



San Joaquin Valley

AIR POLLUTION CONTROL DISTRICT

COMPLIANCE ASSISTANCE BULLETIN

February 2007

Continuous Emission Monitor (CEM) Reporting Requirements

A review of CEM reports currently being received by the District has prompted the issuance of this advisory. Sources need to ensure that excess emissions, CEM equipment breakdowns and general CEM maintenance activities are reported to the District according to the requirements of Rule 1080 and of the California Health and Safety Code Section 42706. These are statutory reporting requirements that must be met even though the District is electronically polling CEM data. More details on CEM requirements may be found on the District website www.valleyair.org under Compliance Assistance, Policies, and Guidelines for CEMS Emissions Reporting (Policy COM 1185), and Continuous Emission monitoring System Policy (Policy COM 2025).

A. Excess Emissions

The operator must report to the District within 96 hours (4 days) any violation of any applicable emission limit reflected in the CEM data. This requires the operator to be aware of each emission limit specified in their permits. Emission limits and averaging times may vary between District and Federal (EPA/PSD) permits. When excess emissions occur the appropriate agency must be notified of the emission exceedance. Also startup and shutdown periods allowed by permit conditions need to be considered in the calculation of possible excess emissions. Emission exceedances must be reported separately from equipment breakdown reports (that must be reported in accordance with District Rule 1100).

1. Excess emission reports must include:
 - The District permit number.
 - Company equipment identification.
 - Permit limit and averaging period.
 - Time period of the event (beginning and ending times).
 - The actual level of the excess emissions and their cause.

Reports may be transmitted by telephone, FAX or mail, however, the District requests that a written copy be submitted that includes a printout of the CEM data. This data shall not be transmitted to the District Breakdown email addresses.

2. The following criteria should be applied for reporting excess emissions.
 - Report excess emissions when the NSR daily emission rate (lbs/day) has been exceeded.
 - Report BACT limit exceedances (ppmv or lbs/MMBtu) on the averaging period specified in the permit.
 - Report lbs/hr limit exceedances on the averaging period specified in the permit.
 - Report NSPS limit exceedances on a one-hour average.
 - All hour-based averages will be reported in one-hour increments. All averaging periods based on one-hour periods will commence on the hour, thus all excess emission periods are in whole hours, no partial hours.

- Report limits based on specific averaging times in District Rule requirements such as in Rule 4305, 4306 and 4801 that have 15 minute averaging periods.

B. CEM Equipment Breakdowns

- Operators are required to report any CEM equipment breakdowns **within one (1) hour of detection.**
- The initial notification may be made by telephone, FAX, or via e-mail to: North.Breakdown@valleyair.org; central.Breakdown@valleyair.org; or South.Breakdown@valleyair.org.
- The time of detection and time of notification needs to be included in the initial notification.
- The District must receive a written report explaining the incident within 10 days after the breakdown condition has been corrected.
- In situations where recurrent equipment breakdowns are being experienced it may be appropriate to seek variance relief for the time necessary to correct the problem, as repeated equipment failures are not eligible for breakdown relief.

C. General and Short Term Maintenance and Calibration

Each scheduled maintenance activity, calibration, and zero/span checks of less than four hours does not need to be reported to the District at the time that they are conducted and are authorized by the District provided downtime does not exceed 12 hours in any one month. These activities must be described in the quarterly report sent to the District. Any scheduled downtime that is anticipated to last more than four (4) hours shall be reviewed with the Compliance Division to determination if a variance is necessary. These longer-term events require District notification within 24 hours of any planned shutdown of the equipment (District Rule 1080, Section 10.0).

CEM Quarterly Report

District Rule 1080 Section 8.0 requires facilities with CEM's to submit quarterly written reports for those monitors. A summary report of all facilities excess emissions and CEM downtime is forwarded to the U.S. Environmental Protection Agency. The Quarterly Report must include the following information.

A. Source Information

- Source name and address
- Permit number
- Process description
- Pollutant(s) monitored and applicable limits

B. CEM Unit Information

- Monitor manufacturer
- Model number
- Serial number
- Date installed
- Total hours of operation in the quarter
- Date of last Performance Specification Test (PST) as based on requirements in 40 CFR Part 60 Appendix F or 40 CFR Part 75 for annual RATA or quarterly CGA audit.

C. Excess Emission Information for pollutant(s).

- Report each pollutant separately.
- Include a summary of date, time and excess for all excess emissions. Only count the hour once if more than one limit for a pollutant is exceeded.
- Classify excess emissions by the following criteria.

1. Number of hours due to startup or shutdown that are not covered by permit conditions.
2. Number of hours due to process problems.
3. Number of hours due to equipment breakdowns.
4. Number of hours due to other known causes.
5. Number of hours due to unknown causes.
6. Total number of hours of excess emissions in the quarter.
7. Total number of hours the equipment operated in the quarter.
8. Percentage of excess emissions in the quarter.

Notes: Excess emissions caused by a startup after a shutdown due to a malfunction should be reported as an excess due to an equipment breakdown. The source is not, however, exempt from emission limits.

D. CEM Downtime Information Monitor(s).

- Report downtime for each monitor separately. Include diluent monitors (O₂, CO₂ and flow).
- Include a summary of downtime, date, time, duration, and activity.
- Classify downtime by the following criteria.

1. Number of hours due to monitor malfunction.
2. Number of hours due to non- monitor malfunction.
3. Number of hours due to calibration, other than daily calibrations.
4. Number of hours due to other known causes.
5. Number of hours due to unknown causes.
6. Total number of hours of downtime in the quarter.
7. Total number of hours the unit operated in the quarter.
8. Percentage of hours of downtime for the quarter.

Note: Monitor malfunctions are associated with the sample collection system. Non-monitor malfunctions are malfunctions not associated with the entire CEM system, i.e. plant power failures. Do not include monitor downtime as non-monitor downtime when the unit is not operating.

E. Excess Emission Notifications

Include copies or a summary of all excess emission notifications made in the quarter.

F. Breakdown Notifications

1. Include copies of breakdown reports associated with excess emission periods.
2. Include copies of CEM breakdown reports.

G. Quarterly Reporting Periods.

Reports must be submitted within 30 days of the end of the quarter for which the report is being submitted

- 1st Quarter, January 1 through March 31, due by April 30.
- 2nd Quarter, April 1 through June 30, due by July 30
- 3rd Quarter, July 1 through September 30, due by October 30.
- 4th Quarter, October 1 through December 31, due by January 30.
- Semi-annual reports are due by July 30 and January 30.