7017.1170 QUALITY ASSURANCE AND CONTROL REQUIREMENTS FOR CEMS.

Subpart 1. [Repealed, 41 SR 763]

Subp. 1a. **Applicability.** The quality assurance and control requirements in this part apply to each CEMS unless otherwise specified by another applicable standard. If multiple CEMS standards apply to a single CEMS unit, the requirements of all applicable standards must be met.

Subp. 2. **Quality assurance plan required.** The owner or operator of the facility must develop and implement a written quality assurance plan that covers each CEMS. The plan must be on site and available for inspection within 30 days after monitor certification. The plan must be revised as needed to keep the plan up to date with the facility's current policies and procedures. The plan must contain all of the information required by Code of Federal Regulations, title 40, part 60, appendix F, section 3, or Code of Federal Regulations, title 40, part 75, Appendix B, as amended. The plan must include the manufacturer's spare parts list for each CEMS and require that those parts be kept at the facility unless the commissioner gives written approval to exclude specific spare parts from the list considering the consequences of a malfunction of the part, the likelihood of a malfunction, the time required to obtain the part, and other pertinent factors.

Subp. 3. **Daily calibration drift assessment and adjustment.** The facility owner or operator must conduct daily calibration drift assessments and make adjustments as needed according to the procedure listed in items A and B, Code of Federal Regulations, title 40, section 60.13(d)(1), or Code of Federal Regulations, title 40, part 75, Appendix B, section 2.1, as amended, as applicable, for each pollutant concentration and diluent monitor. The calibration drift assessment must be conducted on each monitor range. The span value specified in the applicable requirement or compliance document must be used to determine the zero and span calibration points. If no span value is specified in the applicable requirement or compliance document, the owner or operator must use a span value equivalent to 1.5 times the emission limit.

A. For an extractive CEMS, minimum drift assessment procedures must include introducing applicable zero and span gas mixtures into the measurement system as near the probe as is practical. Gases within \pm two percent of tag value must be used to perform the span (upscale) drift assessment. The span and zero gas mixtures must be the same composition as specified in the applicable performance specification.

B. For a nonextractive, in situ CEMS, minimum drift assessment procedures must include upscale checks using a certified calibration gas cell or test cell that is functionally equivalent to a known gas concentration. The zero check may be performed by computing the zero value from upscale measurements or by mechanically producing a zero condition.

Subp. 4. [Repealed, 41 SR 763]

Subp. 4a. Cylinder gas audit.

A. The owner or operator must complete the initial cylinder gas audit (CGA) within 180 days following certification of the CEMS. The owner or operator must conduct subsequent CGAs on each concentration and diluent monitor on each CEMS no later than the end of every second QA operating quarter, regardless of whether the quarters are consecutive, according to Code of

MINNESOTA RULES

Federal Regulations, title 40, part 60, Appendix F, section 5.1.2, or Code of Federal Regulations, title 40, part 75, Appendix A, section 6.2, as amended. As part of each quarterly excess emission report, the owner or operator must submit notification of any exception to CGA frequency that it used during the reporting period. A CGA is not required during any quarter in which a relative accuracy test audit was performed on the CEMS.

B. If the unit being monitored by the CEMS is not in operation on the CGA due date, the owner or operator has a grace period of 168 operating hours in which to perform a CGA on that monitor. If, at the end of the 168-operating-hour grace period, the CGA has not been completed, data from the CEMS is invalid beginning with the first unit operating hour following expiration of the grace period. Nothing in this subpart relieves the owners' or operators' obligation to comply with quality assurance provisions imposed by other applicable standards or compliance documents.

C. The audit frequency in Code of Federal Regulations, title 40, part 60, Appendix F, as amended, applies only if the unit is subject to Code of Federal Regulations, title 40, part 60.

Subp. 5. [Repealed, 41 SR 763]

Subp. 5a. **Relative accuracy test audits.** The owner or operator must complete relative accuracy test audits (RATAs) as required by this subpart.

A. RATAs must be conducted using the applicable procedures in Code of Federal Regulations, title 40, part 60, Appendix B, or Code of Federal Regulations, title 40, part 75, Appendix A, sections 6.5 to 6.5.2.2, and Appendix B, sections 2.3.1.3 and 2.3.1.4, as amended, as applicable.

B. The owner or operator must complete a RATA on each CEMS within 365 days following certification of the CEMS. Subsequent RATAs must be conducted on each CEMS no later than the end of every fourth QA operating quarter, regardless of whether the operating quarters are consecutive, unless the conditions in item C apply.

C. The owner or operator may conduct less frequent RATAs as described in subitems (1) and (2). The owner or operator must include notification of the reduced frequency or delay in performing a RATA to the commissioner in each quarterly excess emission report during which a RATA would have been due. Nothing in this subpart relieves the owners' or operators' obligation to comply with quality assurance provisions imposed by other applicable requirements or compliance documents.

(1) If a RATA demonstrates less than 75 percent of the performance specification under the applicable performance standard of Code of Federal Regulations, title 40, part 60, Appendix B, as amended, the next RATA is due before the end of the sixth subsequent QA operating quarter.

(2) If the unit is not in operation at the RATA due date, the owner or operator has a grace period of 720 operating hours in which to perform a RATA on that monitor. If, at the end of the 720-operating-hour grace period, the RATA has not been completed, data from the CEMS is invalid beginning with the first unit operating hour following expiration of the grace period.

Subp. 6. Criteria for excessive CEMS audit inaccuracy. The criteria for excessive inaccuracy are:

MINNESOTA RULES

A. for RATAs, the relative accuracy value specified in the appropriate Performance Specification of Code of Federal Regulations, title 40, part 60, Appendix B, and Code of Federal Regulations, title 40, part 75, Appendix A, section 3.3, as amended, as applicable; and

B. for CGAs, the average audit value must be within 15 percent of the cylinder gas value or five ppm, whichever is greater.

Subp. 7. Calibration gases. Gas mixtures must not be used after the manufacturer's certification expiration data. The expiration date must be clearly labeled on the container of each gas.

Subp. 8. **Out of control periods.** Data is not considered valid and may not be used for compliance demonstration during out of control periods as defined in part 7017.1002. The out of control period is considered downtime and the owner or operator must follow the requirements of Code of Federal Regulations, title 40, part 60, Appendix F, sections 4.3.2 and 5.2.2, as amended. An owner or operator may not apply the data substitution procedures in Code of Federal Regulations, title 40, part 75, as amended, to comply with this part.

Statutory Authority: *MS s 115.03; 116.07* **History:** *23 SR 1764; 41 SR 763; 44 SR 1030* **Published Electronically:** *April 16, 2020*