

APPENDIX "H"

Quality Control Procedures for:

Continuous Emission Monitoring Systems (CEMS).

- a. CEMS quality control (QC) program. Each owner or operator of a CEMS shall develop and implement a CEMS QC program. At a minimum, each QC program shall include written procedures that describe in detail step-by-step procedures and operations for each of the following:
 1. Initial and routine periodic calibration of the CEMS.
 2. Calibration drift (CD) determination and adjustment of the CEMS.
 3. Preventative maintenance of the CEMS (including spare parts inventory).
 4. Data recording, calculations, and reporting.
 5. Accuracy audit procedures including sampling and analysis methods.
 6. Program of corrective action for malfunctioning CEMS.

- b. Determining out-of-control condition for the CEMS.
 1. If either the zero (or low-level) or high-level CD exceeds ten (10) percent for five consecutive daily periods, the CEMS is out-of-control.
 2. If either the zero (or low-level) or high-level CD exceeds twenty (20) percent, the CEMS is out-of-control.
 3. If the CEMS fails a performance audit (PA) performed consistent with the requirements of 40 CFR, Part 60, **Appendix F** (July 1, 1992), the CEMS is out-of-control, and the owner or operator shall take necessary corrective action to eliminate the problem. Following the corrective action, the source owner or operator shall reconduct the appropriate failed portion of the audit and other applicable portions to determine whether the monitoring system is operating properly and within specifications. Monitoring data obtained during any out-of-control period may not be used for compliance determination or meet any data capture requirements; however, the data can be used for identifying periods when there has been a failure to meet quality assurance/quality control criteria.

- c. Determining the out-of-control time period for the CEMS.

1. The beginning of the out-of-control period is either of the following:
 - i. The time corresponding to the completion of the fifth consecutive daily CD check with CD in excess of two times the allowable limit.
 - ii. The time corresponding to completion of the daily CD check preceding the daily CD check that results in a CD in excess of four times the allowable limit.
 2. The end of the out-of-control period is the time corresponding to the completion of the CD check following corrective action that results in the CD's at both the zero (or low-level) and high-level measurement points being within the corresponding allowable CD limit (i.e., either two times or four times the allowable limit in 40 CFR, Part 60, **Appendix B**, July 1, 1992).
 3. If the CEMS failed a PA, the beginning of the out-of-control period is the time corresponding to the completion of the failed audit test. The end of the out-of-control period is the time corresponding to a successful retest of the PA sample.
- d. Recordkeeping. The owner or operator shall keep the QC procedure described in paragraph (a) of this Section in a readily accessible location for at least 5 years and shall make the procedure available to the Department upon verbal or written request.
- e. Reporting. Upon verbal or written request, the owner or operator shall submit to the Department a copy of all information and records documenting out-of-control periods including beginning and end dates and descriptions of corrective actions taken.