

## **Outline for Minimum Content of Continuous Monitoring System Quality Assurance Plans (QAPs)**

Below is a list of items that TCEQ has identified as key components in a monitoring system quality assurance plan (QAP). This list is primarily the result of our review of EPA guidance on continuous monitoring systems. Specifically, the main document referenced is:

EPA Air Pollution Training Institute Course 474: Continuous Emission Monitoring Systems, Course Workbook, as prepared by James A. Jahnke, PhD, Source Technology Associates, P.O. Box 12609, RTP, NC 27709.

### **QAPs**

1. Continuous Monitoring Systems (CMS) Objectives.
2. CMS Regulatory Requirements.
3. Organization and Responsibilities of Designated CMS Personnel for Installation, Operation, Maintenance, Certification, Calibration, Daily and Ongoing QA/QC.
4. CMS Component Descriptions.
  - a. Parametric Monitors (Flow, Temperature, Pressure, etc.).
  - b. CMS Sampling System.
  - c. Pollutant Monitors.
  - d. Data Acquisition and Handling System.
5. CMS Sampling Location and Process Diagrams.
6. Process Description.
7. Sampling Methods.
8. Laboratory Analytical Methods.
9. Equipment, Supplies, and Spare Part Inventory.
10. CMS Calibration.
11. Audit Procedures and Quality Control.
12. Preventive Maintenance.
13. Corrective Action Program.
14. CMS Reports.
15. Record Retention.

This list of issues is not exhaustive. It is a basic framework to begin preparing a quality assurance plan for submittal to the TCEQ that has sufficient information as to allow for the review and understanding of the issues involved in the monitor system selection, operation, and maintenance in order to optimize system performance. There may be other items not included in this list that may be important or even critical to a specific monitor system or situation.

Additional guidance for developing quality assurance plans may also be found in EPA Requirement for Quality Assurance Project Plans, EPA QA/R-5, EPA/240/B-01/003, March 2001 as prepared by the EPA Office of Environmental Information, Washington DC. 20460.