rule 219-exempt equipment.*

There are some inconsistencies between RECLAIM facilities in the form of records used to document quarterly fuel use for equipment not requiring a written permit pursuant to the South Coast Air Quality Management District's Rule 219 (or Rule 219 equipment), and in emissions monitoring and quantification for equipment that use pilot lights. This advisory provides guidance regarding the minimum recordkeeping standards for Rule 219 equipment and clarifies the emission monitoring and quantification requirements for equipment that use pilot lights. **The provisions in this advisory pertaining to Rule 219-Exempt Equipment will be effective and enforced beginning April 1, 2012; the provisions pertaining to pilot light emissions will be effective and enforced beginning July 1, 2012.**

Rule 219-Exempt Equipment

For Rule 219 equipment that is natural gas fired, the amount of natural gas consumed shall be monitored by either a fuel meter or a timer and the amount of fuel consumed shall be recorded on a quarterly basis. Alternatively, monthly Gas Company bills may also be used to quantify

natural gas consumption, where the amount consumed may be determined by taking the difference between the amount recorded by the Gas Company bill and the total natural gas used by other sources at the facility, as determined by the meter readings used to quantify natural gas use by those other sources for purposes of RECLAIM monitoring, reporting and recordkeeping.

For all Rule 219 equipment **not** fired on natural gas (*e.g.*, diesel-fired internal combustion engines, propane-fired heaters), fuel purchase records (*e.g.*, diesel or propane delivery invoices, gasoline service station receipts) or other records that have a reasonable level of consistent and real-time periodic documentation of fuel consumption or operation hours, such as operator logs or fuel bills/receipts may be used to quantify fuel consumption. To address the inherent risk of underreporting these emissions, adequate procedures shall be in place to ensure records are consistently kept in a manner acceptable to the Executive Officer. Those procedures are described below in this Compliance Advisory. In cases where it is necessary to apportion fuel use between Rule 219 equipment with different emission factors or between Rule 219 equipment subject to RECLAIM reporting requirements and sources not subject to RECLAIM reporting requirements, there must be a reasonable basis for apportionment that is facility specific. It is not acceptable to apportion fuel use based upon assumed usages or upon usages that are average or that are typical for the industry in question.

Acceptable Recordkeeping Procedures for Rule 219 Equipment:

At a minimum, records for Rule 219 equipment shall include the facility I.D., facility name, the calendar quarter for which the data was kept, pollutant type and

- 1) if fuel-meter based: fuel meter I.D., device I.D. (if available), device type, initial meter reading, final meter reading, dates of initial and final meter readings, calculated fuel usage, fuel type, fuel higher heating value, emission factor, and quarterly emissions, or
- 2) if timer based: timer I.D., device I.D. (if available), device type, initial hour reading, final hour reading, dates of initial and final hour readings, hours operated, rated capacity, maximum heat input or fuel consumption rate, calculated fuel usage, fuel type, fuel higher heating value, emission factor, and quarterly emissions, or
- 3) if neither timer nor fuel meter based: measurement method, device I.D. (if available), device type, initial and final readings (if applicable), dates of initial and final readings (if applicable), date of fuel delivery (if applicable), fuel usage (quantity delivered, if purchase/delivery record-based), fuel type, fuel heating value, emission factor, quarterly emissions, and other records as appropriate.

In cases where records as specified above are invalid or unavailable for any Rule 219 equipment, emissions shall be quantified using the same tiered approach, which is also used for RECLAIM process units, as specified below:

- When complete records for one full quarter from the previous year's RECLAIM reports is unavailable, the average quarterly fuel usage of the previous four quarters shall be used; or
- When more than one quarter but less than four full quarters of records are unavailable, the highest quarterly fuel usage of the previous four quarters shall be used; or
- When four or more full quarters of records are unavailable, fuel usage shall be calculated based on the assumption of continuous use at maximum rated capacity, potentially limited by any verifiable record of total elapsed fuel consumption or hours of operation.

Equipment with Pilot Lights

All *NO_x* and *SO_x* emissions from RECLAIM sources, including emissions from pilot lights, are required to be included in emission reports. As such, both fuel consumed by, and emissions resulting from, pilot lights shall be accounted for by one of the following approaches:

- Directly measure the pilot light fuel consumption with either the same meter(s) used to measure the primary fuel or (a) separate fuel meter(s) and calculate the total equipment emissions based on the total measured fuel consumption for the device; or
- Calculate emissions from the pilot light fuel consumption based upon 100 percent up time at the pilot(s)' rated capacity and add the pilot light emissions to the total emissions calculated from the total measured fuel consumption for the device to calculate and report total emissions from the equipment¹; or
- Employ a continuous emission monitoring system (CEMS) that directly measures total stack flow and *NO_x* or *SO_x* concentration and calculate total emissions from the device.

For sources monitored by CEMS and equipped with a pilot light, relative accuracy test audits (RATAs) conducted on or after April 1, 2012 shall also take into account both fuel consumed by, and emissions resulting from, the pilot light. Additionally, in cases where the Facility Permit holder needs to make a modification to an existing CEMS because one of the three approaches outlined above is not being followed, then a CEMS application shall be submitted and approved prior to making any physical changes to any CEMS.

Please direct any questions regarding this Compliance Advisory to the RECLAIM Hotline at (909) 396-3119. For questions regarding CEMS certification, please contact Mike Cecconi at (909) 396-2244.

¹ When this approach is used in conjunction with a major source monitored by a CEMS that calculates stack flow based on heat input rate and stack oxygen concentration (Chapter 2 Equation 2 of Appendix A to Rule 2011 for *SO_x* or Rule 2012 for *NO_x*), it is acceptable for the CEMS software to add the maximum rated pilot light fuel use to the primary burner's/burners' metered fuel use to calculate and report total daily mass emissions rather than calculating the two fuel's contributions to stack flow separately.